Nigeria

Demographic and Health Survey

2013

NIGERIA
DEMOGRAPHIC AND HEALTH SURVEY

2013

National Population Commission
Federal Republic of Nigeria
Abuja, Nigeria

ICF International
Rockville, Maryland, USA

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This report summarises the findings of the 2013 Nigeria Demographic and Health Survey (NDHS), implemented by the National Population Commission (NPC). ICF International provided financial and technical assistance for the survey through the USAID-funded MEASURE DHS program, which is designed to assist developing countries to collect data on fertility, family planning, and maternal and child health. Financial support for the survey was provided by USAID, the United Kingdom Department for International Development (DFID) through PATHS2, and the United Nations Population Fund (UNFPA). The opinions expressed in this report are those of the authors and do not necessarily reflect the views of USAID, the government of Nigeria, or donor organisations.

Additional information about the 2013 NDHS may be obtained from the headquarters of the National Population Commission (NPC), Plot 2031, Olusegun Obasanjo Way, Zone 7 Wuse, PMB 0281, Abuja, Nigeria (telephone: 234-09-523-9173; Fax: 243-09-523-1024; e-mail: info@populationgov.ng; Internet: www.population.gov.ng).

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FOREWORD

Nigeria Demographic and Health Survey (NDHS) 2013 is the fourth survey of its kind to be implemented by the National Population Commission (NPC). As the agency charged with the responsibility of collecting, collating, and analysing demographic data, the Commission has been unrelenting in its efforts to provide reliable, accurate, and up-to-date data for the country. We hope that information contained in this report will assist policymakers and programme managers in monitoring and designing programmes and strategies for improving health and family planning services in Nigeria. This report presents comprehensive, detailed, final outcomes of the findings of the survey. Users will find the available information useful for programme planning and evaluation.

The 2013 NDHS is a national sample survey that provides up-to-date information on background characteristics of the respondents. Specifically, information is collected on fertility levels, marriage, fertility preferences, awareness and the use of family planning methods, child feeding practices, nutritional status of women and children, adult and childhood mortality, awareness and attitudes regarding HIV/AIDS, female genital mutilation, and domestic violence. The target groups were women and men age 15-49 in randomly selected households across Nigeria. Information was also collected on the height and weight of women and children age 0-5. In addition to presenting national estimates, the report provides estimates of key indicators for both the rural and urban areas in Nigeria, the six geo-political zones, the 36 states, and the Federal Capital Territory (FCT).

The success of the 2013 NDHS was made possible by a number of organizations and individuals. In this regard, I appreciate the support of the United States Agency for International Development in Nigeria (USAID/Nigeria) and the Department for International Development through PATHS2 for funding the survey, and also thank the United Nations Population Fund (UNFPA). I wish to also acknowledge Akintola Williams Deloitte (AWD) for providing accounting and disbursement services that allowed for the timely and efficient transfer of project funds throughout all the components of the survey.

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Finally, I would like to thank the former NPC Chairman, Eze Festus Odimegwu, CON, and the Honourable Federal Commissioners for their support during the implementation period and for providing excellent leadership and advocacy support. The support by the Director, Planning and Research, Dr. Emma Enu Attah, and all NPC staff is hereby acknowledged.

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ABBREVIATIONS

ACT	Artemisinin-based combination therapy
AIDS	Acquired immune deficiency syndrome
ANC	Antenatal care
ARI	Acute respiratory infection
ART	Anti-retroviral therapy
ASCON	Administrative Staff College of Nigeria
ASAR	Age-specific attendance rate
ASFR	Age-specific fertility rate
BCG	Bacille-Calmette-Guerin vaccine against tuberculosis
BMI	Body mass index
CBR	Crude birth rate
CDC	Centers for Disease Control and Prevention
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CHEW	Community Health Extension Workers
CTS	Conflict Tactics Scale
DFID	Department for International Development
DHS	Demographic and Health Survey
DPT	Diphtheria, pertussis, and tetanus vaccine
EA	Enumeration area
ECOWAS	Economic Community of West African States
FCT	Federal Capital Territory
FGC	Female Genital Cutting
FMoH	Federal Ministry of Health
GAR	Gross attendance ratio
GDP	Gross domestic product
GFR	General fertility rate
GPI	Gender parity index
GPS	Global Positioning System
HIV	Human immunodeficiency virus
ICD	International Classification of Diseases
IMPAC	ITN Massive Promotion and Awareness Campaign
IPT	Intermittent Preventive Therapy
IRS	Indoor residual spraying
ITN	Insecticide-treated net
IUD	Intrauterine device
IYCF	Infant and young child feeding
LAM	Lactational amenorrhea method
LGA	Local government area
LLIN	Long-lasting insecticide-treated bed net
LPG	Liquid petroleum gas

MDGs	Millennium Development Goals
MMR	Maternal mortality ratio
MSI	Marie Stopes International
MSS	Midwives Service Scheme
MTCT	Mother-to-child transmission
NAR	Net attendance ratio
NCHS	National Center for Health Statistics
NDHS	Nigeria Demographic and Health Survey
NDSS	National Demographic Sample Survey
NFS	Nigeria Fertility Survey
NGO	Nongovernmental organization
NMCSP	National Malaria Control Strategic Plan
NN	Neonatal mortality
NPC	National Population Commission
NPHCDA	National Primary Health Care Development Agency
OPV	Oral polio vaccine
ORS	Oral rehydration salts
ORT	Oral rehydration therapy
OVC	Orphan and Vulnerable Children
PATHS2	Partnership for Transforming Health Systems Phase II
PAHO	Pan American Health Organization
PHC	Primary Health Care
PMS	Patent Medicine Stores
PMTCT	Prevention of mother-to-child transmission
PNN	Postneonatal mortality
PSU	Primary sampling unit
RHF	Recommended home fluid
SDM	Standard days method
SHS	Second-hand smoke
SP	Sulphadoxine-pyrimethamine
STI	Sexually transmitted infection
SURE-P MCH	Subsidy Reinvestment and Empowerment Program, Maternal and Child Health
TFR	Total fertility rate
TT	Tetanus toxoid
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNECA	United Nations Economic Commission for Africa
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VAD	Vitamin A deficiency
VIP	Ventilated improved pit
WHO	World Health Organization
WHS	Ward Health System

MILLENNIUM DEVELOPMENT GOAL INDICATORS

Millennium Development Goal Indicators

Nigeria 2013

Indicator	Sex		Total
	Male	Female	
1. Eradicate extreme poverty and hunger			
1.8 Prevalence of underweight children under 5 years of age	30.2	27.3	28.7
2. Achieve universal primary education			
2.1 Net attendance ratio in primary education[1]	61.6	56.7	59.1
2.3 Literacy rate of 15- to 24-year-olds[2]	80.2[a]	62.8	71.5[b]
3. Promote gender equality and empower women			
3.1 Ratio of girls to boys in primary, secondary, and tertiary education			
3.1a Ratio of girls to boys in primary education[3]	na	na	0.9
3.1b Ratio of girls to boys in secondary education[3]	na	na	0.9
3.1c Ratio of girls to boys in tertiary education[3]	na	na	0.7
4. Reduce child mortality			
4.1 Under-five mortality rate[4]	151	137	128
4.2 Infant mortality rate[4]	84	70	69
4.3 Percentage of 1-year-old children immunized against measles	43.1	41.0	42.1
5. Improve maternal health			
5.1 Maternal mortality ratio[5]	na	na	576 (*CI:500-652*)
5.2 Percentage of births attended by skilled health personnel[6]	na	na	38.1
5.3 Contraceptive prevalence rate[7]	na	15.1	na
5.4 Adolescent birth rate[8]	na	122	na
5.5 Antenatal care coverage			
5.5a At least one visit[9]	na	60.6	na
5.5b Four or more visits[10]	na	51.1	na
5.6 Unmet need for family planning	na	16.1	na
6. Combat HIV/AIDS, malaria, and other diseases			
6.3 Percentage of the population age 15-24 years with comprehensive correct knowledge of HIV/AIDS[11]	33.5[a]	24.2	28.9[b]
6.4 Ratio of school attendance of orphans to school attendance of non-orphans age 10-14 years	1.18	1.28	1.23
6.7 Percentage of children under 5 sleeping under insecticide-treated bednets	16.3	16.8	16.6
6.8 Percentage of children under 5 with fever who are treated with appropriate antimalarial drugs[12]	33.2	32.3	32.7
	Urban	Rural	Total
7. Ensure environmental sustainability			
7.8 Percentage of population using an improved water source[13]	77.6	47.7	59.6
7.9 Percentage of population using an improved sanitation facility[14]	42.7	28.2	34.0

na = Not applicable

[1] The ratio is based on reported attendance, not enrollment, in primary education among primary school age children (5- to 9-year-olds). The rate also includes children of primary school age enrolled in secondary education. This is a proxy for MDG indicator 2.1, net enrollment ratio.

[2] Refers to respondents who attended secondary school or higher or who could read a whole sentence or part of a sentence

[3] Based on reported net attendance, not gross enrollment, among 6- to 12-year-olds for primary, 13- to 18-year-olds for secondary, and 19- to 22-year-olds for tertiary education

[4] Expressed in terms of deaths per 1,000 live births. Mortality by sex refers to a 10-year reference period preceding the survey. Mortality rates for males and females combined refer to the 5-year period preceding the survey.

[5] Expressed in terms of maternal deaths per 100,000 live births in the 7-year period preceding the survey.

[6] Among births in the 5 years preceding the survey

[7] Percentage of currently married women age 15-49 using any method of contraception

[8] Equivalent to the age-specific fertility rate for women age 15-19 for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age 15-19

[9] With a skilled provider

[10] With any health care provider

[11] Comprehensive knowledge means knowing that consistent use of a condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about transmission or prevention of the AIDS virus.

[12] Measured as the percentage of children age 0-59 months who were ill with a fever in the 2 weeks preceding the interview and received any antimalarial drug

[13] Percentage of de jure population whose main source of drinking water is a household connection (piped), public tap or standpipe, tubewell or borehole, protected dug well, protected spring, rainwater collection, or bottled water.

[14] Percentage of de jure population whose household has a flush toilet, ventilated improved pit latrine, pit latrine with a slab, or composting toilet and does not share this facility with other households

[a] Restricted to men in the subsample of households selected for the male interview

[b] The total is calculated as the simple arithmetic mean of the percentages in the columns for males and females.

NIGERIA


N
NIGER
CHAD
BENIN
CAMEROON
Sokoto
Zamfara
Katsina
Jigawa
Yobe
Borno
North West
Kano
Kebbi
North East
Kaduna
Bauchi
Gombe
Niger
Adamawa
North Central
Plateau
FCT-Abuja
Kwara
Nasarawa
Taraba
Oyo
Osun
Ekiti
Kogi
Benue
South West
Ondo
Ogun
Edo
Enugu
Cross River
South South
South East
Lagos
Delta
Imo
Akwa Ibom
Bayelsa
Rivers
Anambra
Abia
Ebonyi
0 75 150 300
Kilometers

INTRODUCTION 1

1.1 GEOGRAPHY, HISTORY, AND ECONOMY

1.1.1 Geography

Nigeria lies on the west coast of Africa between latitudes 4º16' and 13º53' north and longitudes 2º40' and 14º41' east. It occupies approximately 923,768 square kilometres of land stretching from the Gulf of Guinea on the Atlantic coast in the south to the fringes of the Sahara Desert in the north. The territorial boundaries are defined by the republics of Niger and Chad in the north, the Republic of Cameroon on the east, and the Republic of Benin on the west. Nigeria is the most populous country in Africa and the 14th largest in land mass. The country's 2006 Population and Housing Census placed the country's population at 140,431,790.

Nigeria has great geographical diversity, with its topography characterised by two main land forms: lowlands and highlands. The uplands stretch from 600 to 1,300 metres in the North Central and the east highlands, with lowlands of less than 20 metres in the coastal areas. The lowlands extend from the Sokoto plains to the Borno plains in the North, the coastal lowlands of western Nigeria, and the Cross River basin in the east. The highland areas include the Jos Plateau and the Adamawa Highlands in the north, extending to the Obudu Plateau and the Oban Hills in the southeast. Other topographic features include the Niger-Benue Trough and the Chad Basin.

Nigeria has a tropical climate with wet and dry seasons associated with the movement of the inter-tropical convergence zone north and south of the equator. Its climate is influenced by the rain-bearing southwesterly winds and the cold, dry, and dusty northeasterly winds, commonly referred to as the Harmattan. The dry season occurs from October to March with a spell of cool, dry, and dusty Harmattan wind felt mostly in the north in December and January. The wet season occurs from April to September. The temperature in Nigeria oscillates between 25°C and 40°C, and rainfall ranges from 2,650 millimetres in the southeast to less than 600 millimetres in some parts of the north, mainly on the fringes of the Sahara Desert. The vegetation that results from these climatic differences consists of mangrove swamp forest in the Niger Delta and Sahel grassland in the north. With its variety of climatic, vegetation, and soil conditions, Nigeria possesses the potential for growing a wide range of agricultural produce.

1.1.2 History

Nigeria marked its centenary in 2014, having begun its existence as a nation-state in 1914 through the amalgamation of the northern and southern protectorates. Before this time, there were various cultural, ethnic, and linguistic groups, such as the Oyo, Benin, Nupe, Jukun, Kanem-Bornu, and Hausa-Fulani empires. These groups lived in kingdoms and emirates with sophisticated systems of government. There were also other strong ethnic groups such as the Igbos, Ibibios, Ijaws, and Tivs. The establishment and expansion of British influence in both northern and southern Nigeria and the imposition of British rule resulted in the amalgamation of the protectorates of southern and northern Nigeria in 1914.

The British established a crown colony type of government after the amalgamation. By this arrangement, the affairs of the colonial administration were conducted by the British; however, in 1942, a few Nigerians became involved in the administration of the country. In the early 1950s, Nigeria achieved partial self-government with a legislature in which the majority of the members were elected into an executive council of which most were Nigerians. Nigeria became fully independent in October 1960 as a federation of three regions (Northern, Western, and Eastern) under a constitution that provided for a parliamentary system of governance. The Lagos area became the Federal Capital Territory (FCT).

Nigeria became a republic on October 1, 1963, with different administrative structures. Within the boundaries of Nigeria are many social groups with distinct cultural traits; there are about 374 identifiable ethnic groups, with the Hausa, Yoruba, and Igbo as the major groups.

Presently, Nigeria is made up of 36 states and a Federal Capital Territory, grouped into six geopolitical zones: North Central, North East, North West, South East, South South, and South West. There are 774 constitutionally recognised local government areas (LGAs) in the country.

1.1.3 Economy

Agriculture was the mainstay of Nigeria's economy before the discovery of oil in January 1953. Until that point, the country had depended almost entirely on agricultural production for food and agro-industrial raw materials for foreign exchange earnings through the commodity trade. At the time of independence in 1960, agriculture provided gainful employment and a satisfactory livelihood to more than 90 percent of the population. Over the years, the dominant role of agriculture in the economy, especially in terms of the country's foreign exchange earnings, gave way to petroleum exports. Today the country's economic strength is derived largely from its oil and gas reserves.

As of 2013, Nigeria's gross domestic product (GDP) stood at $262.6 billion (World Bank, 2013). A sectoral analysis showed that the contribution of agriculture to the total GDP stood at 39 percent, as compared with 40 percent in 2011. Similarly, the 18 percent and 14 percent contributions of industry and crude oil to the GDP were lower than the 2011 contributions of 19 percent and 15 percent, respectively. The contributions of two other industrial sector components, solid minerals and manufacturing, stood at 0.4 percent and 4 percent, respectively. The services sector as a percentage of GDP was 20 percent, higher than the 19 percent recorded in 2011 (with the finance and insurance, communications, transportation, and utilities components contributing 3.4, 7.1, 2.7, and 2.9 percent, respectively) (Central Bank of Nigeria, 2013).

Since 1999, successive democratic governments have tried to create an enabling environment that would boost investment through economic policies. Appreciable progress has been made toward establishing a market-based economy. Consequently, there has been an improvement in the performance of the domestic economy. Nigeria's GDP, measured at 1990 constant basic prices, indicated a growth rate of 6.6 percent in 2012. However, this figure was lower than the 7.4 percent rate recorded in the previous year. The reduced growth in GDP relative to 2011 was attributed to the contraction in oil's contribution to the GDP. Previous growth rates were estimated at 2.7 percent in 1999, 2.8 percent in 2000, 3.8 percent in 2001, and 6.0 percent in 2006 (Central Bank of Nigeria, 2013).

The government of Nigeria, having recognised the importance of privatisation in restructuring its economy, recently liberalised, deregulated, and privatised the power sector of the economy. This is in addition to the already long privatised telecommunications and downstream petroleum sectors. While it may be too early to determine the impact of privatisation and liberalisation on the Nigerian economy, it is believed that these economic policy reforms, combined with investments in human capital and physical infrastructure as well as the establishment of macroeconomic stability and good governance, will translate into a high rate of self-sustaining, long-term economic growth.

1.2 POPULATION

Over the years, Nigeria has collected data on demographic statistics through censuses, vital registration systems, and sample surveys. The censuses of 1866, 1871, and 1896 were restricted to specific parts of the country. The censuses of 1911 and 1921 included more of the urban towns in the then colony. In 1931, the procedure for the conduct of the census in the southern protectorate was different from that for the northern part of the country. Because of the Second World War, there were no attempts to conduct a census in 1941.

The first elaborate and near-scientific census conducted in Nigeria was the 1952-1953 census. However, it lacked simultaneity and probably underenumerated the country's population. The results of the 1962 census were disregarded, and another census was carried out in 1963. This census was officially accepted (Table 1.1). The population census of 1973 was not acceptable and was, therefore, cancelled. Since then, there have been considerable improvements in the data collection process.

The next census took place in 1991 and counted a total of 88,992,220 Nigerians. The 2006 Population and Housing Census reported Nigeria's population to be 140,431,790, with a national growth rate estimated at 3.2 percent per annum. With this population, Nigeria is the most populous nation in Africa, as noted, and the seventh most populous in the world (Population Reference Bureau, 2013).

Nigeria's population is unevenly distributed across the country. Large areas in the Chad Basin, the middle Niger Valley, and the grassland plains, among others, are sparsely populated. The average population density for the country in 2006 was estimated at 150 people per square kilometre (Table 1.1). The most densely populated states are Lagos (2,607 people per square kilometre), Anambra (868 people per square kilometre), and Imo (758 people per square kilometre). Most of the densely populated states are found in the southern part of the country. Kano, with an average density of 442 people per square kilometre, is the most densely populated state in the north (National Population Commission [NPC], 2010).

Table 1.1 Basic demographic indicators

Demographic indicators from selected sources for Nigeria, 1963-2006

Indicators	1963 census	1991 census	2006 census
Population (millions)	55.7	88.9	140.4
Density (population/km^2)	60	96	150
Percent urban	19	36.3	u
Life expectancy (years)			
Male	u	52.6	u
Female	u	53.8	u

Sources: Federal Office of Statistics, 1963; National Population Commission, 1998; National Population Commission, 2009
u = No information

Numerous sample surveys have been conducted in an effort to generate reliable demographic data. These include the 1965-1966 Rural Demographic Sample Survey and the 1980 National Demographic Sample Survey (NDSS) conducted by the Federal Office of Statistics and the National Population Bureau, respectively. The 1981-1982 Nigeria Fertility Survey (NFS) was the first nationally representative survey on fertility, family planning, contraceptive use, and related topics. This was followed by the first Nigeria Demographic and Health Survey (NDHS) in 1990. In 1994, the first sentinel survey was conducted by the National Population Commission to serve as a baseline study to monitor the various projects designed to achieve the objectives of the National Population Policy. In 1999, another NDHS was conducted. This was followed by a sentinel survey in 2000 and the 2003 NDHS. Another sentinel survey was conducted in 2007 to further assess the implementation of the objectives of the population policy. The most recent NDHS was conducted in 2008.

1.3 POPULATION AND HEALTH POLICIES

1.3.1 National Population Policy

On February 4, 1988, the federal government of Nigeria approved the National Policy on Population for Development in response to the pattern of population growth rate and its adverse effects on national development. Emerging issues such as HIV/AIDS, poverty, and gender inequality gained wider recognition. This necessitated a review of the 1988 National Population Policy, giving way to the National Policy on Population for Sustainable Development, which was signed in January 2004 by Chief Olusegun Obasanjo, then president and commander-in-chief of the armed forces of the Federal Republic of Nigeria. The policy recognises that population factors, social and economic development, and environmental issues are irrevocably interrelated and are therefore critical to the achievement of sustainable development in Nigeria.

The overall goal of the National Policy on Population for Sustainable Development is to improve the quality of life and standard of living of the Nigerian population (NPC, 2004). This is to be achieved through the attainment of a number of specific goals that include:

- Achievement of sustainable economic growth, protection and preservation of the environment, poverty eradication, and provision of quality social services
- Achievement of a balance among the rate of population growth, available resources, and the social and economic development of the country
- Progress toward a complete demographic transition to a reasonable growth in birth rates and a low death rate
- Improvement in the reproductive health of all Nigerians at every stage of the life circle
- Acceleration of a strong and immediate response to the HIV/AIDS pandemic and other related infectious diseases
- Progress in achieving balance and integrated urban and rural development

The National Policy on Population for Sustainable Development operates on the principle that achieving a higher quality of life for people today should not jeopardise the ability of future generations to meet their own needs (NPC, 2004). To guide policy, programme planning, and implementation, the following targets were set:

- Reduce the national population growth rate to 2 percent or lower by 2015
- Reduce the total fertility rate by at least 0.6 children every five years by encouraging child spacing through the use of family planning
- Increase the contraceptive prevalence rate for modern methods by at least two percentage points per year through the use of family planning
- Reduce the infant mortality rate to 35 per 1,000 live births by 2015
- Reduce the child mortality rate to 45 per 1,000 live births by 2010
- Reduce the maternal mortality ratio to 125 per 100,000 live births by 2010 and to 75 by 2015
- Achieve sustainable universal basic education as soon as possible before 2015
- Eliminate the gap between males and females in school enrolment at all levels and in vocational and technical education by 2015
- Eliminate illiteracy by 2020
- Achieve at least a 25 percent reduction in HIV/AIDS adult prevalence every five years

1.3.2 Health Policy

Nigeria formulated a national health policy targeted at achieving quality health for all Nigerians in 1988. As a result of emerging issues and the need to focus on realities and trends, a review of the policy became necessary. The new policy, referred to as the Revised National Health Policy and launched in September 2004, outlined the goals, structure, strategy, and policy direction of the health care delivery system in Nigeria (Federal Ministry of Health, 2004). Roles and responsibilities of different tiers of

government, including nongovernmental organisations, were clearly defined. The policy's overall long-term goal is to provide adequate access to primary, secondary, and tertiary health care services for the entire Nigerian population through a functional referral system.

The underlying principles and values of the Revised National Health Policy are as follows:

- Social justice, equity, and the ideals of freedom and opportunity affirmed in the 1999 Constitution of the Federal Republic of Nigeria are basic rights.
- Health and access to quality and affordable health care are human rights.
- Equity in health care for all Nigerians will be pursued as a goal.
- Primary health care (PHC) will remain the basic philosophy and strategy for national health development.
- Good-quality health care will be assured through cost-effective interventions that are targeted at priority health problems.
- A high level of efficiency and accountability will be maintained in the development and management of the national health system.
- Effective partnerships and collaborations between various health sectors will be pursued while safeguarding the identity of each.

The overall objective of the Revised National Health Policy is to strengthen the national health system such that it will be able to provide effective, efficient, quality, accessible, and affordable health services that will improve the health status of Nigerians through achievement of the health-related Millennium Development Goals (MDGs). The main health policy targets are the following:

- Reduce the under-5 mortality rate by two-thirds between 1990 and 2015
- Reduce the maternal mortality rate by three-quarters between 1990 and 2015
- Reduce the spread of HIV/AIDS by 2015
- Reduce the burden of malaria and other major diseases by 2015

The national health policy identifies primary health care as the framework to achieve improved health for the population. PHC services include health education; adequate nutrition; safe water and sanitation; reproductive health, including family planning; immunisation against five major infectious diseases; provision of essential drugs; and disease control. According to the policy, a comprehensive health care system delivered through PHC centres must incorporate maternal and child health care, including family planning services.

Nigeria's health sector is characterised by wide regional disparities in status, service delivery, and resource availability. In view of this situation, the government of Nigeria initiated several interventions including the Midwives Service Scheme (MSS); the Subsidy Reinvestment and Empowerment Program, Maternal and Child Health (SURE-P-MCH); and systematic PHC infrastructure upgrades through the Ward Health System.

Under the MSS, retired and newly qualified midwives provide services at PHC facilities in underserved communities around the country. The scheme, funded through MDG debt relief gains on a cost-sharing basis among the three tiers of government, has trained and deployed approximately 4,000 midwives and 1,000 community health extension workers (CHEWs) in 1,000 PHC facilities. This has improved access to skilled birth attendants in 375 LGAs across the country. In addition, attention is

continuously geared toward full childhood immunisation and HIV/AIDS prevention (National Primary Health Care Development Agency [NPHCDA], 2012).

The SURE-P-MCH programme, funded through savings derived from the partial removal of the petroleum subsidy, is intended to build and expand on the gains of the MSS. The programme aims to improve both demand and supply components of maternal and child health. As of January 2013, the programme had engaged 1,168 midwives and 2,188 community health extension workers in 500 PHC facilities. A total of 3,072 village health workers were also recruited and deployed. In addition, the programme is implementing a conditional cash transfer scheme as well as pursuing PHC facility upgrades and community engagement.

The Ward Health System (WHS) was initiated in 2000 to improve equitable access to essential health services. The system is premised on the synchronisation of PHC services across electoral wards with the construction of model PHC facilities in underserved areas. As of January 2012, the NPHCDA had built 1,156 PHC facilities across the country. This is in addition to 228 maternal health care centres and 10 health training institutions built by the MDG office (Federal Republic of Nigeria, 2010a; NPHCDA, 2012).

1.4 ORGANISATION OF THE 2013 NIGERIA DEMOGRAPHIC AND HEALTH SURVEY

The 2013 Nigeria Demographic and Health Survey (NDHS) was implemented by the National Population Commission. It is the fifth in the series of Demographic and Health Surveys conducted so far in Nigeria; previous surveys were conducted in 1990, 1999, 2003, and 2008.

The resources for the conduct of the survey were provided by the United States Agency for International Development (USAID), the United Nations Population Fund (UNFPA), the United Kingdom Department for International Development (DFID) (through the Partnership for Transforming Health Systems Phase II [PATHS2]), and the government of Nigeria (through the NPC). ICF International provided technical support throughout the duration of the survey.

A steering committee composed of major stakeholders from the government and international organisations was formed. The steering committee was responsible for coordination, oversight, advice, and decision making on all major aspects of the survey. The steering committee's membership included representatives from organisations such as the NPC, the Federal Ministry of Health, the National Planning Commission, and the National Bureau of Statistics, as well as USAID, UNFPA, the United Nations Children's Fund (UNICEF), the World Health Organization, and the World Bank.

The technical/quality assurance team was responsible for the entire technical management of the survey. The team was headed by a project director with the assistance of a project coordinator. Other members of the team included 18 state coordinators who were in charge of all of the different components of the survey (i.e., recruiting and training the field staff, monitoring the fieldwork, and assisting in any other project-related activities).

Although significantly expanded in content, the 2013 NDHS, as a follow-up to the previous DHS surveys, provides updated estimates of some of the basic demographic and health indicators covered in the earlier surveys. In addition, as with the 2008 NDHS, information was gathered on violence against women. Although most of the previous surveys collected data at the national and zonal levels, the 2013 NDHS, similar to the 2008 survey, collected data representative of the 36 states and the Federal Capital Territory.

The 2013 NDHS was designed to provide data to monitor the population and health situation in Nigeria with an explicit goal of providing reliable information about maternal and child health and family planning services. The primary objective of the 2013 NDHS was to provide up-to-date information on fertility levels, marriage, fertility preferences, awareness and use of family planning methods, child feeding practices, nutritional status of women and children, adult and childhood mortality, awareness and attitudes regarding HIV/AIDS, and domestic violence. This information is intended to assist policymakers and

programme managers in evaluating and designing programmes and strategies for improving health and family planning services in the country.

1.4.1 Sample Design

The sample for the 2013 NDHS was nationally representative and covered the entire population residing in non-institutional dwelling units in the country. The survey used as a sampling frame the list of enumeration areas (EAs) prepared for the 2006 Population Census of the Federal Republic of Nigeria, provided by the National Population Commission. The sample was designed to provide population and health indicator estimates at the national, zonal, and state levels. The sample design allowed for specific indicators to be calculated for each of the six zones, 36 states, and the Federal Capital Territory, Abuja.

Administratively, Nigeria is divided into states. Each state is subdivided into local government areas (LGAs), and each LGA is divided into localities. In addition to these administrative units, during the 2006 population census, each locality was subdivided into census enumeration areas. The primary sampling unit (PSU), referred to as a cluster in the 2013 NDHS, is defined on the basis of EAs from the 2006 EA census frame. The 2013 NDHS sample was selected using a stratified three-stage cluster design consisting of 904 clusters, 372 in urban areas and 532 in rural areas. A representative sample of 40,680 households was selected for the survey, with a minimum target of 943 completed interviews per state (for further details on sample size and design, see Appendix B).

A complete listing of households and a mapping exercise were carried out for each cluster from December 2012 to January 2013, with the resulting lists of households serving as the sampling frame for the selection of households. All regular households were listed. The NPC listing enumerators were trained to use Global Positioning System (GPS) receivers to calculate the coordinates of the 2013 NDHS sample clusters.

A fixed sample take of 45 households were selected per cluster. All women age 15-49 who were either permanent residents of the households in the 2013 NDHS sample or visitors present in the households on the night before the survey were eligible to be interviewed. In a subsample of half of the households, all men age 15-49 who were either permanent residents of the households in the sample or visitors present in the households on the night before the survey were eligible to be interviewed. Also, a subsample of one eligible woman in each household was randomly selected to be asked additional questions regarding domestic violence.

1.4.2 Questionnaires

Three questionnaires were used in the 2013 NDHS: the Household Questionnaire, the Woman's Questionnaire, and the Man's Questionnaire. The content of these questionnaires was based on model questionnaires developed by the MEASURE DHS programme. The model questionnaires were modified according to the country's requirements, in consultation with a broad spectrum of government ministries and agencies, nongovernmental organisations, and international donors, to reflect relevant issues such as family planning, domestic violence, HIV/AIDS, and maternal and child health. A stakeholders' meeting organised by NPC in Abuja on March 26, 2012, provided a platform for experts to discuss the questionnaires extensively, and the input from this was used to finalise the survey questionnaires. The questionnaires were then translated into three major Nigerian languages—Hausa, Igbo, and Yoruba—and were pretested, refined, and finalised for the survey.

The Household Questionnaire was used to list all of the usual members of and visitors to the selected households. Some basic information was collected on the characteristics of each person listed, including age, sex, marital status, education, and relationship to the head of the household. Information on other characteristics of household members was collected as well, including current school attendance and survivorship of parents among those under age 18. If a child in the household had a parent who was sick for more than three consecutive months in the 12 months preceding the survey or a parent who had died,

additional questions related to support for orphans and vulnerable children were asked. Furthermore, if an adult in the household was sick for more than three consecutive months in the 12 months preceding the survey or an adult in the household had died, questions were asked relating to support for sick people or people in households where a member had died.

The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as source of water; type of toilet facilities; materials used for the floor of the house; ownership of various durable goods; ownership of agricultural land; ownership of livestock, farm animals, or poultry; and ownership and use of mosquito nets and long-lasting insecticidal nets. The Household Questionnaire was further used to record height and weight measurements for children age 0-59 months and women age 15-49. In addition, data on the age and sex of household members in the Household Questionnaire were used to identify women and men who were eligible for individual interviews.

The Woman's Questionnaire was used to collect information from all women age 15-49. These women were asked questions on the following main topics:

- Background characteristics (age, religion, education, literacy, media exposure, etc.)
- Reproductive history and childhood mortality
- Knowledge, source, and use of family planning methods
- Fertility preferences
- Antenatal, delivery, and postnatal care
- Breastfeeding and infant feeding practices
- Child immunisation and childhood illnesses
- Marriage and sexual activity
- Women's work and husbands' background characteristics
- Malaria prevention and treatment
- Women's decision making
- Awareness of AIDS and other sexually transmitted infections
- Maternal mortality
- Domestic violence

The Man's Questionnaire was administered to all men age 15-49 in every second household in the 2013 NDHS sample. The Man's Questionnaire collected much of the same information found in the Woman's Questionnaire but was shorter because it did not contain a detailed reproductive history or questions on maternal and child health or nutrition.

All aspects of the NDHS data collection procedures were pretested in November 2012 (e.g., pretesting of survey instruments and training of trainers). Twenty members of the technical team, who also served as trainers/quality assurance personnel, participated in the training of trainers and reviewed the questionnaires thoroughly before finally conducting the pretest fieldwork as interviewers. They were all trained to administer the questionnaires and take anthropometric measurements. The training of trainers consisted of an overview of the project and the objectives of the survey; detailed descriptions of interviewing techniques, field procedures, and all sections of the household and individual questionnaires; and two days of field practice. The trainers included the technical team members, who also doubled as state coordinators, and the ICF DHS country manager. Representatives of the Federal Ministry of Health, the NPHCDA, USAID, UNICEF, UN Women, and UNFPA attended as resource persons and provided technical sessions on relevant topics.

The Household, Woman's, and Man's Questionnaires were pretested in four locations in Makurdi (Benue), where the residents are predominantly Hausa, Yoruba, English, and Igbo speaking. The teams were divided according to languages. The supervisors and editors were drawn from among the trainees. The questionnaires were pretested in 120 households. A debriefing session was held in November 2012 at the end of the pretest fieldwork. Based on observations from the field and suggestions made by the pretest

teams, revisions were made in the wording and translations of the questionnaires. Logistical arrangements for the survey were also discussed.

1.4.3 Recruitment and Training of Field Staff

The NDHS technical team was involved in recruiting field staff who had the requisite skill and experience to work as enumerators. The recruitment process was decentralised and, after screening of the candidates, selections were made on the basis of a written test and an interview focusing on the major languages used in the survey interviews. Almost all of those recruited had ordinary national diplomas, national certificates of education, or higher national diplomas or were university graduates; a few had master's degrees. A substantial number of the field staff members had experience working in previous NDHS surveys. They came from the country's 36 states and the Federal Capital Territory.

The NPC organised a four-week-long training course in January and February 2013 for the 316 participants at the Administrative Staff College of Nigeria (ASCON) in Topo Badagry (Lagos). The training was carried out simultaneously in six classrooms at ASCON, with approximately 50 participants in each classroom. Technical team members, who were trained during the pretest and the training of trainers, were assigned to the six classrooms. The training, conducted according to the standard DHS training procedures, included class presentations, daily reviews, mock interviews, class exercises, and a written test at the end of every module. It also included lectures on how to complete the questionnaires and field practice. Remedial classes were set up for those who did not perform well on the tests. The trainers included the ICF DHS country manager and members of the technical team. Special training was conducted for field editors and supervisors.

Efforts were made to maintain uniformity in the training sessions. Different measures were adopted: trainers were moved from one classroom to another; field staff from a specific state were spread across different classrooms; the DHS interview manual adapted for Nigeria and PowerPoint presentations were used as guidelines; and the trainers met every evening to discuss the issues raised in each class so that they could be addressed uniformly.

1.4.4 Fieldwork

Unlike the previous DHS surveys, fieldwork was launched in the six zones (rather than all of the states); the teams in each zone remained together, and the first clusters were assigned in the vicinity. This enabled close supervision of the teams, as three to four trainers were available in each zone. Interviewers had ample opportunities to build their confidence before they were finally dispatched to their respective states. Fieldwork for the 2013 NDHS was carried out by 37 interviewing teams, one for each of the 36 states of the country and Federal Capital Territory. Each team consisted of a supervisor, a field editor, four female interviewers, two male interviewers, and two drivers. Fieldwork was conducted from February 15, 2013, to the end of May (with the exception of the two teams in Kano and Lagos, who completed fieldwork in June).

The technical team and trainers, who also functioned as the quality controllers, were responsible for ensuring data quality. Data quality was also monitored through field check tables generated concurrently with data processing operations. This was an advantage since the technical team and trainers were able to advise and alert field teams of problems detected during data entry. The technical team and trainers met in Abuja occasionally to discuss fieldwork issues and travelled to states where immediate attention was required. Fieldwork was also monitored by representatives from ICF, USAID, UNFPA, PATHS2, and the NPC.

A number of challenges were faced by the field teams (e.g., restricted working hours, lack of clearance to enter the clusters on a regular basis, and potential threats), especially in the North East and North West due to the security situation in those zones. In some areas, measurement of height and weight became difficult. However, the teams made the utmost effort to accomplish the task. Because of the

security situation, the survey could not be accomplished in eight clusters (four in Borno, two in Yobe, one in Nasarawa, and one in Plateau).

1.4.5 Data Processing

The processing of the 2013 NDHS data began simultaneously with the fieldwork. Completed questionnaires were edited in the field immediately by the field editors and checked by the supervisors before being dispatched to the data processing centre in Abuja. The questionnaires were then edited and entered by 26 data processing personnel specially trained for this task. Data were entered using the CSPro computer package, and all data were entered twice to allow 100 percent verification. The concurrent processing of the data offered a distinct advantage because of the assurance that the data were error free and authentic. Moreover, the double entry of data enabled easy comparisons and identification of errors and inconsistencies. Inconsistencies were resolved by tallying results with the paper questionnaire entries. Secondary editing of the data was completed in the last week of July 2013. The final cleaning of the data set was carried out by the ICF data processing specialist and completed in August.

1.5 RESPONSE RATES

The household and individual response rates for the 2013 NDHS are shown in Table 1.2. A total of 40,320 households were selected from 896 sample points, of which 38,904 were found to be occupied at the time of the fieldwork. Of the occupied households, 38,522 were successfully interviewed, yielding a household response rate of 99 percent. In view of the security challenges in the country, this response rate is highly encouraging and appears to be the result of a well-coordinated team effort.

In the interviewed households, a total of 39,902 women age 15-49 were identified as eligible for individual interviews, and 98 percent of them were successfully interviewed. Among men, 18,229 were identified as eligible for interviews, and 95 percent were successfully interviewed. As expected, response rates were slightly lower in urban areas than in rural areas.

Table 1.2 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Nigeria 2013

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households selected	16,695	23,625	40,320
Households occupied	16,070	22,834	38,904
Households interviewed	15,859	22,663	38,522
Household response rate[1]	98.7	99.3	99.0
Interviews with women age 15-49			
Number of eligible women	15,972	23,930	39,902
Number of eligible women interviewed	15,545	23,403	38,948
Eligible women response rate[2]	97.3	97.8	97.6
Interviews with men age 15-49			
Number of eligible men	7,553	10,676	18,229
Number of eligible men interviewed	7,144	10,215	17,359
Eligible men response rate[2]	94.6	95.7	95.2

[1] Households interviewed/households occupied
[2] Respondents interviewed/eligible respondents

HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS 2

Key Findings

- Sixty-one percent of households in Nigeria have access to an improved source of drinking water.
- Thirty percent of households have an improved toilet facility that is not shared with other households.
- Fifty-six percent of households have access to electricity.
- Wood continues to be the main type of cooking fuel in Nigeria (64 percent).
- Seventy-five percent of households have mobile phones.
- Forty-six percent of Nigeria's population is under age 15.
- One in five households are headed by a female.
- Thirty percent of children under age 5 have had their births registered, and 15 percent have a birth certificate.
- More females than males have not attended school (40 percent versus 30 percent).

This chapter provides an overview of the socioeconomic characteristics of the population, including household conditions, sources of drinking water, sanitation facilities, availability of electricity, housing facilities, possession of household durable goods, and ownership of household effects and land. Information on household assets is used to create the wealth index, an indicator of household economic status. This chapter also describes the demographic characteristics of the household population, including age, sex, and educational attainment.

In the 2013 NDHS, a household was defined as a person or group of persons, related or unrelated, who usually live together in the same dwelling unit, have common cooking and eating arrangements, and acknowledge one adult member as the head of the household. A member of the household is any person who usually lives in the household.

Information was collected from all usual residents of a selected household (de jure population) as well as persons who stayed in the selected household the night before the interview (de facto population). The difference between these two populations is very small, and all tables in this report refer to the de facto population, unless otherwise specified, to maintain comparability with other NDHS reports.

2.1 HOUSEHOLD ENVIRONMENT

The physical characteristics of a household's environment are important determinants of the socioeconomic and health status of household members. The 2013 NDHS asked respondents about their household environment, including access to electricity, source of drinking water, type of sanitation facility, type of flooring material, and number of rooms in the dwelling. Results are presented for households and for the de jure household population.

2.1.1 Drinking Water

Increasing access to improved drinking water is part of Millennium Development Goal (MDG) 7 (ensuring environmental sustainability), adopted by Nigeria and other nations worldwide (United Nations General Assembly, 2002). The goal in Nigeria is for 77 percent of the country's residents to have access to an improved drinking water source by 2015 (Federal Republic of Nigeria, 2010a).

Table 2.1 presents a number of indicators that are useful in monitoring household access to improved drinking water. The source of drinking water is an indicator of whether it is suitable for drinking. In Table 2.1, sources that are likely to provide water suitable for drinking are identified as improved sources. These include a piped source within the dwelling, yard, or plot; a public tap/stand pipe or a borehole; a protected well or spring; and rainwater (WHO and UNICEF, 2010). Lack of easy access to a water source may limit the quantity of suitable drinking water available to a household, even if the water is obtained from an improved source. Water that must be fetched from a source that is not immediately accessible to the household may become contaminated during transport or storage. Especially in such situations, home water treatment can be effective in improving the quality of household drinking water.

Table 2.1 Household drinking water

Percent distribution of households and the de jure population by source of drinking water, time to obtain drinking water, and treatment of drinking water, according to residence, Nigeria 2013

	Households			Population		
Characteristic	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water						
Improved source	75.6	49.2	60.6	77.6	47.7	59.6
Piped into dwelling/yard/plot	5.5	0.7	2.8	6.1	0.8	2.9
Public tap/standpipe	9.2	4.9	6.8	9.6	4.7	6.6
Tube well or borehole	44.2	32.0	37.3	45.8	30.0	36.3
Protected well	13.0	10.1	11.4	13.1	11.0	11.8
Protected spring	0.3	0.5	0.4	0.3	0.5	0.4
Rainwater	0.9	0.7	0.8	0.8	0.5	0.6
Bottled water	2.4	0.3	1.2	1.8	0.2	0.8
Non-improved source	24.2	50.5	39.1	22.2	52.0	40.1
Unprotected well	3.9	23.6	15.1	4.7	26.2	17.6
Unprotected spring	1.2	4.2	2.9	1.2	4.2	3.0
Tanker truck/cart with drum	3.4	0.8	1.9	3.6	0.6	1.8
Surface water	3.7	20.9	13.5	4.1	20.3	13.9
Sachet water	12.0	1.1	5.8	8.6	0.7	3.8
Other source	0.1	0.1	0.1	0.1	0.1	0.1
Missing	0.1	0.2	0.2	0.1	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)						
Water on premises	23.8	17.2	20.0	24.9	18.9	21.3
Less than 30 minutes	54.5	54.4	54.4	50.3	52.6	51.7
30 minutes or longer	20.0	27.6	24.3	23.0	27.8	25.9
Don't know/missing	1.7	0.9	1.2	1.7	0.7	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Water treatment prior to drinking[1]						
Boiled	4.1	1.5	2.6	4.0	1.4	2.4
Bleach/chlorine added	2.9	0.9	1.7	3.1	0.9	1.7
Strained through cloth	1.5	3.5	2.7	1.9	3.6	2.9
Ceramic, sand, or other filter	1.0	0.5	0.7	1.1	0.5	0.8
Solar disinfection	0.1	0.0	0.0	0.1	0.0	0.0
Let stand and settle	1.7	1.3	1.5	1.7	1.3	1.4
Alum	2.2	3.1	2.7	2.3	3.3	2.9
Other	2.0	1.4	1.6	1.9	1.3	1.6
No treatment	87.5	89.2	88.4	87.1	89.0	88.2
Percentage using an appropriate treatment method[2]	7.6	2.8	4.9	7.7	2.7	4.7
Number	16,609	21,913	38,522	70,422	106,541	176,963

[1] Respondents may report multiple treatment methods, so the sum of treatment may exceed 100 percent.
[2] Appropriate water treatment methods include boiling, bleaching, filtering, and solar disinfecting.

As Table 2.1 shows, 61 percent of the households in Nigeria have access to an improved source of drinking water, with a much higher proportion among urban households (76 percent) than among rural households (49 percent). The results show an overall improvement in the quality of sources of water in Nigeria since the 2008 NDHS (when the figure was 56 percent). This improvement was higher in rural areas (45 to 49 percent) than in urban areas (75 to 76 percent). The most common source of improved drinking water in Nigeria is tube well or borehole water, used by 44 percent of urban and 32 percent of rural households. Thirteen percent of urban households and 10 percent of rural households have access to drinking water from a protected well. Use of sachet water, which is included under non-improved sources, is common in Nigeria, with 6 percent of households using it as their main source of drinking water. It is used more in urban areas than in rural areas (12 percent versus 1 percent).

In the 2013 NDHS, only 20 percent of households reported having water on their premises, as compared with 25 percent in the 2008 NDHS. Households not having water on their premises were asked how long it takes to fetch water. About a quarter of households (24 percent) travel 30 minutes or longer to obtain their drinking water (20 percent in urban areas and 28 percent in rural areas).

In the 2013 NDHS, all households also were asked whether they treat their water prior to drinking. An overwhelming majority, 88 percent, do not treat their drinking water. Urban households (8 percent) are somewhat more likely than rural households (3 percent) to use an appropriate treatment method to ensure that their water is safe for drinking.

Table A.2.1 indicates that many households in some of Nigeria's states have no access to improved source of drinking water. For instance, only 3 in 10 households in Benue, Bauchi, Taraba, and Zamfara and only 2 in 10 households in Kebbi have access to an improved source of drinking water.

2.1.2 Household Sanitation Facilities

Ensuring adequate sanitation facilities is also part of MDG 7. At the household level, adequate sanitation facilities include an improved toilet and a method of disposal that separates waste from human contact. A household is classified as having an improved toilet if the toilet is used only by household members (i.e., it is not shared with another household) and if the facility used by the household separates waste from human contact (WHO and UNICEF, 2010).

Table 2.2 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, according to residence, Nigeria 2013

	Households			Population		
Type of toilet/latrine facility	Urban	Rural	Total	Urban	Rural	Total
Improved, not shared facility	36.6	25.1	30.1	42.7	28.2	34.0
Flush/pour flush to piped sewer system	6.1	1.5	3.5	6.1	1.2	3.1
Flush/pour flush to septic tank	11.2	1.9	5.9	11.4	1.7	5.5
Flush/pour flush to pit latrine	3.6	1.1	2.2	4.1	1.0	2.2
Ventilated improved pit (VIP) latrine	10.0	14.3	12.4	13.6	17.1	15.7
Pit latrine with slab	5.7	6.3	6.0	7.4	7.2	7.3
Composting toilet	0.1	0.1	0.1	0.1	0.1	0.1
Shared facility[1]	40.2	13.4	24.9	34.2	10.6	20.0
Flush/pour flush to piped sewer system	3.1	1.1	2.0	2.4	0.7	1.4
Flush/pour flush to septic tank	11.6	1.1	5.6	9.2	0.8	4.1
Flush/pour flush to pit latrine	6.0	1.2	3.3	5.0	0.8	2.5
Ventilated improved pit (VIP) latrine	10.7	6.1	8.1	10.2	5.5	7.3
Pit latrine with slab	8.5	3.5	5.7	7.1	2.6	4.4
Missing	0.3	0.3	0.3	0.3	0.2	0.2
Non-improved facility	23.1	61.5	45.0	23.1	61.3	46.1
Flush/pour flush not to sewer/septic tank/pit latrine	0.4	0.2	0.3	0.5	0.2	0.3
Pit latrine without slab/open pit	5.8	19.6	13.7	6.7	21.4	15.5
Bucket	0.2	0.0	0.1	0.1	0.0	0.1
Hanging toilet/hanging latrine	1.1	1.7	1.5	1.1	1.6	1.4
No facility/bush/field	15.5	39.9	29.4	14.6	38.1	28.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	16,609	21,913	38,522	70,422	106,541	176,963

[1] Facilities that would be considered improved if they were not shared by two or more households

Table 2.2 shows that 3 in 10 households in Nigeria use improved toilet facilities that are not shared with other households (37 percent in urban areas and 25 percent in rural areas). Twenty-five percent of households (40 percent in urban areas and 13 percent in rural areas) use shared toilet facilities, while 45 percent use non-improved facilities (62 percent in rural areas and 23 percent in urban areas). The most common type of non-improved toilet facility is an open pit latrine or pit latrine without slabs, used by 20 percent of households in rural areas and 6 percent of households in urban areas. Overall, 29 percent of households have no toilet facility (16 percent in urban areas and 40 percent in rural areas).

Table A.2.2 shows the percent distribution of households and the de jure population by type of toilet/latrine facilities, according to state of residence. In Zamfara and Ogun states, less than 10 percent of households have access to an improved, not shared facility. In Benue, Kogi, Niger, Bauchi, Ebonyi, Bayelsa, Cross River, Ekiti, Ondo, Osun, and Oyo, between 10 percent and 20 percent of households have access to an improved, not shared facility. In Gombe and Kano, 6 in 10 households (67 percent and 64 percent, respectively) have access to such a facility.

2.1.3 Housing Characteristics

Table 2.3 presents information on housing characteristics in Nigeria, which reflect a household's socioeconomic situation. They also may influence environmental conditions (e.g., use of biomass fuels and resulting exposure to indoor air pollution) that have a direct bearing on the health and welfare of household members.

Table 2.3 includes information on availability of electricity, type of flooring material, number of rooms used for sleeping, the place where cooking is done, and the type of fuel used for cooking. The table shows that 56 percent of households in Nigeria have access to electricity (84 percent in urban areas and 34 percent in rural areas). This is a slight improvement from 2008, when 50 percent of households had access to electricity (85 percent in urban areas and 31 percent in rural areas).

Cement is the most common flooring material used in Nigerian households (46 percent). The use of cement has increased since 2008 (when the figure was 42 percent), and increases have been observed in both urban and rural areas. Urban households remain more likely to use cement (53 percent) than rural households (40 percent). Earth and sand are used in 3 out of 10 households, and they are used more often in rural areas (49 percent) than in urban areas (12 percent). Fourteen percent of households use carpet as a flooring material.

Table 2.3 Household characteristics

Percent distribution of households by housing characteristics, percentage using solid fuel for cooking, and percent distribution by frequency of smoking in the home, according to residence, Nigeria 2013

Housing characteristic	Residence		Total
	Urban	Rural	
Electricity			
Yes	83.6	34.4	55.6
No	16.3	65.4	44.2
Missing	0.1	0.2	0.2
Total	100.0	100.0	100.0
Flooring material			
Earth, sand	11.5	48.6	32.6
Dung	0.8	2.7	1.9
Wood/planks	0.1	0.4	0.3
Ceramic tiles	7.0	1.6	3.9
Cement	52.8	40.1	45.5
Carpet	26.2	5.2	14.2
Other[1]	1.4	1.0	1.2
Missing	0.3	0.3	0.3
Total	100.0	100.0	100.0
Rooms used for sleeping			
One	45.5	33.6	38.7
Two	28.2	32.8	30.8
Three or more	25.9	33.1	30.0
Missing	0.3	0.5	0.4
Total	100.0	100.0	100.0
Place for cooking			
In the house	46.8	46.0	46.3
In a separate building	19.5	22.9	21.4
Outdoors	30.7	28.5	29.4
No food cooked in household	2.9	2.4	2.6
Other	0.0	0.1	0.0
Total	100.0	100.0	100.0
Cooking fuel			
Electricity	0.7	0.2	0.4
LPG/natural gas/biogas	4.6	0.5	2.3
Kerosene	47.6	8.7	25.5
Coal/lignite	0.7	0.0	0.3
Charcoal	5.3	1.6	3.2
Wood	37.9	83.3	63.7
Agricultural crops/straw/ shrubs/grass	0.2	3.1	1.8
Animal dung	0.0	0.1	0.1
No food cooked in household	2.9	2.4	2.6
Total	100.0	100.0	100.0
Percentage using solid fuel for cooking[2]	44.1	88.1	69.1
Frequency of smoking in the home			
Daily	6.0	6.1	6.0
Weekly	0.9	0.7	0.8
Monthly	0.1	0.1	0.1
Less than monthly	0.3	0.1	0.2
Never	92.5	92.8	92.7
Missing	0.2	0.2	0.2
Total	100.0	100.0	100.0
Number	16,609	21,913	38,522

LPG = Liquid petroleum gas
[1] Includes palm/bamboo, parquet or polished wood, and vinyl or asphalt strips
[2] Includes coal/lignite, charcoal, wood/agricultural crops/straw/shrubs/grass, and animal dung

The number of rooms used for sleeping in relation to the number of household members is an indication of the extent of crowding, which in turn increases the risk of contracting communicable diseases. The proportion of households using one room for sleeping has decreased from 43 percent to 39 percent over the past five years.

Indoor air pollution has important implications for the health of household members. Cooking and heating with solid fuels can lead to high levels of indoor smoke, which consists of a complex mix of

pollutants that can increase the risk of contracting diseases. Solid fuels include charcoal, wood, straw, shrubs, grass, agricultural crops, and animal dung. Forty-six percent of households cook in the housing unit where they live, 21 percent use a separate building, and 29 percent cook outdoors.

Wood is the main type of cooking fuel, used by 64 percent of households (38 percent of urban households and 83 percent of rural households). In addition to wood, kerosene is an important type of cooking fuel in urban areas; 48 percent of urban households use kerosene for cooking. Reducing the proportion of households that rely on solid fuels is one of the aims of MDG 7. Nigeria has made some progress toward this goal, with the proportion of households using solid fuels decreasing from 78 percent in the 2008 NDHS to 69 percent in 2013.

Information on smoking was collected in the 2013 NDHS to assess the percentage of household members who are exposed to secondhand smoke (SHS), which is a risk factor for those who do not smoke. Pregnant women who are exposed to SHS have a higher risk of delivering a low birth weight baby (Windham et al., 1999). In addition, children who are exposed to SHS are at a higher risk of respiratory and ear infections and poor lung development (U.S. Department of Health and Human Services, 2006). Table 2.3 provides information on the frequency of smoking in the home, which is used as a proxy for level of SHS exposure. Overall, 6 percent of households are exposed daily to SHS, with no differences between urban and rural areas.

2.1.4 Household Possessions

Possession of durable consumer goods is another useful indicator of a household's socio-economic status. The possession and use of household durable goods have multiple effects and implications. For instance, a radio or a television can bring household members information and new ideas, a refrigerator prolongs the wholesomeness of foods, and a means of transport can increase access to many services that are beyond walking distance. Table 2.4 shows the extent of possession of selected consumer goods by area of residence. Sixty-eight percent of households have radios, 75 percent have mobile telephones, 48 percent have televisions, 3 percent have non-mobile telephones, and 18 percent have refrigerators.

Table 2.4 Household possessions

Percentage of households possessing various household effects, means of transportation, agricultural land, and livestock/farm animals, by residence, Nigeria 2013

Possession	Residence		Total
	Urban	Rural	
Household effects			
Radio	77.7	61.3	68.3
Television	73.2	28.2	47.6
Mobile telephone	88.6	64.8	75.1
Non-mobile telephone	3.2	2.1	2.5
Refrigerator	32.5	7.5	18.3
Means of transport			
Canoe	1.0	3.3	2.3
Bicycle	12.7	22.6	18.3
Animal-drawn cart	1.3	5.4	3.6
Motorcycle/scooter	27.0	34.4	31.2
Car/truck	14.4	4.3	8.7
Boat with a motor	0.6	1.0	0.8
Ownership of agricultural land	31.2	78.1	57.8
Ownership of farm animals[1]	29.4	64.9	49.6
Ownership of bank account[2]	56.0	18.4	34.6
Number	16,609	21,913	38,522

[1] Cattle, cows, bulls, horses, donkeys, goats, sheep, or chickens
[2] At least one household member has an account.

In both urban and rural areas, only a small percentage of households possess a means of transport. Rural households are slightly more likely than urban households to own a motorcycle or scooter (34 percent versus 27 percent) or a bicycle (23 percent versus 13 percent). Only 9 percent of households own a car or truck. Half of all households own agricultural land (58 percent) or farm animals (50 percent). Overall, 35 percent of households have a bank account, and more than half of urban households have an account (56 percent versus 18 percent in rural households).

2.2 WEALTH INDEX

The wealth index used in this survey has been used in many DHS and other country-level surveys to indicate inequalities in household characteristics, in the use of health and other services, and in health outcomes (Rutstein et al., 2000). It serves as an indicator of wealth that is consistent with expenditure and income measures (Rutstein, 1999). The index was constructed using household asset data via a principal components analysis.

In its current form, which takes better account of urban-rural differences in scores and indicators of wealth, the wealth index is created in three steps. In the first step, a subset of indicators common to urban and rural areas is used to create wealth scores for households in both areas. Categorical variables to be used are transformed into separate dichotomous (0-1) indicators. These indicators and those that are continuous are then examined using a principal components analysis to produce a common factor score for each household. In the second step, separate factor scores are produced for households in urban and rural areas using area-specific indicators. The third step combines the separate area-specific factor scores to produce a nationally applicable combined wealth index by adjusting area-specific scores through a regression on the common factor scores. The resulting combined wealth index has a mean of zero and a standard deviation of one. Once the index is computed, national-level wealth quintiles (from lowest to highest) are obtained by assigning household scores to each de jure household member, ranking each person in the population by his or her score, and then dividing the ranking into five equal categories, each comprising 20 percent of the population.

Table 2.5 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and the Gini coefficient, according to residence and region, Nigeria 2013

	Wealth quintile							
Residence/region	Lowest	Second	Middle	Fourth	Highest	Total	Number of persons	Gini Coefficient
Residence								
Urban	3.0	6.6	16.3	30.9	43.3	100.0	70,422	0.18
Rural	31.3	28.9	22.5	12.8	4.6	100.0	106,541	0.35
Zone								
North Central	11.3	21.3	32.1	20.5	14.8	100.0	27,368	0.32
North East	40.4	26.1	15.0	11.2	7.4	100.0	26,927	0.25
North West	35.4	28.7	15.9	12.7	7.4	100.0	56,512	0.28
South East	4.7	13.3	25.5	28.5	27.9	100.0	18,777	0.24
South South	0.5	10.1	25.9	32.2	31.3	100.0	19,893	0.29
South West	1.7	6.6	13.4	28.5	49.8	100.0	27,486	0.18
Total	20.0	20.0	20.0	20.0	20.0	100.0	176,963	0.29

Table 2.5 presents wealth quintiles by residence and geographical zone. In urban areas, 43 percent of the population is in the highest wealth quintile, in sharp contrast to rural areas, where only 5 percent of the population is in the highest wealth quintile. Among regions, the wealth quintile distribution varies greatly; half of the population in the South West is in the highest quintile, while 3 in 10 households in the South South and South East are in the highest quintile. In contrast, a significant proportion of households in the North East and North West (40 percent and 35 percent, respectively) are in the lowest quintile.

Table 2.5 also includes information on the Gini coefficient, which indicates the level of concentration of wealth (0 being an equal distribution and 1 a totally unequal distribution). This ratio is expressed as a proportion between 0 and 1. Wealth inequality is higher in rural than in urban areas. Inequality in wealth varies among the zones, with wealth being more evenly distributed in the South West (0.18).

2.3 HAND WASHING

Hand washing with soap and water is ideal. However, hand washing with a non-soap cleaning agent such as ash or sand is an improvement over not using any cleansing agent.

To obtain information on hand washing, interviewers asked to see the place where members of the household most often washed their hands; information on the availability of water and/or cleansing agents was recorded only for households where a hand washing place was observed. Table 2.6 shows that interviewers observed a place for hand washing in 40 percent of households. A hand washing place was observed more often in urban areas (43 percent) than in rural areas (37 percent). The most common reason interviewers were not able to observe the place where members of the household washed their hands was that there was no specific place designated for hand washing (data not shown).

Table 2.6 Hand washing

Percentage of households in which the place most often used for washing hands was observed, and among households in which the place for hand washing was observed, the percent distribution by availability of water, soap, and other cleansing agents, Nigeria 2013

Background characteristic	Percentage of households where place for washing hands was observed	Number of households	Among households where place for hand washing was observed, percentage with: Soap and water[1]	Water and cleansing agent[2] other than soap only	Water only	Soap but no water[3]	Cleansing agent other than soap only[2]	No water, soap, or other cleansing agent	Missing	Total	Number of households with place for hand washing observed
Residence											
Urban	42.5	16,609	38.7	1.1	16.1	2.4	2.4	39.3	0.1	100.0	7,066
Rural	37.1	21,913	15.6	4.5	13.4	1.8	8.2	56.3	0.2	100.0	8,141
Zone											
North Central	54.6	5,942	19.4	4.5	14.7	2.5	13.3	45.6	0.0	100.0	3,245
North East	48.0	5,115	2.8	0.2	9.9	0.9	0.1	86.1	0.1	100.0	2,455
North West	31.5	9,992	19.2	7.7	15.3	1.2	10.4	45.7	0.4	100.0	3,144
South East	11.1	4,687	50.1	0.0	21.0	11.0	0.0	16.9	1.0	100.0	520
South South	40.8	5,239	54.7	2.2	15.6	2.2	3.1	22.0	0.1	100.0	2,135
South West	49.1	7,546	34.3	0.1	15.7	1.8	0.4	47.7	0.0	100.0	3,708
States											
North Central											
FCT-Abuja	39.7	361	93.4	0.3	3.2	0.0	0.0	3.1	0.0	100.0	143
Benue	23.8	1,365	14.5	0.7	25.8	1.5	0.0	57.5	0.0	100.0	325
Kogi	55.3	876	28.3	11.3	25.3	1.8	4.7	28.5	0.0	100.0	485
Kwara	56.5	617	14.9	0.0	6.4	0.7	0.4	77.6	0.0	100.0	349
Nasarawa	74.6	550	22.8	1.0	5.5	1.2	1.3	68.2	0.0	100.0	410
Niger	90.6	1,504	8.6	5.9	14.8	4.0	29.1	37.6	0.0	100.0	1,362
Plateau	25.5	669	29.3	1.8	12.1	2.9	3.2	50.7	0.0	100.0	170
North East											
Adamawa	2.3	726	*	*	*	*	*	*	*	100.0	17
Bauchi	17.3	932	1.1	0.5	4.7	0.0	0.0	93.7	0.0	100.0	161
Borno	89.4	1,560	1.1	0.2	5.8	0.1	0.0	92.8	0.0	100.0	1,395
Gombe	40.7	464	4.0	0.6	3.9	7.9	0.0	83.6	0.0	100.0	189
Taraba	0.6	634	*	*	*	*	*	*	*	100.0	4
Yobe	86.4	799	6.0	0.0	20.9	0.8	0.3	72.1	0.0	100.0	690
North West											
Jigawa	15.4	1,152	24.3	7.6	17.8	3.6	6.4	39.2	1.0	100.0	178
Kaduna	53.1	1,915	29.5	1.1	17.1	0.2	24.2	27.8	0.1	100.0	1,017
Kano	2.4	2,606	(5.7)	(9.7)	(10.6)	(0.0)	(0.0)	(65.7)	(8.3)	100.0	63
Katsina	72.8	1,257	19.8	19.5	20.7	1.3	4.7	33.6	0.5	100.0	915
Kebbi	19.8	1,069	1.9	0.0	2.0	2.4	0.6	93.2	0.0	100.0	212
Sokoto	34.4	898	20.6	1.1	10.7	0.9	0.0	66.5	0.3	100.0	309
Zamfara	41.1	1,096	2.0	6.9	9.2	2.1	5.9	73.8	0.0	100.0	450
South East											
Abia	15.1	644	62.3	0.0	2.3	17.7	0.0	17.7	0.0	100.0	97
Anambra	8.8	1,050	61.8	0.0	18.7	13.2	0.0	6.3	0.0	100.0	92
Ebonyi	13.8	978	42.3	0.0	25.8	9.4	0.0	20.3	2.2	100.0	135
Enugu	3.1	920	(52.3)	(0.0)	(7.7)	(28.9)	(0.0)	(11.1)	(0.0)	100.0	28
Imo	15.3	1,096	42.6	0.0	31.3	4.2	0.0	20.4	1.5	100.0	167
South South											
Akwa Ibom	27.1	892	61.3	0.3	4.9	8.8	4.1	20.5	0.0	100.0	241
Bayelsa	4.7	322	(78.6)	(0.0)	(4.8)	(9.4)	(0.0)	(7.1)	(0.0)	100.0	15
Cross River	20.1	848	33.5	0.6	26.2	6.9	0.0	32.0	0.8	100.0	170
Delta	61.3	946	47.8	4.2	30.2	0.2	0.3	17.3	0.0	100.0	580
Edo	53.1	702	49.4	5.8	16.3	0.8	14.4	13.2	0.1	100.0	373
Rivers	49.5	1,529	64.7	0.0	5.4	1.2	0.1	28.5	0.1	100.0	756
South West											
Ekiti	56.8	376	28.6	0.1	12.2	2.6	0.0	56.4	0.0	100.0	213
Lagos	75.6	2,240	37.5	0.0	20.6	2.4	0.8	38.7	0.0	100.0	1,692
Ogun	14.6	1,355	15.7	0.0	9.1	4.0	0.0	71.2	0.0	100.0	198
Ondo	53.8	920	36.9	1.1	10.9	0.0	0.0	51.1	0.0	100.0	495
Osun	86.7	853	16.5	0.0	6.5	0.8	0.0	76.2	0.0	100.0	740
Oyo	20.5	1,802	65.2	0.0	23.1	1.6	0.0	10.0	0.0	100.0	369
Wealth quintile											
Lowest	40.1	6,245	3.1	4.5	12.5	0.5	9.6	69.7	0.2	100.0	2,505
Second	33.4	7,166	10.4	5.6	14.7	1.1	7.3	60.5	0.3	100.0	2,394
Middle	34.5	7,894	15.4	4.2	15.3	2.1	7.8	55.1	0.1	100.0	2,723
Fourth	35.3	8,310	25.5	2.1	15.5	2.5	5.7	48.7	0.0	100.0	2,934
Highest	52.2	8,907	54.0	0.6	14.8	3.0	1.0	26.4	0.2	100.0	4,651
Total	39.5	38,522	26.3	2.9	14.6	2.0	5.5	48.4	0.2	100.0	15,207

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Soap includes soap or detergent in bar, liquid, powder, or paste form. This column includes households with soap and water only as well as those that had soap and water and another cleansing agent.

[2] Cleansing agents other than soap include locally available materials such as ash, mud, or sand.

[3] Includes households with soap only as well as those with soap and another cleansing agent

Soap and water were available in 26 percent of the households where a hand washing place was observed, and water only was available in 15 percent; 2 percent of households had soap but no water, 3 percent had water with another cleansing agent other than soap, and 6 percent had another cleansing agent but no water. In the case of 48 percent of the households, no water, soap, or any other cleansing agent was observed at the hand washing place. Lack of water and a cleansing agent decreased with increasing wealth quintile, from 70 percent in the lowest wealth quintile to 26 percent in the highest wealth quintile.

2.4 HOUSEHOLD POPULATION BY AGE, SEX, AND RESIDENCE

The 2013 NDHS Household Questionnaire collected data on the demographic and social characteristics of all usual residents of the sampled household and on visitors who had spent the previous night in the household. Table 2.7 shows the distribution of the household population by five-year age groups, according to sex and residence. A total of 176,574 individuals were residing in the sampled households; 89,529 were female (51 percent), and 87,034 were male (49 percent) (information on gender was not available for 11 individuals). The sex ratio was 97 males per 100 females. Age and sex are important demographic variables and are the primary basis of demographic classifications in vital statistics, censuses, and surveys. They are also very important variables in the study of mortality, fertility, nuptiality, and migration. In general, a cross-classification by sex and age is useful for the effective analysis of all forms of data obtained in surveys.

Table 2.7 Household population by age, sex, and residence

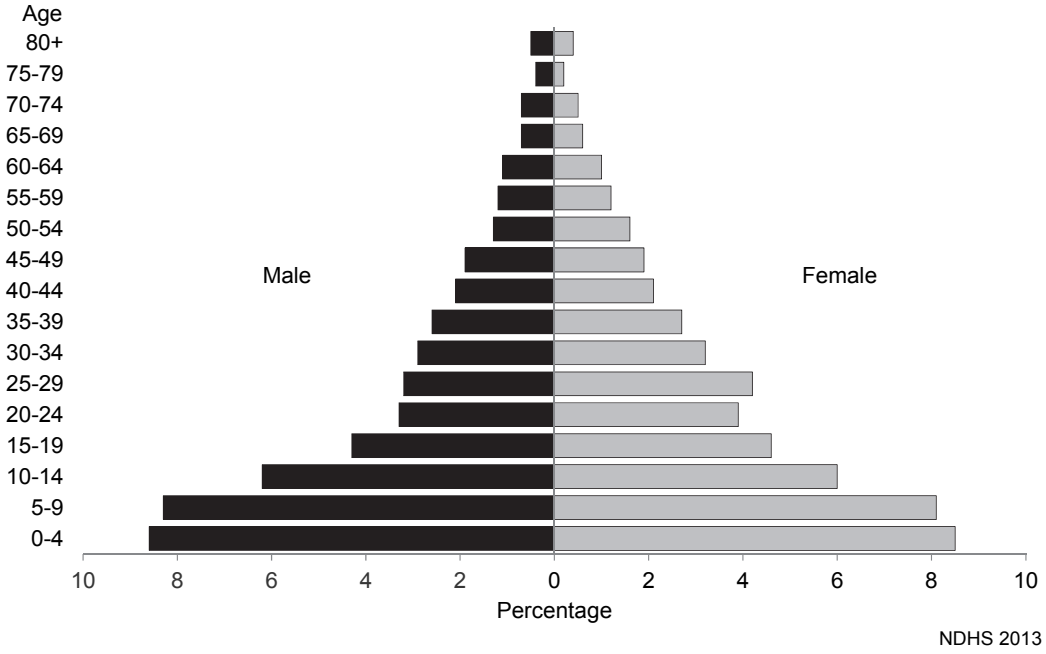
Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Nigeria 2013

	Urban			Rural					
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	15.7	15.2	15.5	18.6	17.7	18.1	17.4	16.7	17.1
5-9	14.8	14.3	14.6	18.0	17.0	17.5	16.8	15.9	16.3
10-14	12.5	12.0	12.2	12.8	11.8	12.3	12.7	11.9	12.3
15-19	9.1	9.5	9.3	8.3	8.7	8.5	8.6	9.0	8.8
20-24	7.4	8.0	7.7	6.2	7.6	6.9	6.7	7.8	7.2
25-29	7.3	8.6	8.0	6.1	8.1	7.1	6.6	8.3	7.4
30-34	6.7	7.0	6.9	5.4	5.7	5.6	5.9	6.2	6.1
35-39	5.8	5.7	5.8	4.9	5.2	5.0	5.2	5.4	5.3
40-44	4.7	4.2	4.4	4.1	3.9	4.0	4.3	4.0	4.2
45-49	3.9	3.9	3.9	3.8	3.6	3.7	3.9	3.7	3.8
50-54	3.0	3.2	3.1	2.4	3.3	2.9	2.6	3.3	2.9
55-59	2.7	2.3	2.5	2.4	2.3	2.3	2.5	2.3	2.4
60-64	2.2	2.1	2.1	2.3	1.9	2.1	2.3	2.0	2.1
65-69	1.4	1.4	1.4	1.5	1.1	1.3	1.5	1.2	1.3
70-74	1.2	1.1	1.2	1.4	1.0	1.2	1.3	1.0	1.2
75-79	0.7	0.5	0.6	0.7	0.4	0.5	0.7	0.5	0.6
80+	0.9	0.8	0.9	1.1	0.7	0.9	1.0	0.8	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	34,692	35,744	70,439	52,342	53,785	106,135	87,034	89,529	176,574

Note: Total includes 11 persons whose sex was not stated.

The age-sex structure of the population is shown in the population pyramid in Figure 2.1. The broad base of the pyramid indicates that Nigeria's population is young, a scenario typical of countries with high fertility rates. The proportion of children under age 15 is around 46 percent, while the proportion of individuals age 65 and older is 4 percent.

Figure 2.1 **Population pyramid**



2.5 HOUSEHOLD COMPOSITION

Information on household composition is critical for understanding family size, household headship, and orphanhood and for implementing meaningful population-based policies and programmes. Household composition is also a determinant of health status and well-being.

Table 2.8 presents information on household composition. The majority (82 percent) of households are headed by men, with only 19 percent headed by women. The proportion of female-headed households has remained almost the same in the last five years. The average household size is 4.6 persons, as compared with 4.4 in 2008; household sizes are larger in rural (4.9) than urban (4.2) areas. The proportion of households with nine or more members is higher in rural areas (12 percent) than in urban areas (7 percent).

Information was also collected on the living arrangements and survival status of all children under age 18 residing in the NDHS sample households. These data can be used to assess the extent to which households are faced with a need to care for orphaned or foster children. Orphans include children whose mother or father has died (single orphans) as well as children who have lost both parents (double orphans). In the case of foster children, both parents are alive but the children are living in a household where neither

Table 2.8 Household composition

Percent distribution of households by sex of head of household and by household size, mean size of household, and percentage of households with orphans and foster children under age 18, according to residence, Nigeria 2013

Characteristic	Residence		Total
	Urban	Rural	
Household headship			
Male	77.1	84.8	81.5
Female	22.9	15.2	18.5
Total	100.0	100.0	100.0
Number of usual members			
0	0.2	0.1	0.2
1	19.2	13.6	16.0
2	12.1	11.9	12.0
3	14.6	13.1	13.8
4	13.9	12.9	13.3
5	12.7	12.3	12.5
6	10.0	10.5	10.3
7	6.1	8.0	7.2
8	3.9	5.6	4.9
9+	7.3	11.9	9.9
Total	100.0	100.0	100.0
Mean size of households	4.2	4.9	4.6
Percentage of households with orphans and foster children under age 18			
Foster children[1]	15.0	16.6	15.9
Double orphans	0.7	0.7	0.7
Single orphans[2]	7.0	6.2	6.5
Foster and/or orphan children	18.6	19.8	19.3
Number of households	16,609	21,913	38,522

Note: Table is based on de jure household members (i.e., usual residents).
[1] Foster children are those under age 18 living in households with neither their mother nor their father present.
[2] Includes children with one dead parent and an unknown survival status of the other parent

their natural mother nor natural father resides. Foster children and orphans may be at an increased risk of neglect or exploitation because their mothers or fathers are not present to assist them. There is little difference in the distribution of orphans by rural and urban areas. Overall, 16 percent of households are caring for foster children, and more rural than urban households have foster children (17 percent and 15 percent, respectively). Single orphans are present in 7 percent of households, whereas double orphans are present in less than 1 percent of households.[1]

2.6 BIRTH REGISTRATION

Birth registration is the inscription of the facts of each birth into an official log kept at the registrar's office. According to the Births, Deaths, etc. (Compulsory Registration) Act No. 69 of 1992, registration of births and deaths is compulsory in all cases, and the National Population Commission (NPC) is responsible for registering these events nationwide (NPC, 1992). Information on registration of births was collected in the household interview, wherein respondents were asked whether children under age 5 residing in the household had ever been registered. If they reported that the child had been registered, an additional question was posed to ascertain whether the child's birth had been registered with the birth and death registry or another agency. When it had been confirmed that the child was registered, interviewers asked to see the birth certificate.

Table 2.9 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Nigeria 2013

Background characteristic	Children whose births are registered		Percentage registered	Number of children
	Percentage with a birth certificate	Percentage without a birth certificate		
Age				
<2	14.6	14.1	28.7	12,042
2-4	14.9	15.7	30.6	18,066
Sex				
Male	14.9	15.0	29.9	15,178
Female	14.6	15.1	29.8	14,929
Residence				
Urban	25.5	24.4	49.8	10,870
Rural	8.7	9.8	18.6	19,238
Zone				
North Central	11.6	16.2	27.8	4,161
North East	11.0	9.3	20.4	5,171
North West	10.8	8.7	19.5	10,973
South East	21.7	30.1	51.8	2,701
South South	20.0	17.3	37.3	2,888
South West	24.9	26.3	51.2	4,214
State				
North Central				
FCT-Abuja	34.0	27.2	61.2	204
Benue	8.2	15.4	23.5	885
Kogi	16.9	31.5	48.4	396
Kwara	25.1	33.4	58.5	397
Nasarawa	12.1	13.1	25.2	451
Niger	5.6	8.6	14.1	1,335
Plateau	9.1	10.6	19.7	492
North East				
Adamawa	20.3	15.5	35.8	692
Bauchi	5.4	8.9	14.2	1,260
Borno	16.0	8.2	24.2	1,077
Gombe	12.4	14.6	27.0	554
Taraba	10.8	9.9	20.7	694
Yobe	5.3	2.9	8.2	893
North West				
Jigawa	5.9	10.5	16.4	1,425
Kaduna	12.1	12.3	24.4	1,456
Kano	13.3	5.8	19.1	2,851
Katsina	28.1	17.9	46.0	1,614
Kebbi	2.3	7.4	9.6	1,158
Sokoto	5.1	5.6	10.7	1,059
Zamfara	0.6	2.4	3.0	1,410

Continued…

[1] A more detailed discussion on orphan and vulnerable children can be found in Chapter 17 of this report.

Table 2.9—*Continued*

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Nigeria 2013

Background characteristic	Children whose births are registered		Percentage registered	Number of children
	Percentage with a birth certificate	Percentage without a birth certificate		
South East				
Abia	27.3	31.4	58.8	311
Anambra	26.0	35.2	61.2	617
Ebonyi	18.0	18.8	36.8	723
Enugu	18.0	28.1	46.1	536
Imo	21.9	41.3	63.2	515
South South				
Akwa Ibom	22.8	21.6	44.5	467
Bayelsa	9.4	14.6	24.1	227
Cross River	10.5	11.2	21.6	536
Delta	24.2	11.8	36.0	554
Edo	24.3	27.7	52.0	400
Rivers	23.1	18.4	41.4	702
South West				
Ekiti	29.2	21.2	50.5	194
Lagos	31.3	30.7	62.0	1,234
Ogun	15.0	20.7	35.6	719
Ondo	17.1	23.8	40.8	545
Osun	33.9	31.7	65.6	453
Oyo	23.4	25.1	48.6	1,068
Wealth quintile				
Lowest	3.2	3.5	6.7	6,896
Second	7.4	9.3	16.7	6,799
Middle	12.8	14.6	27.4	5,802
Fourth	22.6	22.4	45.0	5,478
Highest	33.8	31.1	64.9	5,133
Total	14.8	15.1	29.8	30,108

Note: Total includes 2 children with missing information on sex.

Table 2.9 shows the percentage of de jure children under age 5 whose births were officially registered and the percentage who had a birth certificate at the time of the survey. Thirty percent of de jure children had their births registered. Fifteen percent had a birth certificate, and 15 percent did not. Almost equal proportions of male and female children had been registered, but children age 2-4 were more likely than those under age 2 to have been registered (31 percent and 29 percent, respectively). Children in urban households were more likely to have had their birth registered than children in rural households (50 percent and 19 percent, respectively). The proportion of registered births was highest in the South East and South West (52 percent and 51 percent, respectively) and lowest in the North West and North East (20 percent each). Across the states, Zamfara had the lowest percentage of children registered (3 percent). In Yobe and Kebbi the proportions were 8 percent and 10 percent, respectively. Households in the highest wealth quintile were most likely to register children's births (65 percent), and households in the lowest quintile were least likely to do so (7 percent).

In the case of children whose births were confirmed as registered, interviewers asked respondents about the place of registration. Table 2.10 shows that 57 percent of births were registered with the NPC, while 22 percent were registered in a private clinic/hospital. There has been an improvement in registration of births with the NPC since the 2008 NDHS (when the figure was 36 percent). In both urban and rural areas, more than half of births were registered with the NPC (58 percent and 55 percent, respectively). Registration of births with the NPC was lowest in Benue (27 percent) and in Kebbi and Kaduna (24 percent each).

Table 2.10 Birth registration of children under age 5 by authority

Among de jure children under age 5 whose births are registered with the civil authorities, percent distribution of children by authority with which the birth is registered, according to background characteristics, Nigeria 2013

Background characteristic	Authority where birth is registered					Total	Number of children
	National Population Commission	Local Government Administration	Private clinic/hospital	Other	Missing		
Age							
<2	58.6	10.8	22.7	5.9	2.0	100.0	3,569
2-4	56.0	14.5	20.8	6.6	2.2	100.0	5,698
Sex							
Male	58.1	12.9	20.4	6.5	2.1	100.0	4,676
Female	55.8	13.2	22.7	6.2	2.1	100.0	4,590
Residence							
Urban	58.4	11.6	23.3	5.4	1.2	100.0	5,546
Rural	54.8	15.2	18.9	7.7	3.4	100.0	3,720
Zone							
North Central	50.9	18.0	22.2	6.3	2.6	100.0	1,189
North East	54.9	16.3	19.1	5.4	4.4	100.0	1,128
North West	61.9	18.5	15.8	0.8	3.0	100.0	2,231
South East	49.5	3.5	37.7	8.5	0.8	100.0	1,411
South South	59.5	7.9	21.6	9.1	1.9	100.0	1,119
South West	59.9	12.0	17.7	9.6	0.7	100.0	2,190
State							
North Central							
FCT-Abuja	81.7	4.3	8.7	2.7	2.5	100.0	128
Benue	26.7	29.8	28.3	8.1	7.1	100.0	224
Kogi	54.4	13.1	23.2	9.2	0.0	100.0	191
Kwara	58.0	22.0	16.7	2.6	0.7	100.0	235
Nasarawa	41.5	9.8	38.7	7.4	2.6	100.0	117
Niger	44.4	24.9	23.8	4.3	2.6	100.0	194
Plateau	66.3	4.8	14.6	12.2	2.1	100.0	100
North East							
Adamawa	44.9	22.3	25.6	4.0	3.1	100.0	258
Bauchi	54.1	15.8	19.2	5.7	5.2	100.0	189
Borno	67.1	15.1	15.7	0.0	2.1	100.0	278
Gombe	60.6	24.9	5.0	3.4	6.2	100.0	160
Taraba	47.2	8.4	29.9	12.4	2.1	100.0	153
Yobe	49.8	1.4	17.4	17.1	14.2	100.0	89
North West							
Jigawa	67.9	16.5	13.2	0.9	1.5	100.0	240
Kaduna	23.6	19.4	54.2	1.0	1.8	100.0	373
Kano	78.3	15.5	3.9	0.1	2.2	100.0	557
Katsina	78.1	16.9	4.1	0.5	0.4	100.0	745
Kebbi	23.7	34.8	32.1	4.6	4.8	100.0	118
Sokoto	52.8	18.3	14.5	0.0	14.3	100.0	138
Zamfara	(19.3)	(38.3)	(14.1)	(2.5)	(25.8)	100.0	59
South East							
Abia	51.2	3.3	43.3	2.2	0.0	100.0	183
Anambra	44.9	4.2	33.8	17.1	0.0	100.0	377
Ebonyi	66.2	1.7	24.8	3.2	4.0	100.0	277
Enugu	51.0	2.3	37.1	9.5	0.2	100.0	248
Imo	38.3	5.3	50.3	6.1	0.0	100.0	326
South South							
Akwa Ibom	59.0	5.5	24.3	10.5	0.6	100.0	209
Bayelsa	45.6	7.5	28.0	17.6	1.3	100.0	58
Cross River	69.2	1.9	22.2	2.2	4.5	100.0	121
Delta	71.1	7.5	10.1	6.4	4.9	100.0	220
Edo	61.0	11.6	21.1	4.9	1.4	100.0	219
Rivers	48.7	9.6	27.1	14.6	0.0	100.0	291
South West							
Ekiti	66.5	8.3	14.8	10.4	0.0	100.0	99
Lagos	62.5	16.9	12.9	7.6	0.1	100.0	768
Ogun	52.2	10.8	16.8	17.2	3.0	100.0	271
Ondo	36.7	17.0	28.5	16.6	1.3	100.0	228
Osun	68.4	7.6	18.2	5.8	0.0	100.0	297
Oyo	64.1	6.7	20.8	7.7	0.6	100.0	528
Wealth quintile							
Lowest	60.9	18.1	9.4	3.2	8.3	100.0	508
Second	54.8	19.5	14.9	6.6	4.2	100.0	1,188
Middle	55.5	15.9	20.6	6.2	1.9	100.0	1,637
Fourth	56.2	11.2	23.0	7.8	1.8	100.0	2,530
Highest	58.5	10.1	25.0	5.6	0.8	100.0	3,404
Total	57.0	13.1	21.5	6.3	2.1	100.0	9,267

Note: Total includes 1 child with missing information on sex. Figures in parentheses are based on 25-49 unweighted cases.

2.7 EDUCATION OF THE HOUSEHOLD POPULATION

2.7.1 Educational Attainment

The educational level of household members is among the most important characteristics of a household because it is associated with many factors that have a significant impact on health-seeking behaviours, reproductive behaviours, use of contraception, and children's health status.

Table 2.11.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Nigeria 2013

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Don't know/ missing	Total	Number	Median years completed
Age[3]										
6-9	43.4	54.3	0.1	0.4	0.0	0.0	1.7	100.0	11,621	0.0
10-14	25.9	45.6	5.7	21.6	0.1	0.0	1.0	100.0	10,640	2.9
15-19	27.1	6.4	7.4	45.8	11.5	1.4	0.5	100.0	8,054	7.1
20-24	33.2	3.6	9.3	16.3	26.8	10.0	0.7	100.0	6,971	7.7
25-29	37.6	4.4	11.7	9.6	22.8	13.0	1.0	100.0	7,418	5.6
30-34	38.0	4.3	15.0	8.4	19.8	13.6	1.0	100.0	5,593	5.5
35-39	40.7	5.3	17.9	8.2	16.8	10.5	0.6	100.0	4,832	5.2
40-44	42.7	5.9	18.9	8.5	13.5	9.3	1.0	100.0	3,621	5.0
45-49	51.0	5.5	17.4	7.6	10.0	7.8	0.8	100.0	3,307	0.0
50-54	56.7	6.8	15.6	4.2	7.5	7.0	2.1	100.0	2,910	0.0
55-59	64.4	7.5	14.1	3.4	4.6	3.9	2.2	100.0	2,068	0.0
60-64	69.6	8.2	10.8	1.8	3.3	2.3	3.9	100.0	1,764	0.0
65+	78.2	4.9	7.0	0.8	1.4	1.7	5.9	100.0	3,113	0.0
Residence										
Urban	21.5	20.6	10.8	18.1	17.5	10.6	0.9	100.0	29,345	5.6
Rural	53.5	18.2	8.7	10.0	5.9	2.1	1.7	100.0	42,590	0.0
Zone										
North Central	38.0	23.3	9.2	14.0	8.7	5.7	1.0	100.0	10,897	1.9
North East	61.1	16.7	5.9	7.1	4.5	2.9	1.7	100.0	10,505	0.0
North West	62.8	15.8	6.7	6.6	4.3	1.4	2.4	100.0	22,036	0.0
South East	18.7	22.0	13.0	18.5	18.0	8.8	0.9	100.0	8,523	5.6
South South	13.0	22.4	14.0	22.4	18.6	9.1	0.5	100.0	8,467	5.9
South West	17.1	19.5	12.8	20.3	19.0	11.0	0.3	100.0	11,507	5.9
State										
North Central										
FCT-Abuja	14.5	22.6	9.5	14.4	17.2	20.6	1.3	100.0	529	6.5
Benue	25.7	33.9	9.4	20.1	5.9	3.1	1.9	100.0	2,364	2.8
Kogi	25.7	24.6	11.8	16.3	14.6	6.5	0.6	100.0	1,414	4.9
Kwara	26.6	19.6	12.3	15.9	13.4	10.5	1.6	100.0	1,109	5.2
Nasarawa	41.3	23.1	9.4	13.1	7.1	5.3	0.7	100.0	1,163	1.4
Niger	61.6	17.5	6.0	6.9	5.2	2.4	0.4	100.0	3,017	0.0
Plateau	35.6	20.1	10.2	16.2	9.4	7.7	0.9	100.0	1,300	2.9
North East										
Adamawa	35.5	26.9	8.7	14.6	8.4	4.4	1.3	100.0	1,533	1.8
Bauchi	62.3	17.5	7.3	5.6	2.6	1.4	3.2	100.0	2,177	0.0
Borno	69.0	12.5	4.7	4.6	4.1	4.2	0.8	100.0	2,503	0.0
Gombe	61.6	17.0	4.9	7.6	5.1	2.0	1.9	100.0	1,113	0.0
Taraba	43.2	27.4	9.6	9.8	5.6	3.2	1.3	100.0	1,435	0.3
Yobe	85.3	4.0	1.2	3.6	2.8	1.7	1.4	100.0	1,744	0.0
North West										
Jigawa	71.3	16.3	6.4	3.5	0.8	0.3	1.4	100.0	2,528	0.0
Kaduna	40.3	18.5	9.2	13.8	11.4	5.4	1.4	100.0	3,565	1.7
Kano	54.2	20.8	8.3	8.6	5.0	1.0	2.0	100.0	6,209	0.0
Katsina	67.7	15.2	7.3	2.3	2.6	0.2	4.7	100.0	2,912	0.0
Kebbi	75.8	9.7	4.3	5.6	2.3	0.7	1.5	100.0	2,502	0.0
Sokoto	78.5	9.6	3.1	3.4	1.6	0.4	3.4	100.0	1,900	0.0
Zamfara	77.3	10.1	3.7	3.1	1.4	0.8	3.4	100.0	2,421	0.0
South East										
Abia	17.2	18.4	13.8	17.3	20.8	11.6	0.8	100.0	1,020	6.0
Anambra	10.1	22.4	12.2	17.6	23.5	13.4	0.9	100.0	1,879	7.6
Ebonyi	27.8	25.9	12.8	18.3	10.8	3.5	1.0	100.0	2,084	3.8
Enugu	23.1	20.7	14.5	17.5	16.5	6.6	1.1	100.0	1,815	5.4
Imo	13.4	20.6	12.3	21.6	20.7	10.8	0.7	100.0	1,725	6.7
South South										
Akwa Ibom	12.9	22.2	15.6	24.0	14.7	9.4	1.1	100.0	1,565	5.8
Bayelsa	10.4	27.6	13.9	23.8	19.7	4.7	0.0	100.0	613	5.7
Cross River	18.0	28.7	13.9	20.4	12.9	5.9	0.3	100.0	1,373	5.2
Delta	14.3	22.1	13.8	21.7	17.4	10.3	0.4	100.0	1,630	5.9
Edo	12.1	23.3	13.1	23.8	18.4	8.9	0.4	100.0	1,299	5.9
Rivers	10.0	16.4	13.7	21.8	26.3	11.4	0.3	100.0	1,989	8.1

Continued…

Table 2.11.1—*Continued*

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Don't know/ missing	Total	Number	Median years completed
South West										
Ekiti	15.2	18.0	11.5	20.4	18.5	15.9	0.4	100.0	610	7.4
Lagos	9.0	18.4	10.7	20.4	26.8	14.4	0.3	100.0	3,398	8.5
Ogun	24.1	20.0	21.2	18.0	12.3	4.0	0.4	100.0	1,723	5.3
Ondo	14.1	22.6	13.1	22.5	16.1	11.5	0.1	100.0	1,476	5.9
Osun	16.3	19.5	9.7	21.9	19.4	13.1	0.1	100.0	1,398	6.4
Oyo	24.9	19.1	11.9	19.8	15.2	8.7	0.4	100.0	2,902	5.4
Wealth quintile										
Lowest	81.0	10.9	3.5	2.1	0.4	0.1	2.1	100.0	13,855	0.0
Second	58.0	20.5	8.7	8.2	2.2	0.2	2.2	100.0	14,124	0.0
Middle	37.5	24.0	12.6	15.4	7.8	1.5	1.2	100.0	14,777	2.0
Fourth	20.7	22.0	14.1	20.0	17.1	5.4	0.8	100.0	14,440	5.4
Highest	7.7	18.1	8.5	20.1	24.8	20.2	0.5	100.0	14,738	9.7
Total	40.4	19.2	9.5	13.3	10.6	5.6	1.4	100.0	71,935	1.7

[1] Completed grade 6 at the primary level
[2] Completed grade 6 at the secondary level
[3] Excludes 22 cases with missing information on age

Table 2.11.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Nigeria 2013

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Don't know/ missing	Total	Number	Median years completed
Age[3]										
6-9	41.9	56.0	0.2	0.4	0.0	0.0	1.4	100.0	11,826	0.0
10-14	21.0	51.2	5.5	21.6	0.1	0.1	0.5	100.0	11,023	3.1
15-19	17.3	8.1	6.9	54.3	11.7	1.3	0.4	100.0	7,525	7.6
20-24	18.6	2.3	7.0	20.9	37.4	13.3	0.5	100.0	5,814	11.0
25-29	21.2	3.0	9.6	10.1	35.2	20.4	0.4	100.0	5,714	11.2
30-34	22.8	3.1	13.3	9.8	30.5	20.1	0.5	100.0	5,132	11.0
35-39	25.1	4.1	16.3	8.5	28.3	17.3	0.5	100.0	4,548	8.6
40-44	26.0	4.1	19.1	7.8	24.8	17.7	0.5	100.0	3,757	6.7
45-49	30.8	4.6	17.8	7.8	21.3	17.2	0.5	100.0	3,371	5.8
50-54	32.8	3.3	21.9	6.9	15.7	18.9	0.4	100.0	2,291	5.6
55-59	43.4	5.3	21.5	5.8	10.0	13.2	0.8	100.0	2,178	5.0
60-64	54.6	6.5	18.3	2.8	8.0	7.9	1.9	100.0	1,962	0.0
65+	62.0	6.9	14.6	3.4	5.2	5.2	2.7	100.0	3,919	0.0
Residence										
Urban	13.9	21.2	10.1	17.4	22.1	14.8	0.5	100.0	28,299	7.0
Rural	40.4	20.7	9.6	13.0	10.5	4.9	1.0	100.0	40,787	1.5
Zone										
North Central	22.6	24.1	8.5	17.9	14.3	12.0	0.6	100.0	11,129	5.3
North East	52.4	18.0	5.1	9.4	7.9	6.2	1.0	100.0	10,293	0.0
North West	46.9	19.0	8.0	10.1	9.8	4.8	1.4	100.0	21,209	0.0
South East	10.7	25.7	17.6	19.0	17.9	8.5	0.6	100.0	7,283	5.7
South South	6.1	22.4	12.6	21.1	24.8	12.7	0.3	100.0	8,252	8.0
South West	11.6	19.7	11.6	18.3	24.6	13.9	0.2	100.0	10,921	7.6
State										
North Central										
FCT-Abuja	10.4	19.4	8.1	11.4	20.0	29.9	0.9	100.0	593	11.0
Benue	11.1	31.5	10.2	26.0	10.8	9.3	1.0	100.0	2,521	5.5
Kogi	14.1	20.2	9.5	19.6	21.8	14.3	0.5	100.0	1,307	7.3
Kwara	12.9	22.1	11.2	17.2	17.3	18.9	0.5	100.0	1,062	6.3
Nasarawa	20.6	25.8	8.6	19.1	15.4	9.8	0.6	100.0	1,174	5.3
Niger	40.2	21.9	5.4	11.6	12.5	8.1	0.3	100.0	3,212	1.8
Plateau	25.2	21.1	9.9	18.7	11.9	12.7	0.5	100.0	1,261	5.3
North East										
Adamawa	21.2	28.7	7.8	18.5	12.3	10.6	0.8	100.0	1,416	4.9
Bauchi	51.5	21.4	5.2	9.2	6.1	4.4	2.2	100.0	2,063	0.0
Borno	63.6	10.5	3.9	6.5	8.2	6.8	0.5	100.0	2,622	0.0
Gombe	46.4	20.8	4.9	12.7	8.0	6.7	0.7	100.0	1,046	0.0
Taraba	28.6	31.5	9.5	12.8	10.8	6.0	0.8	100.0	1,352	2.5
Yobe	83.3	5.1	1.1	2.3	3.8	3.5	0.8	100.0	1,794	0.0
North West										
Jigawa	54.7	20.4	8.4	7.5	4.6	3.4	1.2	100.0	2,258	0.0
Kaduna	31.8	18.9	7.7	13.3	18.1	9.5	0.7	100.0	3,673	4.6
Kano	37.8	20.5	10.3	13.0	12.8	4.7	0.9	100.0	6,077	2.2
Katsina	54.8	18.2	10.4	4.1	6.7	3.1	2.8	100.0	2,639	0.0
Kebbi	59.9	15.8	4.2	9.0	5.5	4.5	1.1	100.0	2,485	0.0
Sokoto	57.4	18.3	5.3	8.9	4.8	2.7	2.5	100.0	1,928	0.0
Zamfara	55.8	18.5	5.8	8.5	5.8	3.5	2.2	100.0	2,147	0.0

Continued…

Table 2.11.2—*Continued*

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Don't know/ missing	Total	Number	Median years completed
South East										
Abia	7.3	22.0	17.7	19.0	23.6	9.6	0.8	100.0	945	6.6
Anambra	7.9	23.4	18.4	18.9	20.7	10.3	0.4	100.0	1,757	6.0
Ebonyi	14.2	33.2	15.1	17.7	12.0	7.0	0.8	100.0	1,550	5.1
Enugu	17.0	25.3	20.5	17.3	13.1	6.5	0.3	100.0	1,455	5.4
Imo	6.9	23.2	16.4	21.8	21.8	9.1	0.7	100.0	1,576	6.7
South South										
Akwa Ibom	6.1	24.6	15.8	22.7	19.4	10.3	0.9	100.0	1,539	6.3
Bayelsa	4.5	23.9	8.0	24.3	28.1	11.1	0.0	100.0	627	8.1
Cross River	7.3	23.8	17.6	22.4	20.4	8.5	0.1	100.0	1,248	6.0
Delta	6.8	23.3	12.3	20.4	24.6	12.2	0.4	100.0	1,535	7.8
Edo	7.2	22.2	11.3	19.9	25.6	13.6	0.2	100.0	1,215	8.1
Rivers	4.8	18.7	9.5	19.3	30.1	17.5	0.1	100.0	2,087	10.6
South West										
Ekiti	6.5	17.6	11.5	21.7	20.5	21.5	0.6	100.0	545	9.3
Lagos	4.6	16.9	10.1	16.5	33.3	18.3	0.2	100.0	3,315	11.0
Ogun	15.1	23.7	20.7	16.2	17.2	6.9	0.1	100.0	1,552	5.5
Ondo	8.8	20.8	11.0	22.0	22.5	14.8	0.2	100.0	1,415	8.2
Osun	8.3	20.7	7.1	22.7	22.8	18.3	0.1	100.0	1,298	8.7
Oyo	21.9	20.2	10.7	17.0	21.1	8.6	0.3	100.0	2,795	5.6
Wealth quintile										
Lowest	71.1	14.0	6.0	4.9	2.4	0.4	1.2	100.0	13,158	0.0
Second	42.8	24.0	10.7	12.2	7.1	1.8	1.4	100.0	13,037	0.6
Middle	22.5	26.3	11.7	18.9	14.7	5.3	0.7	100.0	13,772	5.1
Fourth	11.6	23.4	12.4	19.7	22.6	9.8	0.5	100.0	14,503	6.2
Highest	4.6	16.8	8.0	17.3	27.3	25.6	0.4	100.0	14,616	11.1
Total	29.5	20.9	9.8	14.8	15.2	8.9	0.8	100.0	69,085	4.7

[1] Completed grade 6 at the primary level
[2] Completed grade 6 at the secondary level
[3] Excludes 23 cases with missing information on age

Tables 2.11.1 and 2.11.2 show the distribution of female and male household members age 6 and above by the highest level of schooling ever attended (even if they did not complete that level) and the median number of years of education completed according to age, urban-rural residence, geopolitical zone, and wealth quintile. Although the majority of Nigerians have attained some education, there are differences in educational attainment according to sex. Overall, 70 percent of males age 6 and over have ever attended school, as compared with 58 percent of females.

About one in five females and males have completed some primary education (19 percent and 21 percent, respectively). Six percent of females and 9 percent of males have more than a secondary education. Large percentages of both females (40 percent) and males (30 percent) have no education. Households in rural areas are far below their urban counterparts in educational attainment; 54 percent of females in rural areas and 22 percent in urban areas have no education, and the corresponding figures for males are 40 percent and 14 percent. Across the geopolitical zones, the North East and North West lag behind others in educational attainment, with more than 60 percent of females and about half of males having no education.

The most substantial variation in educational attainment occurs across the wealth quintiles. Only 8 percent of females in the wealthiest households have no education, as compared with 81 percent in the poorest households. Among males, 5 percent of those in the wealthiest households have no education, compared with 71 percent in the poorest households. Median number of years of educational attainment is higher for males (4.7 years) than for females (1.7 years).

2.7.2 School Attendance Ratios

Tables 2.12.1 and 2.12.2 present school attendance ratios by level of schooling and by sex, area of residence, geopolitical zone, state, and wealth quintile. The net attendance ratio (NAR) is an indicator of participation in schooling among children of official school age (age 6-12 for primary school and age 13-18 for secondary school), and the gross attendance ratio (GAR) indicates participation at each level of schooling among those of any age between 5 and 24 years. The GAR is nearly always higher than the NAR for the same level because the GAR includes participation by those who may be older or younger than the official age range for that level.

Table 2.12.1 School attendance ratios: Primary school

Net attendance ratios (NARs) and gross attendance ratios (GARs) for the de facto household population by sex at primary level of schooling, and the gender parity index (GPI), according to background characteristics, Nigeria 2013

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender parity index[3]	Male	Female	Total	Gender parity index[3]
Residence								
Urban	73.1	69.4	71.2	0.95	105.2	99.3	102.2	0.94
Rural	54.7	48.8	51.8	0.89	82.4	72.9	77.7	0.88
Zone								
North Central	69.6	66.2	68.0	0.95	104.4	98.0	101.3	0.94
North East	46.7	41.5	44.1	0.89	71.0	63.4	67.2	0.89
North West	50.7	43.8	47.2	0.86	76.0	63.0	69.4	0.83
South East	82.3	80.3	81.4	0.98	119.7	116.5	118.2	0.97
South South	76.4	73.4	74.9	0.96	108.7	109.5	109.0	1.01
South West	70.5	69.5	70.0	0.99	101.6	99.7	100.6	0.98
State								
North Central								
FCT-Abuja	74.4	73.1	73.7	0.98	108.7	110.2	109.5	1.01
Benue	75.4	77.7	76.5	1.03	122.8	122.0	122.4	0.99
Kogi	71.4	76.9	74.3	1.08	102.1	110.7	106.6	1.08
Kwara	73.9	72.5	73.2	0.98	103.2	103.5	103.3	1.00
Nasarawa	72.6	69.3	71.0	0.96	108.0	102.6	105.4	0.95
Niger	64.1	51.4	57.9	0.80	93.8	74.7	84.6	0.80
Plateau	62.5	63.6	63.1	1.02	93.6	90.5	92.1	0.97
North East								
Adamawa	79.0	74.5	76.8	0.94	115.7	112.2	114.0	0.97
Bauchi	54.0	41.1	47.3	0.76	81.7	63.9	72.4	0.78
Borno	34.8	35.3	35.1	1.01	53.1	51.0	52.0	0.96
Gombe	50.9	39.3	44.6	0.77	80.4	58.4	68.4	0.73
Taraba	67.2	61.1	64.3	0.91	108.5	101.0	105.1	0.93
Yobe	14.3	11.0	12.8	0.77	19.2	16.2	17.9	0.84
North West								
Jigawa	48.6	38.1	43.2	0.78	80.3	60.8	70.2	0.76
Kaduna	58.9	57.3	58.1	0.97	88.7	80.5	84.6	0.91
Kano	60.5	58.6	59.5	0.97	86.4	81.9	84.1	0.95
Katsina	46.6	40.6	43.5	0.87	69.4	58.1	63.5	0.84
Kebbi	40.6	27.1	34.1	0.67	56.5	38.2	47.8	0.68
Sokoto	39.8	24.6	32.7	0.62	58.9	37.0	48.7	0.63
Zamfara	42.9	27.7	35.0	0.65	73.3	42.5	57.2	0.58
South East								
Abia	84.9	74.7	80.1	0.88	120.5	102.2	111.9	0.85
Anambra	81.6	82.4	82.0	1.01	117.3	123.2	120.1	1.05
Ebonyi	86.4	84.7	85.6	0.98	121.6	119.3	120.5	0.98
Enugu	81.8	81.2	81.5	0.99	118.3	113.6	116.0	0.96
Imo	76.6	73.8	75.3	0.96	120.7	116.2	118.6	0.96
South South								
Akwa Ibom	78.1	71.4	74.9	0.92	110.4	101.5	106.2	0.92
Bayelsa	76.2	80.4	78.1	1.06	110.6	115.9	113.1	1.05
Cross River	71.4	75.2	73.5	1.05	105.1	110.1	107.8	1.05
Delta	78.5	76.4	77.4	0.97	116.2	116.1	115.9	1.00
Edo	79.0	74.4	76.6	0.94	111.2	110.2	110.6	0.99
Rivers	74.9	66.9	71.4	0.89	101.1	107.2	103.8	1.06

Continued…

Table 2.12.1—*Continued*

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender parity index[3]	Male	Female	Total	Gender parity index[3]
South West								
Ekiti	70.0	70.8	70.4	1.01	100.5	105.1	102.9	1.05
Lagos	70.4	67.9	69.0	0.96	107.3	99.6	103.2	0.93
Ogun	78.6	74.8	76.7	0.95	102.7	101.2	102.0	0.99
Ondo	73.6	74.6	74.1	1.01	118.3	111.7	114.9	0.94
Osun	75.1	71.2	73.1	0.95	111.1	101.3	106.2	0.91
Oyo	63.6	64.9	64.2	1.02	86.5	91.5	88.8	1.06
Wealth quintile								
Lowest	30.0	24.2	27.1	0.80	47.7	37.5	42.6	0.79
Second	59.9	52.7	56.3	0.88	91.7	78.9	85.3	0.86
Middle	74.5	71.3	72.9	0.96	108.2	102.6	105.5	0.95
Fourth	77.2	73.1	75.2	0.95	111.8	104.0	108.1	0.93
Highest	71.4	69.5	70.4	0.97	101.9	102.1	102.0	1.00
Total	61.6	56.7	59.1	0.92	90.9	83.0	87.0	0.91

[1] The NAR for primary school is the percentage of the primary school age (6-12 years) population that is attending primary school. By definition, the NAR cannot exceed 100 percent.
[2] The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary school age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent.
[3] The GPI for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males.

Table 2.12.2 School attendance ratios: Secondary school

Net attendance ratios (NARs) and gross attendance ratios (GARs) for the de facto household population by sex at secondary level of schooling, and the gender parity index (GPI), according to background characteristics, Nigeria 2013

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender parity index[3]	Male	Female	Total	Gender parity index[3]
Residence								
Urban	66.0	62.1	64.0	0.94	101.8	94.0	97.8	0.92
Rural	43.1	32.6	37.8	0.76	65.7	47.6	56.6	0.72
Zone								
North Central	57.3	51.5	54.5	0.90	92.3	77.1	85.0	0.84
North East	34.6	23.0	28.5	0.66	53.3	33.8	43.0	0.63
North West	39.8	25.3	32.5	0.63	58.5	37.5	47.9	0.64
South East	70.1	69.2	69.6	0.99	98.2	95.3	96.7	0.97
South South	67.7	63.3	65.4	0.93	109.4	95.3	102.0	0.87
South West	67.0	69.3	68.1	1.03	105.8	109.1	107.5	1.03
State								
North Central								
FCT-Abuja	68.2	56.1	62.0	0.82	103.1	92.3	97.6	0.90
Benue	60.3	55.2	57.9	0.91	93.6	76.1	85.2	0.81
Kogi	75.7	64.7	70.0	0.85	123.5	95.8	109.2	0.78
Kwara	73.1	70.0	71.5	0.96	123.5	109.7	116.4	0.89
Nasarawa	60.2	45.6	53.7	0.76	93.7	72.6	84.3	0.78
Niger	41.8	33.2	38.0	0.80	69.4	52.7	62.0	0.76
Plateau	52.0	54.5	53.2	1.05	84.7	78.8	81.8	0.93
North East								
Adamawa	54.4	39.9	46.6	0.73	88.0	55.0	70.3	0.63
Bauchi	32.7	18.6	25.7	0.57	50.3	27.8	39.2	0.55
Borno	38.6	20.2	28.0	0.52	52.6	28.2	38.6	0.54
Gombe	38.9	24.5	31.8	0.63	64.3	33.9	49.3	0.53
Taraba	38.4	26.8	32.5	0.70	58.3	45.6	51.8	0.78
Yobe	10.7	13.7	12.3	1.28	18.8	21.5	20.2	1.14
North West								
Jigawa	28.3	9.8	18.3	0.35	52.7	18.2	34.0	0.34
Kaduna	46.7	38.4	42.5	0.82	68.3	59.4	63.8	0.87
Kano	50.8	35.6	43.3	0.70	71.9	48.3	60.3	0.67
Katsina	25.8	13.3	18.9	0.52	39.4	18.3	27.8	0.46
Kebbi	34.2	24.0	29.5	0.70	46.3	36.3	41.7	0.78
Sokoto	26.7	10.1	18.7	0.38	43.6	17.3	31.0	0.40
Zamfara	36.8	14.6	26.1	0.40	53.0	27.2	40.6	0.51

Continued…

Table 2.12.2—*Continued*

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender parity index[3]	Male	Female	Total	Gender parity index[3]
South East								
Abia	73.2	70.4	71.9	0.96	99.6	117.7	107.6	1.18
Anambra	75.3	67.0	71.0	0.89	99.9	88.0	93.7	0.88
Ebonyi	60.4	64.5	62.8	1.07	93.0	84.0	87.8	0.90
Enugu	69.2	72.9	71.1	1.05	90.7	97.8	94.4	1.08
Imo	74.2	74.9	74.6	1.01	109.6	110.5	110.1	1.01
South South								
Akwa Ibom	70.6	67.3	68.8	0.95	111.7	100.5	105.7	0.90
Bayelsa	72.7	66.3	69.4	0.91	111.4	93.8	102.4	0.84
Cross River	69.5	55.5	63.1	0.80	119.4	102.7	111.7	0.86
Delta	64.7	64.4	64.6	1.00	105.5	88.1	96.1	0.83
Edo	69.8	64.1	66.7	0.92	100.7	92.0	96.0	0.91
Rivers	62.5	60.7	61.5	0.97	109.5	97.1	102.7	0.89
South West								
Ekiti	75.7	70.6	73.3	0.93	117.7	112.7	115.3	0.96
Lagos	69.0	69.6	69.3	1.01	114.7	118.5	116.7	1.03
Ogun	69.4	71.8	70.6	1.03	106.0	112.4	109.2	1.06
Ondo	67.6	62.9	65.2	0.93	97.0	92.1	94.5	0.95
Osun	75.1	74.9	75.0	1.00	115.0	118.4	116.6	1.03
Oyo	58.1	68.5	63.1	1.18	95.6	102.5	99.0	1.07
Wealth quintile								
Lowest	15.8	6.8	11.5	0.43	24.2	10.2	17.4	0.42
Second	39.1	26.1	32.3	0.67	59.3	37.0	47.5	0.62
Middle	61.1	50.9	56.0	0.83	92.1	72.5	82.3	0.79
Fourth	69.8	64.4	67.2	0.92	106.1	96.2	101.3	0.91
Highest	72.5	69.7	71.0	0.96	115.2	109.0	111.9	0.95
Total	52.6	45.1	48.8	0.86	80.7	67.2	73.8	0.83

[1] The NAR for secondary school is the percentage of the secondary school age (13-18 years) population that is attending secondary school. By definition, the NAR cannot exceed 100 percent.
[2] The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary school age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent.
[3] The GPI for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

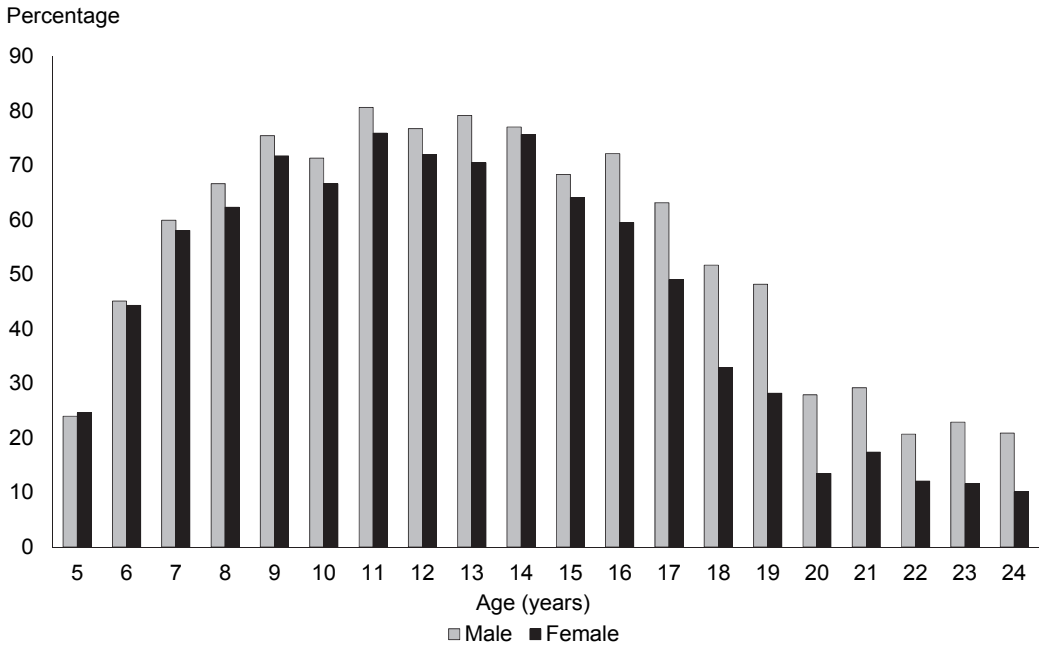
The results in Tables 2.12.1 and 2.12.2 show that 59 percent of children age 6-12 attend primary school and 49 percent of children age 13-18 attend secondary school. There are differences in the NARs for males and females at both the primary and secondary levels. At the primary level, the NAR in urban areas is higher than in rural areas (71 percent and 52 percent, respectively), while there is a much wider gap in the NAR between urban and rural areas at the secondary level (64 percent and 38 percent, respectively). By geopolitical zone, the North East has the lowest NAR at the primary and secondary levels (44 percent and 29 percent, respectively), while the South East has the highest (81 percent and 70 percent, respectively). Attendance is higher among wealthy households than poorer households at both the primary and secondary levels. For example, the NAR at the primary level is 27 percent for children in the lowest wealth quintile, as compared with more than 70 percent in the middle and higher wealth quintiles. The same pattern occurs at the secondary level, with the NAR being 12 percent for children age 13 to 18 in the lowest wealth quintile and 71 percent in the highest wealth quintile.

The GAR is higher than the NAR at the both the primary school level (87 percent versus 59 percent) and the secondary school level (74 percent versus 49 percent). This is an indication that fewer pupils attend secondary school than primary school.

Tables 2.12.1 and 2.12.2 also show the gender parity index (GPI), which represents the ratio of the NAR and GAR for females to the NAR and GAR for males. A GPI below one indicates that a smaller proportion of females than males attend school. The indexes for NAR and GAR at the primary level are slightly less than one (0.9), indicating that the gender gap is very narrow.

Age-specific attendance rates (ASARs) for the population age 5 to 24 are presented in Figure 2.2 by age and sex. The ASAR indicates participation in schooling at any level. The trends are the same for males and females. Approximately half of children attend school by age 6. In the 9-16 age group, 7 of 10 children attend school. At age 16, attendance rates begin to decline with increasing age, and the decline is faster for females than males after age 15.

Figure 2.2 **Age-specific attendance rates**



NDHS 2013

CHARACTERISTICS OF RESPONDENTS 3

Key Findings

- More than half of women (56 percent) and men (54 percent) age 15-49 are under age 30.
- A high proportion of respondents (71 percent of women and 50 percent of men) are currently married.
- More than half of the respondents live in rural areas.
- Thirty-eight percent of women and 21 percent of men have no education, while 45 percent of women and 62 percent of men have a secondary or higher education.
- Ninety-three percent of women in the highest wealth quintile are literate.
- Sixty-two percent of women are currently employed.
- Nine in 10 women receive cash (including cash and in-kind) for their work.

This chapter provides a profile of the respondents who were interviewed in the 2013 NDHS, that is, women and men age 15-49. Information is presented on a number of basic characteristics including age at the time of the survey, religion, marital status, residence, education, literacy status, and media access. In addition, the chapter explores adults' employment status, occupation, and earnings. An analysis of these variables provides the socioeconomic context within which demographic and reproductive health issues are examined in the subsequent chapters.

3.1 CHARACTERISTICS OF SURVEY RESPONDENTS

Table 3.1 shows the percent distribution of women and men age 15-49 by their background characteristics. Fifty-six percent of women and 54 percent of men are under age 30. In general, the proportion of women and men in each age group declines with increasing age, reflecting the comparatively young age structure of the population in Nigeria, which is a result of a past history of high fertility.

More than half of the respondents (52 percent of women and 51 percent of men) are Muslims, while 11 percent of women and 12 percent of men are Catholics. Other Christians (such as Pentecostals and orthodox) account for 36 percent of women and men.

With respect to ethnicity, 28 percent of women and 27 percent of men are Hausa, while 15 percent of women and 13 percent of men belong to the Igbo ethnic group. Fourteen percent each of women and men identified themselves as Yoruba. The Fulani ethnic group constitutes only 7 percent of women and 6 percent of men. There are more than 250 ethnic groups in Nigeria, but most comprise only small numbers. For instance, the Ibibio, Ijaw, Kanuri, and Tiv ethnic groups each account for only 2 percent of the population.

The majority of respondents are currently married or living together with a partner (71 percent of women and 50 percent of men). Twenty-four percent of women and 48 percent of men age 15-49 had never been married at the time of the survey. The universality of marriage in Nigeria probably reflects the social and economic security marriage is perceived to provide (National Population Commission [NPC], 1998). The proportion of women who are divorced, separated, or widowed (5 percent) is higher than the proportion among men (2 percent). Men are more likely than women to remarry after a divorce, separation, or widowhood.

Over half of the respondents live in rural areas (58 percent of women and 56 percent of men), and 3 in 10 live in the North West zone. Fourteen to 16 percent each of women and men live in the North Central, North West, or South West zone.

Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Nigeria 2013

Background characteristic	Women			Men		
	Weighted percentage	Weighted number	Unweighted number	Weighted percentage	Weighted number	Unweighted number
Age						
15-19	20.1	7,820	7,905	20.9	3,619	3,708
20-24	17.3	6,757	6,714	16.7	2,892	2,840
25-29	18.3	7,145	7,037	15.9	2,757	2,763
30-34	14.0	5,467	5,373	13.9	2,414	2,368
35-39	12.1	4,718	4,701	12.5	2,175	2,170
40-44	9.3	3,620	3,663	10.2	1,777	1,777
45-49	8.8	3,422	3,555	9.9	1,724	1,733
Religion						
Catholic	11.1	4,316	4,081	11.6	2,014	1,916
Other Christian	35.7	13,922	15,757	35.6	6,181	7,058
Islam	51.7	20,149	18,578	51.3	8,907	8,134
Traditionalist	0.9	359	352	0.9	161	157
Missing	0.5	192	166	0.5	79	77
Ethnic group						
Ekoi	0.1	22	34	0.1	20	31
Fulani	6.6	2,565	2,425	5.5	953	954
Hausa	27.5	10,699	9,386	27.2	4,719	4,100
Ibibio	2.2	841	849	2.4	419	435
Igala	1.0	371	416	1.1	196	210
Igbo	14.5	5,636	5,448	13.4	2,330	2,228
Ijaw/Izon	1.9	751	1,590	2.0	346	765
Kanuri/Beriberi	1.7	680	523	1.7	292	209
Tiv	2.1	836	621	2.6	448	312
Yoruba	14.1	5,482	5,606	13.5	2,341	2,416
Other	28.2	11,002	11,987	30.2	5,247	5,653
Don't know	0.0	1	2	0.0	0	0
Missing	0.2	63	61	0.3	48	46
Marital status						
Never married	23.9	9,326	9,820	48.3	8,378	8,531
Married	69.4	27,043	26,403	49.1	8,520	8,292
Living together	2.0	787	871	1.2	203	265
Divorced/separated	2.1	826	861	1.2	206	217
Widowed	2.5	967	993	0.3	52	54
Residence						
Urban	42.1	16,414	15,545	43.8	7,611	7,144
Rural	57.9	22,534	23,403	56.2	9,748	10,215
Zone						
North Central	14.3	5,572	6,251	15.5	2,685	3,018
North East	14.8	5,766	6,630	14.5	2,515	2,843
North West	30.5	11,877	9,673	29.9	5,185	4,131
South East	11.5	4,476	4,462	9.7	1,686	1,681
South South	12.7	4,942	6,058	14.1	2,445	3,035
South West	16.2	6,314	5,874	16.4	2,843	2,651
State						
North Central						
FCT-Abuja	0.8	315	761	1.0	175	428
Benue	3.2	1,240	870	3.6	616	409
Kogi	1.8	704	859	1.9	333	425
Kwara	1.5	596	966	1.6	274	450
Nasarawa	1.5	594	874	1.6	282	401
Niger	3.8	1,462	1,046	4.0	701	512
Plateau	1.7	662	875	1.7	302	393
North East						
Adamawa	2.1	828	1,122	2.1	358	493
Bauchi	3.0	1,161	1,196	2.9	512	492
Borno	3.6	1,412	782	3.9	676	376
Gombe	1.4	550	1,076	1.5	255	490
Taraba	2.2	844	1,374	1.9	325	541
Yobe	2.5	971	1,080	2.2	390	451
North West						
Jigawa	3.5	1,353	1,211	2.9	510	462
Kaduna	5.5	2,136	1,243	6.0	1,033	602
Kano	8.2	3,189	2,228	9.2	1,592	1,108
Katsina	3.9	1,525	1,304	3.4	596	512
Kebbi	3.2	1,244	1,184	3.2	551	524
Sokoto	2.8	1,098	1,314	2.4	424	501
Zamfara	3.4	1,332	1,189	2.8	479	422

Continued…

Table 3.1—*Continued*

Background characteristic	Women			Men		
	Weighted percentage	Weighted number	Unweighted number	Weighted percentage	Weighted number	Unweighted number
South East						
Abia	1.3	518	805	1.3	229	357
Anambra	2.7	1,052	903	2.6	446	366
Ebonyi	2.9	1,122	1,075	2.1	368	334
Enugu	2.4	951	965	1.8	320	355
Imo	2.1	833	714	1.9	323	269
South South						
Akwa Ibom	2.2	864	979	2.6	451	502
Bayelsa	0.9	364	1,224	1.1	187	652
Cross River	1.8	703	727	1.8	310	320
Delta	2.6	993	1,130	2.7	473	554
Edo	1.9	742	1,079	2.1	365	517
Rivers	3.3	1,276	919	3.8	658	490
South West						
Ekiti	0.8	326	863	0.8	148	394
Lagos	5.0	1,964	1,482	5.5	948	701
Ogun	2.3	883	672	2.1	358	268
Ondo	2.1	808	916	2.3	404	435
Osun	2.0	765	1,026	2.1	356	480
Oyo	4.0	1,568	915	3.6	629	373
Education						
No education	37.8	14,729	13,740	21.2	3,685	3,354
Primary	17.3	6,734	7,104	16.7	2,907	2,979
Secondary	35.8	13,927	14,407	47.7	8,281	8,390
More than secondary	9.1	3,558	3,697	14.3	2,486	2,636
Wealth quintile						
Lowest	18.3	7,132	6,602	16.5	2,862	2,646
Second	19.1	7,428	7,515	17.2	2,992	3,033
Middle	19.2	7,486	8,001	19.2	3,338	3,538
Fourth	20.5	7,992	8,450	22.1	3,835	4,042
Highest	22.9	8,910	8,380	25.0	4,332	4,100
Total	100.0	38,948	38,948	100.0	17,359	17,359

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.

Education is an important determinant of an individual's attitudes and outlook on various aspects of life. Educational attainment in Nigeria is fairly high; 45 percent of women and 62 percent of men have a secondary or higher level of education. However, 38 percent of women and 21 percent of men have no education. With respect to wealth, men are more likely than women to be in the fourth and highest wealth quintiles, while women are more likely than men to be in the lowest two quintiles.

3.2 EDUCATIONAL ATTAINMENT BY BACKGROUND CHARACTERISTICS

Table 3.2.1 shows the relationship between respondents' level of education and their background characteristics. The percentage of women with no education increases steadily by age group, from 31 percent among women age 15-24 to 54 percent among women age 45-49. There are urban-rural differences that are more pronounced at the lowest and highest educational levels. For example, more than half of rural women have no education, as compared with 16 percent of urban women. Forty-six percent of urban women have a secondary education or higher, compared with 14 percent of rural women.

Women's educational attainment differs markedly among the zones and states. The North West and North East have the highest proportions of women with no education (69 percent and 64 percent, respectively), and the South South and South East have the lowest proportions (5 percent each). Across states, the highest proportion of women with more than a secondary education is in Federal Capital Territory (FCT)-Abuja (30 percent), followed by Ekiti (26 percent). In these states, as well as in Abia, Anambra, Imo, Rivers, Lagos, and Osun, women have completed a median of 11 years of schooling or more. Access to education increases with women's wealth. Eighty-seven percent of women in the lowest wealth quintile have no education, as compared with 3 percent in the highest wealth quintile. On the other hand, 87 percent of women in the highest wealth quintile have attended or completed secondary schooling or higher, compared with 4 percent of women in the lowest quintile.

Table 3.2.1 Educational attainment: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Nigeria 2013

Background characteristic	Highest level of schooling						Total	Median years completed	Number of women
	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary			
Age									
15-24	30.5	4.7	7.7	30.9	20.7	5.4	100.0	7.6	14,576
15-19	27.8	5.4	6.8	43.9	14.6	1.6	100.0	7.5	7,820
20-24	33.7	3.9	8.7	16.0	27.8	9.9	100.0	7.8	6,757
25-29	38.7	4.6	10.6	10.5	21.9	13.7	100.0	5.6	7,145
30-34	39.4	4.9	14.8	9.4	18.6	12.9	100.0	5.4	5,467
35-39	40.7	5.9	17.5	9.0	16.0	10.9	100.0	5.2	4,718
40-44	44.4	6.6	18.0	9.0	13.2	8.8	100.0	4.5	3,620
45-49	53.5	6.3	16.3	7.7	8.9	7.2	100.0	0.0	3,422
Residence									
Urban	15.5	4.1	12.5	22.0	29.0	16.9	100.0	10.2	16,414
Rural	54.1	6.0	11.8	14.1	10.5	3.5	100.0	0.0	22,534
Zone									
North Central	31.6	8.3	14.2	20.1	16.1	9.7	100.0	5.7	5,572
North East	64.4	5.8	8.0	9.3	7.7	4.9	100.0	0.0	5,766
North West	69.4	3.4	8.2	8.8	7.7	2.5	100.0	0.0	11,877
South East	5.3	6.6	14.4	29.0	30.6	14.2	100.0	10.3	4,476
South South	5.0	6.3	16.8	28.4	29.2	14.2	100.0	9.8	4,942
South West	8.4	3.4	16.0	22.1	32.8	17.4	100.0	11.0	6,314
State									
North Central									
FCT-Abuja	11.4	4.5	11.7	15.8	26.5	30.0	100.0	11.2	315
Benue	17.2	20.0	16.8	30.9	9.9	5.2	100.0	5.7	1,240
Kogi	13.4	5.6	19.5	23.0	27.4	11.2	100.0	8.8	704
Kwara	21.4	1.8	17.5	19.4	23.5	16.4	100.0	8.9	596
Nasarawa	31.6	10.4	15.6	19.4	14.1	8.9	100.0	5.5	594
Niger	65.8	2.0	7.4	9.5	10.3	4.9	100.0	0.0	1,462
Plateau	21.3	8.8	15.9	23.4	18.5	12.0	100.0	7.3	662
North East									
Adamawa	34.5	8.7	13.3	21.1	14.6	7.9	100.0	5.5	828
Bauchi	72.8	5.1	8.6	6.2	4.6	2.7	100.0	0.0	1,161
Borno	72.4	3.0	5.7	5.3	6.5	7.1	100.0	0.0	1,412
Gombe	63.0	5.5	7.6	10.2	10.3	3.5	100.0	0.0	550
Taraba	45.0	13.7	13.7	13.6	9.3	4.8	100.0	2.4	844
Yobe	85.6	1.4	1.3	4.3	4.7	2.7	100.0	0.0	971
North West									
Jigawa	83.2	4.9	6.2	3.9	1.5	0.4	100.0	0.0	1,353
Kaduna	40.3	3.6	11.2	17.8	18.7	8.4	100.0	5.5	2,136
Kano	60.2	4.6	11.2	12.1	9.9	2.0	100.0	0.0	3,189
Katsina	78.4	2.2	10.4	3.7	4.7	0.6	100.0	0.0	1,525
Kebbi	81.2	3.0	5.3	5.2	4.3	1.1	100.0	0.0	1,244
Sokoto	89.1	1.5	2.4	4.4	2.1	0.6	100.0	0.0	1,098
Zamfara	86.3	2.0	3.5	4.1	2.3	1.7	100.0	0.0	1,332
South East									
Abia	2.6	3.3	13.7	24.4	36.1	19.8	100.0	11.2	518
Anambra	2.9	3.8	10.1	26.3	37.7	19.2	100.0	11.2	1,052
Ebonyi	11.9	13.3	19.9	29.4	19.5	6.0	100.0	7.2	1,122
Enugu	5.7	6.6	17.4	31.3	28.5	10.6	100.0	9.7	951
Imo	0.5	3.0	9.5	32.0	35.7	19.3	100.0	11.1	833
South South									
Akwa Ibom	2.8	5.6	20.0	31.7	24.5	15.5	100.0	9.7	864
Bayelsa	4.7	10.2	16.3	31.7	30.5	6.7	100.0	8.7	364
Cross River	8.7	9.7	18.4	29.5	22.6	11.1	100.0	8.3	703
Delta	7.6	6.6	15.8	27.9	26.8	15.4	100.0	9.5	993
Edo	4.3	6.0	15.4	31.3	29.3	13.7	100.0	9.8	742
Rivers	3.1	3.9	15.6	23.4	37.3	16.8	100.0	11.1	1,276
South West									
Ekiti	2.0	2.4	10.3	27.6	32.1	25.5	100.0	11.2	326
Lagos	4.4	1.7	11.6	18.0	42.6	21.7	100.0	11.3	1,964
Ogun	11.9	5.2	28.8	21.7	25.4	7.0	100.0	7.6	883
Ondo	7.5	4.6	15.1	27.4	28.3	17.2	100.0	10.4	808
Osun	4.0	2.9	12.9	26.6	32.9	20.7	100.0	11.1	765
Oyo	15.4	4.2	17.5	21.3	27.0	14.6	100.0	9.1	1,568
Wealth quintile									
Lowest	87.3	4.4	4.8	2.9	0.7	0.1	100.0	0.0	7,132
Second	61.5	8.3	12.8	12.7	4.2	0.4	100.0	0.0	7,428
Middle	32.8	8.0	18.2	23.4	14.9	2.7	100.0	5.5	7,486
Fourth	14.8	4.5	16.9	26.1	28.8	8.8	100.0	8.8	7,992
Highest	3.3	1.5	8.0	20.1	37.7	29.4	100.0	11.4	8,910
Total	37.8	5.2	12.1	17.4	18.3	9.1	100.0	5.6	38,948

[1] Completed grade 6 at the primary level
[2] Completed grade 6 at the secondary level

Table 3.2.2 Educational attainment: Men

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Nigeria 2013

Background characteristic	Highest level of schooling						Total	Median years completed	Number of men
	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary			
Age									
15-24	16.6	4.4	7.4	38.1	26.4	7.1	100.0	9.1	6,511
15-19	16.6	5.8	7.6	52.3	16.3	1.4	100.0	8.2	3,619
20-24	16.6	2.5	7.1	20.4	39.0	14.3	100.0	11.1	2,892
25-29	20.8	3.5	10.1	10.3	34.8	20.5	100.0	11.2	2,757
30-34	22.4	3.7	12.7	10.4	31.2	19.5	100.0	11.0	2,414
35-39	24.3	5.1	17.3	9.0	26.2	18.0	100.0	8.3	2,175
40-44	23.8	5.6	20.6	9.3	24.0	16.7	100.0	6.0	1,777
45-49	31.0	5.2	18.8	8.4	19.3	17.2	100.0	5.7	1,724
Residence									
Urban	6.7	2.8	10.3	21.3	36.9	22.1	100.0	11.2	7,611
Rural	32.6	5.8	13.9	19.5	20.0	8.3	100.0	5.8	9,748
Zone									
North Central	12.5	5.4	9.8	27.0	26.4	19.0	100.0	10.3	2,685
North East	44.7	6.4	8.8	14.0	15.3	10.8	100.0	4.1	2,515
North West	39.0	3.8	13.5	14.9	19.9	8.9	100.0	5.5	5,185
South East	1.3	4.2	17.1	29.2	33.4	14.8	100.0	10.8	1,686
South South	1.1	4.0	13.3	25.4	38.3	17.9	100.0	11.2	2,445
South West	5.3	3.5	11.8	19.9	40.0	19.6	100.0	11.2	2,843
State									
North Central									
FCT-Abuja	5.6	3.1	7.2	14.9	30.4	38.7	100.0	11.6	175
Benue	3.4	10.6	9.3	43.1	18.2	15.4	100.0	9.4	616
Kogi	5.3	2.5	8.6	25.4	40.0	18.2	100.0	11.2	333
Kwara	4.2	1.2	15.9	19.6	29.0	30.2	100.0	11.3	274
Nasarawa	9.8	4.8	11.6	26.2	32.0	15.6	100.0	10.5	282
Niger	31.1	4.0	7.2	19.1	24.4	14.1	100.0	8.8	701
Plateau	10.0	6.7	12.3	28.3	22.7	20.0	100.0	10.0	302
North East									
Adamawa	13.9	5.6	12.2	28.4	24.0	15.9	100.0	8.9	358
Bauchi	47.9	10.3	8.4	14.3	10.8	8.3	100.0	1.3	512
Borno	53.6	2.8	8.8	7.0	15.7	12.0	100.0	0.0	676
Gombe	37.2	10.6	7.0	15.2	20.1	9.8	100.0	5.3	255
Taraba	19.5	12.6	16.0	23.9	18.1	10.0	100.0	6.7	325
Yobe	79.4	0.4	1.4	3.3	7.0	8.6	100.0	0.0	390
North West									
Jigawa	45.7	6.6	19.3	11.8	9.3	7.3	100.0	2.8	510
Kaduna	25.6	2.5	10.0	17.1	30.8	14.1	100.0	8.8	1,033
Kano	26.8	1.9	17.2	19.0	26.6	8.4	100.0	7.6	1,592
Katsina	53.5	3.7	18.0	6.1	12.5	6.2	100.0	0.0	596
Kebbi	55.6	3.4	5.7	13.1	12.9	9.4	100.0	0.0	551
Sokoto	53.0	9.8	9.2	12.3	10.7	4.9	100.0	0.0	424
Zamfara	51.9	5.4	10.0	14.8	10.5	7.5	100.0	0.0	479
South East									
Abia	0.3	3.5	9.0	29.2	42.2	15.8	100.0	11.2	229
Anambra	2.6	2.6	17.8	26.1	35.5	15.3	100.0	11.0	446
Ebonyi	0.8	9.7	17.0	34.8	22.3	15.3	100.0	9.2	368
Enugu	2.1	2.2	25.9	30.0	27.1	12.6	100.0	9.0	320
Imo	0.0	2.7	13.0	26.3	43.0	15.0	100.0	11.2	323
South South									
Akwa Ibom	1.1	5.8	17.9	28.5	30.9	15.7	100.0	10.6	451
Bayelsa	0.5	3.9	9.3	32.8	37.3	16.1	100.0	11.1	187
Cross River	1.4	4.4	19.9	26.0	36.5	11.9	100.0	10.7	310
Delta	1.9	3.8	12.7	25.2	38.6	17.8	100.0	11.2	473
Edo	0.8	3.7	10.5	26.5	39.3	19.0	100.0	11.2	365
Rivers	0.8	3.0	10.2	20.2	43.6	22.1	100.0	11.4	658
South West									
Ekiti	1.0	0.9	7.6	24.6	33.3	32.6	100.0	11.5	148
Lagos	1.7	2.6	10.3	16.7	46.2	22.4	100.0	11.4	948
Ogun	12.2	7.0	23.0	17.4	28.7	11.7	100.0	9.6	358
Ondo	1.5	4.1	10.0	21.8	42.0	20.7	100.0	11.3	404
Osun	0.9	1.4	7.2	25.1	40.6	24.7	100.0	11.4	356
Oyo	12.8	4.1	12.4	20.7	37.0	13.1	100.0	11.0	629
Wealth quintile									
Lowest	67.2	6.4	11.5	8.8	4.9	1.2	100.0	0.0	2,862
Second	35.6	8.3	18.5	20.8	14.0	2.7	100.0	5.3	2,992
Middle	13.7	5.6	15.0	28.2	28.5	9.0	100.0	8.9	3,338
Fourth	4.9	2.5	12.6	24.9	39.6	15.6	100.0	11.1	3,835
Highest	1.2	1.3	6.3	17.4	39.8	33.9	100.0	11.6	4,332
Total	21.2	4.4	12.3	20.3	27.4	14.3	100.0	9.1	17,359

[1] Completed grade 6 at the primary level
[2] Completed grade 6 at the secondary level

The pattern of educational attainment among men is similar to that of women. At every level of education, however, percentages of attendance or completion are higher among men than among women. Tables 3.2.1 and 3.2.2 show that the median number of years of schooling is higher for men than for women (9.1 and 5.6 years, respectively).

Men living in urban areas stay in school longer than those in rural areas (median years of schooling of 11.2 and 5.8, respectively). One in three rural men have no education, as compared with only 7 percent of urban men. Men's educational attainment varies across zones and states. The percentage of men with no education ranges from 1 percent or lower in many states, especially those in the South South, to 53-56 percent in Katsina, Kebbi, and Sokoto in the North West zone. Education is positively related to wealth quintile; 67 percent of men in the lowest quintile have no education, as compared with only 1 percent of men in the highest quintile.

3.3 LITERACY

The ability to read and write is an important personal asset, increasing an individual's opportunities in life. In addition, literacy statistics can help programme managers, especially those working in health and family planning, determine the best ways to reach women and men with their print messages.

In the 2013 NDHS, literacy status was determined by assessing the respondent's ability to read all or part of a sentence. During data collection, interviewers carried a set of cards that had simple sentences printed in three major Nigerian languages, Igbo, Hausa, and Yoruba. Only women and men who had never been to school and those who had not completed a primary-level education were asked to read the cards (in the language they were most likely to be able to read). Those with a secondary education or higher were assumed to be literate.

Table 3.3.1 shows that 53 percent of women age 15-49 are literate. Literacy levels decline with age, from 66 percent among women age 15-19 to 36 percent among women age 45-49. Literacy is much higher in urban than in rural areas. More than 7 in 10 urban women (77 percent) are literate, as compared with less than 4 in 10 rural women (36 percent).

There are differences in literacy across zones, with literacy levels being highest among women in the South East (84 percent) and lowest among those in the North West (26 percent). Ninety percent or more of women in Abia, Anambra, Imo, Ekiti, and Osun are literate. On the other hand, only 10 percent of women in Sokoto, 11 percent in Jigawa, and 11 percent in Zamfara are literate.

Literacy increases with increasing wealth, ranging from 7 percent among women in the lowest wealth quintile to 93 percent among those in the highest wealth quintile.

Table 3.3.2 shows that men are much more likely than women to be literate (75 percent versus 53 percent). Similar to women, men age 15-24 (80 percent), men living in urban areas (91 percent), and men in the highest wealth quintile (97 percent) have the highest literacy levels. The gap in literacy levels between women and men is notable in the North Central, North East, and North West zones (Figure 3.1).

Table 3.3.1 Literacy: Women

Percent distribution of women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Nigeria 2013

Background characteristic	Secondary school or higher	No schooling or primary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/ visually impaired	Missing	Total	Percentage literate[1]	Number of women
Age										
15-24	57.1	1.2	4.5	36.4	0.3	0.0	0.5	100.0	62.8	14,576
15-19	60.1	1.4	4.6	33.2	0.2	0.0	0.6	100.0	66.0	7,820
20-24	53.7	1.0	4.4	40.0	0.4	0.0	0.5	100.0	59.1	6,757
25-29	46.1	1.0	5.4	46.9	0.1	0.0	0.5	100.0	52.5	7,145
30-34	40.9	1.8	7.3	49.4	0.2	0.1	0.5	100.0	49.9	5,467
35-39	35.9	3.2	8.4	51.6	0.2	0.0	0.6	100.0	47.6	4,718
40-44	31.0	3.5	8.3	56.1	0.4	0.1	0.5	100.0	42.9	3,620
45-49	23.9	2.5	9.8	62.4	0.3	0.3	0.7	100.0	36.2	3,422
Residence										
Urban	67.9	2.2	7.1	22.3	0.1	0.0	0.5	100.0	77.2	16,414
Rural	28.1	1.6	5.8	63.4	0.4	0.1	0.6	100.0	35.5	22,534
Zone										
North Central	45.9	1.7	6.7	44.6	0.1	0.0	1.0	100.0	54.3	5,572
North East	21.9	1.8	4.6	69.9	1.4	0.0	0.4	100.0	28.3	5,766
North West	19.0	1.6	5.2	73.7	0.0	0.1	0.5	100.0	25.8	11,877
South East	73.8	1.2	9.2	15.1	0.1	0.2	0.4	100.0	84.2	4,476
South South	71.8	2.4	6.8	18.1	0.1	0.1	0.7	100.0	81.0	4,942
South West	72.2	2.4	7.3	17.6	0.1	0.0	0.3	100.0	82.0	6,314
State										
North Central										
FCT-Abuja	72.4	0.9	5.5	20.6	0.0	0.0	0.6	100.0	78.8	315
Benue	46.0	1.5	5.4	45.9	0.0	0.0	1.3	100.0	52.8	1,240
Kogi	61.5	0.5	9.6	27.8	0.2	0.0	0.3	100.0	71.6	704
Kwara	59.3	3.4	5.2	31.8	0.0	0.0	0.4	100.0	67.9	596
Nasarawa	42.4	3.8	11.6	41.1	1.0	0.0	0.0	100.0	57.9	594
Niger	24.8	0.7	3.7	68.5	0.0	0.0	2.3	100.0	29.2	1,462
Plateau	54.0	2.9	10.1	33.0	0.0	0.0	0.1	100.0	66.9	662
North East										
Adamawa	43.6	2.9	6.7	46.6	0.1	0.0	0.1	100.0	53.2	828
Bauchi	13.5	2.1	4.5	72.6	6.6	0.0	0.7	100.0	20.1	1,161
Borno	19.0	0.9	2.3	77.2	0.4	0.0	0.3	100.0	22.2	1,412
Gombe	24.0	2.2	6.5	66.9	0.0	0.0	0.4	100.0	32.7	550
Taraba	27.6	2.8	9.7	59.6	0.0	0.0	0.3	100.0	40.1	844
Yobe	11.7	0.4	0.8	86.7	0.0	0.0	0.4	100.0	12.9	971
North West										
Jigawa	5.7	0.7	4.4	87.7	0.1	0.5	0.8	100.0	10.9	1,353
Kaduna	44.9	0.6	6.3	47.9	0.0	0.0	0.3	100.0	51.8	2,136
Kano	24.0	3.5	8.8	63.1	0.0	0.0	0.5	100.0	36.3	3,189
Katsina	8.9	1.5	4.7	84.4	0.0	0.0	0.4	100.0	15.2	1,525
Kebbi	10.5	1.5	1.2	86.6	0.0	0.0	0.2	100.0	13.2	1,244
Sokoto	7.0	0.7	2.5	89.0	0.0	0.0	0.7	100.0	10.2	1,098
Zamfara	8.2	0.2	2.3	88.9	0.0	0.0	0.5	100.0	10.6	1,332
South East										
Abia	80.4	0.9	10.6	8.1	0.0	0.0	0.1	100.0	91.9	518
Anambra	83.2	1.5	7.1	7.9	0.0	0.0	0.3	100.0	91.8	1,052
Ebonyi	54.9	2.3	11.3	30.8	0.2	0.1	0.4	100.0	68.6	1,122
Enugu	70.4	0.3	11.4	16.3	0.0	0.6	0.9	100.0	82.1	951
Imo	87.0	0.5	5.7	6.0	0.3	0.0	0.4	100.0	93.3	833
South South										
Akwa Ibom	71.6	4.1	8.9	13.2	0.2	0.7	1.3	100.0	84.6	864
Bayelsa	68.9	1.8	7.5	21.7	0.1	0.0	0.1	100.0	78.2	364
Cross River	63.1	2.1	7.5	26.6	0.2	0.0	0.4	100.0	72.8	703
Delta	70.0	0.8	6.9	21.5	0.0	0.0	0.7	100.0	77.8	993
Edo	74.3	1.8	7.9	15.2	0.0	0.0	0.6	100.0	84.1	742
Rivers	77.5	3.0	4.2	14.9	0.0	0.0	0.5	100.0	84.6	1,276
South West										
Ekiti	85.2	2.4	4.8	7.5	0.0	0.0	0.1	100.0	92.5	326
Lagos	82.2	1.7	5.4	10.0	0.1	0.0	0.6	100.0	89.3	1,964
Ogun	54.1	6.7	14.1	25.1	0.0	0.0	0.1	100.0	74.9	883
Ondo	72.8	1.6	4.5	20.9	0.0	0.2	0.0	100.0	78.9	808
Osun	80.2	1.5	9.9	8.0	0.1	0.0	0.3	100.0	91.5	765
Oyo	62.9	1.9	6.7	28.2	0.0	0.0	0.3	100.0	71.5	1,568
Wealth quintile										
Lowest	3.6	0.5	2.9	91.6	0.9	0.0	0.5	100.0	7.0	7,132
Second	17.4	1.3	6.6	74.0	0.2	0.1	0.5	100.0	25.3	7,428
Middle	41.0	2.7	9.1	46.2	0.1	0.1	0.8	100.0	52.8	7,486
Fourth	63.8	3.0	8.7	23.7	0.1	0.1	0.6	100.0	75.4	7,992
Highest	87.2	1.5	4.5	6.4	0.0	0.0	0.3	100.0	93.2	8,910
Total	44.9	1.8	6.3	46.1	0.3	0.1	0.5	100.0	53.1	38,948

[1] Refers to women who attended secondary school or higher and women who can read a whole sentence or part of a sentence

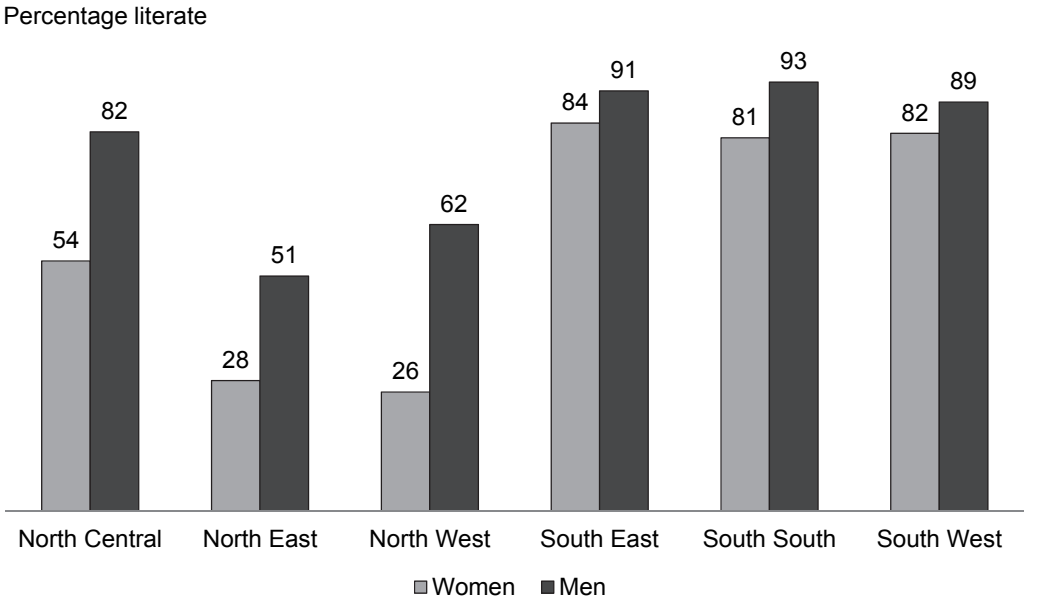
Table 3.3.2 Literacy: Men

Percent distribution of men age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Nigeria 2013

Background characteristic	Secondary school or higher	No schooling or primary school: Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/ visually impaired	Missing	Total	Percentage literate[1]	Number of men
Age										
15-24	71.6	2.1	6.4	19.4	0.1	0.0	0.4	100.0	80.2	6,511
15-19	70.0	2.7	7.2	19.7	0.0	0.0	0.4	100.0	79.9	3,619
20-24	73.7	1.4	5.4	18.9	0.1	0.0	0.4	100.0	80.5	2,892
25-29	65.6	2.3	9.2	22.4	0.1	0.0	0.5	100.0	77.0	2,757
30-34	61.1	3.3	10.1	24.8	0.2	0.0	0.5	100.0	74.4	2,414
35-39	53.2	5.1	13.2	27.9	0.0	0.0	0.6	100.0	71.6	2,175
40-44	50.0	5.4	14.2	29.7	0.0	0.0	0.7	100.0	69.6	1,777
45-49	44.9	5.5	14.8	33.9	0.1	0.3	0.4	100.0	65.2	1,724
Residence										
Urban	80.3	2.8	7.6	8.7	0.1	0.0	0.4	100.0	90.8	7,611
Rural	47.7	3.8	11.6	36.2	0.1	0.0	0.6	100.0	63.1	9,748
Zone										
North Central	72.3	1.8	8.2	17.0	0.1	0.0	0.5	100.0	82.3	2,685
North East	40.1	3.6	7.4	48.3	0.1	0.0	0.5	100.0	51.0	2,515
North West	43.6	4.6	14.0	37.2	0.0	0.1	0.6	100.0	62.2	5,185
South East	77.4	4.3	9.5	7.5	0.0	0.2	1.1	100.0	91.2	1,686
South South	81.5	2.7	8.9	6.5	0.1	0.0	0.3	100.0	93.1	2,445
South West	79.4	2.4	6.9	10.8	0.2	0.0	0.2	100.0	88.8	2,843
State										
North Central										
FCT-Abuja	84.1	2.8	3.4	8.6	0.0	0.4	0.7	100.0	90.3	175
Benue	76.7	0.7	15.2	7.2	0.0	0.0	0.3	100.0	92.6	616
Kogi	83.6	1.9	5.5	9.0	0.0	0.0	0.0	100.0	91.0	333
Kwara	78.7	5.0	5.3	9.5	0.5	0.0	1.0	100.0	89.0	274
Nasarawa	73.8	3.1	8.3	14.5	0.3	0.0	0.0	100.0	85.2	282
Niger	57.7	1.1	6.4	34.3	0.0	0.0	0.6	100.0	65.1	701
Plateau	71.0	0.7	6.8	20.0	0.0	0.0	1.5	100.0	78.5	302
North East										
Adamawa	68.3	2.8	6.6	22.3	0.0	0.0	0.0	100.0	77.7	358
Bauchi	33.4	8.8	7.7	49.0	0.0	0.0	1.0	100.0	50.0	512
Borno	34.7	1.6	5.3	57.6	0.5	0.0	0.2	100.0	41.7	676
Gombe	45.2	7.6	13.8	32.4	0.0	0.0	1.0	100.0	66.6	255
Taraba	51.9	1.0	15.5	30.8	0.0	0.0	0.7	100.0	68.5	325
Yobe	18.8	0.3	0.5	80.4	0.0	0.0	0.0	100.0	19.6	390
North West										
Jigawa	28.5	9.5	18.1	43.6	0.0	0.2	0.2	100.0	56.0	510
Kaduna	61.9	3.1	12.7	21.7	0.0	0.1	0.4	100.0	77.8	1,033
Kano	54.0	2.8	19.0	23.8	0.0	0.0	0.4	100.0	75.8	1,592
Katsina	24.8	10.3	8.9	53.6	0.0	0.2	2.2	100.0	44.0	596
Kebbi	35.3	0.6	4.4	59.6	0.0	0.0	0.1	100.0	40.3	551
Sokoto	28.0	7.1	6.4	57.8	0.0	0.0	0.7	100.0	41.5	424
Zamfara	32.7	3.4	19.7	44.2	0.0	0.0	0.0	100.0	55.8	479
South East										
Abia	87.2	1.5	5.8	4.8	0.0	0.0	0.7	100.0	94.5	229
Anambra	77.0	2.4	12.0	7.7	0.0	0.0	0.9	100.0	91.4	446
Ebonyi	72.4	5.7	12.5	8.2	0.0	0.0	1.1	100.0	90.7	368
Enugu	69.8	7.0	8.5	11.7	0.0	0.2	2.9	100.0	85.3	320
Imo	84.2	4.7	6.1	4.3	0.0	0.6	0.0	100.0	95.1	323
South South										
Akwa Ibom	75.2	3.3	11.4	9.4	0.4	0.0	0.2	100.0	89.9	451
Bayelsa	86.3	1.3	4.5	7.4	0.0	0.0	0.5	100.0	92.1	187
Cross River	74.3	2.9	14.5	8.1	0.0	0.0	0.2	100.0	91.6	310
Delta	81.6	3.2	8.1	6.6	0.0	0.1	0.3	100.0	93.0	473
Edo	84.9	2.2	5.4	7.1	0.0	0.0	0.5	100.0	92.5	365
Rivers	86.0	2.4	8.5	3.0	0.0	0.0	0.2	100.0	96.9	658
South West										
Ekiti	90.5	2.1	2.8	4.0	0.0	0.0	0.5	100.0	95.5	148
Lagos	85.3	2.2	7.6	4.5	0.0	0.0	0.4	100.0	95.1	948
Ogun	57.9	6.3	11.1	24.0	0.7	0.0	0.0	100.0	75.3	358
Ondo	84.5	0.5	2.8	12.3	0.0	0.0	0.0	100.0	87.7	404
Osun	90.5	1.0	4.7	3.6	0.0	0.0	0.2	100.0	96.2	356
Oyo	70.7	2.6	8.5	17.6	0.5	0.0	0.0	100.0	81.9	629
Wealth quintile										
Lowest	15.0	3.7	11.2	69.5	0.0	0.1	0.5	100.0	29.9	2,862
Second	37.6	5.0	16.9	39.2	0.2	0.1	1.0	100.0	59.5	2,992
Middle	65.7	3.8	11.6	18.3	0.2	0.0	0.4	100.0	81.2	3,338
Fourth	80.1	3.2	7.9	8.3	0.1	0.0	0.5	100.0	91.2	3,835
Highest	91.2	1.7	4.4	2.4	0.0	0.0	0.3	100.0	97.3	4,332
Total	62.0	3.3	9.8	24.2	0.1	0.0	0.5	100.0	75.2	17,359

[1] Refers to men who attended secondary school or higher and men who can read a whole sentence or part of a sentence

Figure 3.1 **Literacy status of women and men age 15-49 by regions**



NDHS 2013

3.4 EXPOSURE TO MASS MEDIA

Exposure to information on television and radio and in the print media can increase people's knowledge and awareness of new ideas, social changes, and opportunities as well as affect their perceptions and behaviours, including those related to health. The 2013 NDHS assessed exposure to the media by asking respondents how often they read a newspaper, watch television, or listen to the radio. Tables 3.4.1 and 3.4.2 show the percentages of women and men who read newspapers, watch television, and listen to the radio at least once a week, according to age, urban or rural residence, zone, state, level of education, and wealth quintile.

The results show that level of exposure to mass media, especially exposure to the print media, is low in Nigeria. Nine percent of women read a newspaper, 35 percent watch television, and 39 percent listen to the radio at least once a week. Only 7 percent of women have access to all three media at least once a week, and half do not have access to any of the three media at least once a week. There are slight variations by age. There is also a wide gap in exposure to mass media according to place of residence, education, and wealth. For example, the proportion of urban women who read a newspaper at least once a week is 15 percent, as compared with 5 percent among rural women. Urban women are much more likely than rural women to watch television once a week (55 percent versus 21 percent). Across states, women who reside in Abia are the most likely to access all three media at least once a week (44 percent). Exposure to media increases with increasing education and wealth. For example, 66 percent of women with a secondary education or higher listen to the radio at least once a week, as compared with 23 percent of women with no education.

Men are more likely to be exposed to each type of mass media than women. Twenty percent of men age 15-49 read a newspaper at least once a week, 40 percent watch television, and 55 percent listen to the radio (Table 3.4.2). Fifteen percent of men are exposed to all three media sources at least once a week, while 38 percent have no regular exposure to the mass media.

The proportion of men who regularly read a newspaper, listen to the radio, and watch television has declined since 2008. For example, the proportion of men who listen to the radio at least once a week has declined from 81 percent to 55 percent. At the same time, exposure to print media has decreased from 30 percent to 20 percent, and exposure to television has decreased from 52 percent to 40 percent. Overall, the proportion of men exposed to all three media has declined from 24 percent to 15 percent.

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Nigeria 2013

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	9.8	37.3	37.3	7.0	50.0	7,820
20-24	10.0	37.1	39.3	7.2	49.5	6,757
25-29	9.8	36.6	40.0	7.0	49.7	7,145
30-34	9.6	36.4	40.7	7.6	49.3	5,467
35-39	8.4	34.7	41.2	6.4	49.6	4,718
40-44	7.8	31.1	37.6	6.0	54.6	3,620
45-49	6.4	28.6	39.8	4.5	52.4	3,422
Residence						
Urban	15.0	55.1	52.2	11.3	32.9	16,414
Rural	4.9	21.0	30.0	3.4	63.1	22,534
Zone						
North Central	9.2	43.1	42.5	7.5	44.5	5,572
North East	4.4	15.6	19.1	2.4	73.8	5,766
North West	4.6	17.1	32.9	3.6	63.4	11,877
South East	17.5	42.8	41.8	11.1	41.5	4,476
South South	15.2	51.5	41.8	11.7	40.4	4,942
South West	11.3	63.0	63.5	9.0	23.8	6,314
State						
North Central						
FCT-Abuja	16.4	61.3	50.4	12.9	29.6	315
Benue	3.6	39.8	43.5	3.2	43.7	1,240
Kogi	20.3	67.1	57.0	17.3	22.3	704
Kwara	17.6	46.9	67.5	15.2	28.4	596
Nasarawa	7.1	30.9	24.7	5.0	62.7	594
Niger	5.9	42.9	39.4	5.0	45.3	1,462
Plateau	5.6	22.7	22.0	3.5	72.8	662
North East						
Adamawa	10.4	30.1	38.1	5.1	50.2	828
Bauchi	5.8	15.0	30.6	4.5	66.0	1,161
Borno	2.5	15.6	11.6	1.3	79.9	1,412
Gombe	6.7	14.8	15.8	2.4	77.2	550
Taraba	1.9	12.0	10.4	0.6	81.1	844
Yobe	1.6	7.7	9.4	1.0	86.0	971
North West						
Jigawa	1.7	7.5	20.1	0.5	76.6	1,353
Kaduna	10.4	35.8	35.2	9.0	53.1	2,136
Kano	7.2	22.9	45.5	6.4	54.0	3,189
Katsina	1.1	5.5	34.3	0.4	63.3	1,525
Kebbi	2.7	13.6	23.7	0.8	72.6	1,244
Sokoto	0.8	14.5	40.9	0.6	55.7	1,098
Zamfara	0.6	1.7	12.8	0.4	86.5	1,332
South East						
Abia	46.2	71.4	68.8	43.6	22.5	518
Anambra	6.8	41.2	19.7	3.0	51.1	1,052
Ebonyi	5.2	25.9	44.3	3.7	52.1	1,122
Enugu	16.3	32.3	32.7	5.1	48.8	951
Imo	31.4	61.8	59.7	17.9	18.4	833
South South						
Akwa Ibom	16.4	51.4	48.3	13.7	39.5	864
Bayelsa	12.5	49.2	30.5	7.1	40.0	364
Cross River	12.9	48.1	46.1	9.9	43.7	703
Delta	12.5	47.0	34.1	9.8	46.2	993
Edo	24.2	65.4	59.1	20.2	26.8	742
Rivers	13.4	49.5	34.2	9.3	42.8	1,276
South West						
Ekiti	9.2	66.9	64.4	6.5	25.5	326
Lagos	16.5	74.0	61.3	12.9	20.3	1,964
Ogun	12.7	67.5	70.8	11.5	19.1	883
Ondo	13.2	52.2	47.4	9.2	35.4	808
Osun	7.9	60.8	67.8	7.4	22.8	765
Oyo	5.1	52.7	68.3	3.7	24.8	1,568
Education						
No education	0.1	9.7	23.1	0.0	73.8	14,729
Primary	2.0	31.8	37.5	1.2	52.2	6,734
Secondary	14.2	54.5	50.6	10.2	33.3	13,927
More than secondary	40.2	73.2	66.2	31.5	16.8	3,558
Wealth quintile						
Lowest	0.4	2.1	16.8	0.1	82.3	7,132
Second	1.6	9.8	24.7	0.6	71.5	7,428
Middle	5.5	29.6	37.4	3.3	52.3	7,486
Fourth	11.7	54.2	51.4	8.8	33.3	7,992
Highest	23.1	71.2	60.5	18.3	21.0	8,910
Total	9.1	35.4	39.4	6.8	50.4	38,948

Table 3.4.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Nigeria 2013

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
Age						
15-19	10.2	35.7	44.1	7.3	46.1	3,619
20-24	21.9	40.2	53.0	15.7	37.8	2,892
25-29	24.8	40.9	55.3	17.8	36.6	2,757
30-34	23.5	41.4	58.1	18.0	35.5	2,414
35-39	22.2	41.3	59.7	17.5	34.7	2,175
40-44	24.6	41.0	60.5	19.3	33.6	1,777
45-49	20.4	37.8	61.6	15.8	32.9	1,724
Residence						
Urban	28.9	54.5	62.2	22.7	27.4	7,611
Rural	13.6	27.8	48.8	9.4	45.8	9,748
Zone						
North Central	22.9	36.5	55.2	14.2	34.9	2,685
North East	7.5	14.8	30.2	3.2	63.9	2,515
North West	8.1	18.1	37.6	5.4	57.0	5,185
South East	30.3	45.2	61.8	19.8	26.1	1,686
South South	35.8	76.2	81.7	31.1	10.4	2,445
South West	32.1	68.6	79.6	28.4	12.5	2,843
State						
North Central						
FCT-Abuja	38.8	46.6	39.4	25.9	39.2	175
Benue	15.9	30.1	59.1	10.3	35.3	616
Kogi	25.8	44.8	62.7	23.3	31.7	333
Kwara	27.9	43.9	63.1	11.9	18.6	274
Nasarawa	27.4	38.7	66.0	16.2	27.0	282
Niger	21.8	40.2	52.6	15.1	38.2	701
Plateau	19.0	17.1	37.0	3.2	49.8	302
North East						
Adamawa	19.2	43.2	52.8	9.5	34.2	358
Bauchi	4.0	10.0	33.9	1.9	61.7	512
Borno	4.0	6.3	15.6	0.2	80.4	676
Gombe	17.9	34.2	53.9	10.5	37.5	255
Taraba	3.1	5.2	16.4	1.3	79.9	325
Yobe	4.5	4.9	25.7	0.9	69.1	390
North West						
Jigawa	12.7	20.7	56.6	7.1	38.6	510
Kaduna	19.9	43.3	75.4	17.6	20.9	1,033
Kano	3.0	14.1	15.2	1.1	74.8	1,592
Katsina	5.5	4.6	37.7	2.0	60.4	596
Kebbi	3.5	4.2	7.1	0.7	90.1	551
Sokoto	4.6	19.5	41.8	3.3	55.4	424
Zamfara	5.9	5.7	42.0	2.7	54.7	479
South East						
Abia	27.6	63.1	73.2	22.8	16.3	229
Anambra	24.7	31.2	38.1	10.1	45.8	446
Ebonyi	26.5	39.1	73.1	17.6	20.7	368
Enugu	14.2	34.4	62.7	9.2	26.9	320
Imo	60.4	69.2	72.5	43.8	11.0	323
South South						
Akwa Ibom	40.2	71.1	84.7	36.8	11.5	451
Bayelsa	14.7	77.2	72.2	14.2	16.4	187
Cross River	17.6	62.3	71.4	13.0	18.3	310
Delta	34.3	83.3	87.2	28.8	4.8	473
Edo	24.1	79.2	72.1	22.2	13.4	365
Rivers	55.1	79.1	88.4	47.4	6.7	658
South West						
Ekiti	24.9	67.9	59.7	22.7	27.7	148
Lagos	50.7	88.5	83.4	45.9	4.9	948
Ogun	46.0	85.6	91.8	44.6	4.9	358
Ondo	23.7	58.2	66.1	17.3	22.8	404
Osun	19.7	60.2	93.2	17.5	5.5	356
Oyo	10.2	40.5	72.4	7.6	22.0	629
Education						
No education	0.6	6.7	29.0	0.3	69.5	3,685
Primary	5.7	29.4	51.0	3.5	42.4	2,907
Secondary	23.2	49.8	61.8	17.2	28.8	8,281
More than secondary	56.8	65.9	73.2	44.5	15.0	2,486
Wealth quintile						
Lowest	2.0	5.1	27.2	0.8	71.0	2,862
Second	6.8	14.1	41.1	3.0	54.6	2,992
Middle	14.6	32.9	56.5	9.1	37.2	3,338
Fourth	23.0	54.1	64.6	17.4	25.4	3,835
Highest	43.7	72.1	72.0	36.0	15.4	4,332
Total	20.3	39.5	54.7	15.2	37.7	17,359

3.5 EMPLOYMENT

The 2013 NDHS asked respondents whether they were employed at the time of the survey (that is, whether they had worked in the last 7 days) and, if not, whether they had worked at any time during the 12 months preceding the survey. Table 3.5.1 and Figure 3.2 show that 62 percent of women are currently employed. Twenty-eight percent of women age 15-19 are currently employed, rising to 66 percent among women age 25-29 and peaking at 83 percent among women age 45-49. Women who are divorced, separated, or widowed are most likely to be currently employed (81 percent).

There are notable variations in the proportion of women currently employed by place of residence and by zone. Urban women are slightly more likely to be currently employed than rural women (63 percent versus 61 percent). Employment is highest in the South West zone, especially in Ogun, where 80 percent of women are currently employed. Fifty-six percent of women in the nation's capital (FCT-Abuja) are currently employed. Women in Yobe and Borno are least likely to be currently employed (34 percent and 29 percent, respectively).

Table 3.5.1 Employment status: Women

Percent distribution of women age 15-49 by employment status, according to background characteristics, Nigeria 2013

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Missing/ don't know	Total	Number of women
	Currently employed[1]	Not currently employed				
Age						
15-19	28.0	1.1	70.8	0.1	100.0	7,820
20-24	50.6	1.6	47.7	0.1	100.0	6,757
25-29	65.8	2.0	32.2	0.1	100.0	7,145
30-34	75.8	1.9	22.2	0.1	100.0	5,467
35-39	80.4	1.9	17.7	0.1	100.0	4,718
40-44	82.2	1.3	16.4	0.0	100.0	3,620
45-49	83.1	1.4	15.5	0.0	100.0	3,422
Marital status						
Never married	35.2	1.1	63.7	0.1	100.0	9,326
Married or living together	69.4	1.8	28.7	0.1	100.0	27,830
Divorced/separated/ widowed	81.3	1.1	17.6	0.0	100.0	1,793
Number of living children						
0	37.9	1.2	60.8	0.1	100.0	11,750
1-2	62.9	1.6	35.3	0.1	100.0	9,737
3-4	75.7	1.7	22.6	0.1	100.0	8,876
5+	78.8	2.0	19.1	0.0	100.0	8,585
Residence						
Urban	63.2	1.5	35.2	0.1	100.0	16,414
Rural	60.7	1.7	37.5	0.1	100.0	22,534
Zone						
North Central	68.8	1.9	29.2	0.1	100.0	5,572
North East	45.8	1.9	52.1	0.2	100.0	5,766
North West	57.2	2.0	40.7	0.1	100.0	11,877
South East	63.8	1.7	34.5	0.0	100.0	4,476
South South	65.6	1.3	32.9	0.1	100.0	4,942
South West	74.2	0.6	25.2	0.0	100.0	6,314
State						
North Central						
FCT-Abuja	55.9	1.5	42.4	0.2	100.0	315
Benue	77.5	0.7	21.7	0.0	100.0	1,240
Kogi	71.3	0.4	28.3	0.0	100.0	704
Kwara	62.7	0.4	36.9	0.0	100.0	596
Nasarawa	55.3	11.8	32.9	0.0	100.0	594
Niger	79.1	0.6	20.1	0.2	100.0	1,462
Plateau	51.1	1.3	47.7	0.0	100.0	662
North East						
Adamawa	57.2	1.5	41.2	0.1	100.0	828
Bauchi	54.1	2.1	43.6	0.1	100.0	1,161
Borno	28.5	2.0	69.3	0.2	100.0	1,412
Gombe	50.4	1.7	47.6	0.4	100.0	550
Taraba	62.9	3.8	33.3	0.1	100.0	844
Yobe	34.0	0.5	65.3	0.2	100.0	971

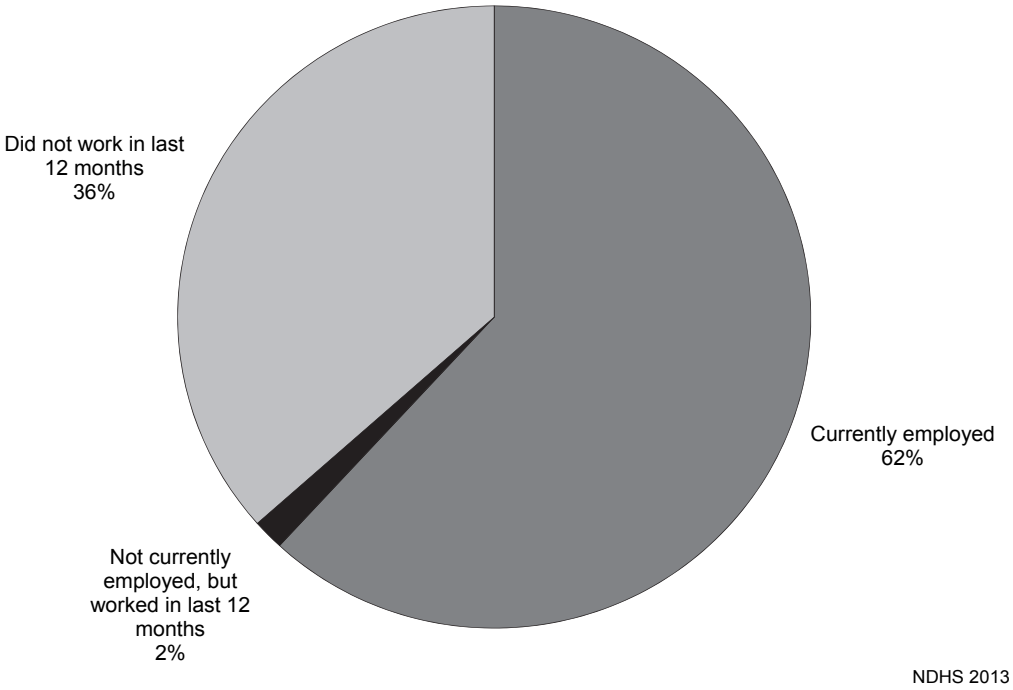
Continued…

Table 3.5.1—*Continued*

Background characteristic	Employed in the 12 months preceding the survey: Currently employed[1]	Employed in the 12 months preceding the survey: Not currently employed	Not employed in the 12 months preceding the survey	Missing/ don't know	Total	Number of women
North West						
Jigawa	52.6	2.0	45.3	0.1	100.0	1,353
Kaduna	60.9	0.4	38.7	0.0	100.0	2,136
Kano	56.1	0.1	43.7	0.0	100.0	3,189
Katsina	56.8	9.8	33.2	0.3	100.0	1,525
Kebbi	61.1	1.8	37.1	0.0	100.0	1,244
Sokoto	45.8	0.4	53.7	0.1	100.0	1,098
Zamfara	65.2	1.4	33.4	0.0	100.0	1,332
South East						
Abia	66.7	1.1	32.2	0.0	100.0	518
Anambra	56.6	0.2	43.2	0.0	100.0	1,052
Ebonyi	75.3	3.4	21.3	0.0	100.0	1,122
Enugu	63.6	0.4	35.8	0.2	100.0	951
Imo	55.7	3.0	41.3	0.1	100.0	833
South South						
Akwa Ibom	60.8	1.6	36.9	0.7	100.0	864
Bayelsa	64.1	0.1	35.7	0.0	100.0	364
Cross River	68.4	2.7	28.9	0.0	100.0	703
Delta	56.7	0.2	43.1	0.0	100.0	993
Edo	61.8	1.0	37.2	0.0	100.0	742
Rivers	77.1	1.7	21.3	0.0	100.0	1,276
South West						
Ekiti	62.8	0.9	36.2	0.0	100.0	326
Lagos	72.5	0.8	26.5	0.1	100.0	1,964
Ogun	79.6	0.9	19.5	0.0	100.0	883
Ondo	68.4	0.5	31.1	0.0	100.0	808
Osun	71.7	0.1	28.2	0.0	100.0	765
Oyo	79.7	0.4	19.9	0.0	100.0	1,568
Education						
No education	59.3	1.9	38.6	0.1	100.0	14,729
Primary	75.6	1.7	22.7	0.0	100.0	6,734
Secondary	56.7	1.4	41.9	0.1	100.0	13,927
More than secondary	65.7	1.2	33.0	0.2	100.0	3,558
Wealth quintile						
Lowest	55.8	1.7	42.3	0.1	100.0	7,132
Second	61.6	2.1	36.3	0.1	100.0	7,428
Middle	62.2	1.8	36.0	0.0	100.0	7,486
Fourth	64.4	1.3	34.3	0.1	100.0	7,992
Highest	64.1	1.2	34.6	0.1	100.0	8,910
Total	61.8	1.6	36.5	0.1	100.0	38,948

[1] "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Figure 3.2 **Women's employment status in the past 12 months**



The likelihood that a woman is employed increases with her education. The proportion of women who are employed increases from 59 percent among those with no education to 66 percent among those with more than a secondary education. Likelihood of employment also increases with increasing wealth; 64 percent of women in the highest two quintiles are currently employed, as compared with 56 percent of women in the lowest quintile.

More than three in four men are currently employed (76 percent) (Table 3.5.2). The proportion of currently employed men generally increases with age and number of living children. Rural men are more likely than urban men to be currently employed (79 percent versus 73 percent). There are notable variations by zone in the proportion of men employed in the previous 12 months; men in the North Central (83 percent) and North East (82 percent) zones are most likely to be currently employed, possibly because they are predominantly farmers. On the other hand, men in the South East zone are least likely to be currently employed (70 percent). Among states, Kebbi has the lowest employment (56 percent), whereas Niger has the highest (97 percent).

The relationship between men's employment and education is not linear, with men having a secondary education least likely to be employed. The same pattern was recorded in the 2008 NDHS. Wealth status has an inverse relationship with employment; current employment decreases from 81 percent among the poorest men to 74 percent among the wealthiest.

Current employment among women age 15-49 increased from 59 percent in 2008 to 62 percent in 2013. In contrast, the proportion for men age 15-49 decreased from 80 percent to 76 percent.

Table 3.5.2 Employment status: Men

Percent distribution of men age 15-49 by employment status, according to background characteristics, Nigeria 2013

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Missing/ don't know	Total	Number of men
	Currently employed[1]	Not currently employed				
Age						
15-19	36.6	5.0	58.2	0.2	100.0	3,619
20-24	66.5	3.7	29.5	0.3	100.0	2,892
25-29	84.5	3.1	12.2	0.2	100.0	2,757
30-34	92.7	3.2	4.1	0.0	100.0	2,414
35-39	96.2	2.6	1.2	0.1	100.0	2,175
40-44	96.1	2.7	1.2	0.0	100.0	1,777
45-49	94.4	4.4	1.1	0.1	100.0	1,724
Marital status						
Never married	55.7	3.9	40.2	0.2	100.0	8,378
Married or living together	95.7	3.3	0.9	0.1	100.0	8,723
Divorced/separated/ widowed	91.6	5.3	3.2	0.0	100.0	258
Number of living children						
0	59.2	3.8	36.8	0.2	100.0	9,177
1-2	95.1	3.1	1.7	0.1	100.0	2,981
3-4	96.2	2.8	0.9	0.1	100.0	2,531
5+	95.2	4.3	0.6	0.0	100.0	2,671
Residence						
Urban	73.2	2.2	24.5	0.1	100.0	7,611
Rural	78.7	4.8	16.4	0.2	100.0	9,748
Zone						
North Central	83.2	1.3	14.9	0.7	100.0	2,685
North East	82.3	6.5	11.2	0.0	100.0	2,515
North West	72.4	5.8	21.9	0.0	100.0	5,185
South East	70.4	2.7	26.9	0.1	100.0	1,686
South South	73.7	1.6	24.6	0.1	100.0	2,445
South West	77.5	1.8	20.7	0.0	100.0	2,843
State						
North Central						
FCT-Abuja	72.6	1.6	24.3	1.5	100.0	175
Benue	76.8	2.0	20.0	1.3	100.0	616
Kogi	71.8	0.4	27.8	0.0	100.0	333
Kwara	73.4	0.2	26.4	0.0	100.0	274
Nasarawa	84.6	1.7	13.7	0.0	100.0	282
Niger	96.7	0.4	2.3	0.6	100.0	701
Plateau	91.4	2.9	4.7	1.0	100.0	302
North East						
Adamawa	73.3	7.5	19.2	0.0	100.0	358
Bauchi	75.2	22.0	2.8	0.0	100.0	512
Borno	88.5	1.3	10.2	0.0	100.0	676
Gombe	86.2	3.8	9.8	0.2	100.0	255
Taraba	85.5	0.2	14.4	0.0	100.0	325
Yobe	83.9	1.2	15.0	0.0	100.0	390
North West						
Jigawa	89.8	4.4	5.7	0.0	100.0	510
Kaduna	76.2	2.6	21.3	0.0	100.0	1,033
Kano	62.2	1.7	36.1	0.0	100.0	1,592
Katsina	82.9	2.4	14.7	0.0	100.0	596
Kebbi	55.7	27.5	16.8	0.0	100.0	551
Sokoto	66.8	6.2	27.0	0.0	100.0	424
Zamfara	90.2	6.4	3.4	0.0	100.0	479
South East						
Abia	71.1	1.0	27.9	0.0	100.0	229
Anambra	65.8	1.6	32.6	0.0	100.0	446
Ebonyi	83.8	5.1	11.1	0.0	100.0	368
Enugu	66.5	3.5	29.6	0.4	100.0	320
Imo	64.8	1.7	33.5	0.0	100.0	323
South South						
Akwa Ibom	71.5	1.8	26.5	0.2	100.0	451
Bayelsa	73.7	1.6	24.5	0.2	100.0	187
Cross River	75.8	0.1	24.1	0.0	100.0	310
Delta	65.8	1.7	32.5	0.0	100.0	473
Edo	71.0	4.9	23.7	0.4	100.0	365
Rivers	81.3	0.4	18.4	0.0	100.0	658

Continued…

Table 3.5.2—*Continued*

Background characteristic	Employed in the 12 months preceding the survey: Currently employed[1]	Employed in the 12 months preceding the survey: Not currently employed	Not employed in the 12 months preceding the survey	Missing/ don't know	Total	Number of men
South West						
Ekiti	65.4	0.8	33.8	0.0	100.0	148
Lagos	81.8	3.3	14.9	0.0	100.0	948
Ogun	79.8	0.7	19.5	0.0	100.0	358
Ondo	70.9	0.5	28.6	0.0	100.0	404
Osun	74.6	3.8	21.6	0.0	100.0	356
Oyo	78.3	0.0	21.7	0.0	100.0	629
Education						
No education	84.4	7.5	8.1	0.0	100.0	3,685
Primary	86.8	2.5	10.6	0.0	100.0	2,907
Secondary	68.5	2.6	28.8	0.1	100.0	8,281
More than secondary	78.0	2.7	18.9	0.3	100.0	2,486
Wealth quintile						
Lowest	81.0	8.3	10.6	0.1	100.0	2,862
Second	79.6	5.0	15.2	0.2	100.0	2,992
Middle	74.9	2.6	22.2	0.2	100.0	3,338
Fourth	74.5	1.8	23.7	0.0	100.0	3,835
Highest	73.5	2.1	24.3	0.1	100.0	4,332
Total	76.3	3.6	19.9	0.1	100.0	17,359

[1] "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

3.6 OCCUPATION

Currently employed respondents were asked about their occupation. Table 3.6.1 shows that 7 percent of women are employed in professional, technical, or managerial positions. The largest group of women (61 percent) are engaged in sales and services. The remaining women are working in agriculture (16 percent), in skilled manual jobs (14 percent), and in unskilled manual jobs (1 percent).

Table 3.6.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Nigeria 2013

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Missing	Total	Number of women
Age									
15-19	2.7	0.8	59.0	15.6	1.9	17.3	2.7	100.0	2,275
20-24	6.2	1.7	56.4	20.5	0.7	13.9	0.4	100.0	3,527
25-29	7.9	1.5	60.1	16.6	0.4	12.8	0.6	100.0	4,840
30-34	8.7	0.8	61.8	14.6	0.2	13.5	0.5	100.0	4,251
35-39	8.3	0.9	63.4	11.9	0.2	14.8	0.6	100.0	3,880
40-44	8.7	0.5	60.3	10.2	0.2	19.7	0.3	100.0	3,025
45-49	7.1	0.6	61.6	9.1	0.3	20.8	0.5	100.0	2,889
Marital status									
Never married	13.0	3.9	53.5	13.7	2.1	12.2	1.7	100.0	3,380
Married or living together	6.5	0.5	62.0	14.8	0.2	15.4	0.6	100.0	19,830
Divorced/separated/ widowed	6.9	0.9	56.3	9.2	0.8	25.7	0.2	100.0	1,477
Number of living children									
0	11.9	3.0	52.5	16.5	1.6	13.1	1.5	100.0	4,593
1-2	9.1	0.8	60.0	16.1	0.4	13.1	0.6	100.0	6,288
3-4	6.6	0.7	63.6	13.4	0.1	15.2	0.4	100.0	6,869
5+	3.7	0.2	63.1	12.2	0.2	19.9	0.6	100.0	6,937
Residence									
Urban	12.3	1.8	64.6	13.1	0.8	6.6	0.7	100.0	10,621
Rural	3.7	0.4	57.4	15.2	0.2	22.4	0.7	100.0	14,067
Zone									
North Central	6.7	0.8	52.0	7.5	0.3	32.2	0.5	100.0	3,942
North East	4.5	0.8	48.3	23.9	0.7	20.0	1.8	100.0	2,754
North West	2.0	0.1	72.9	21.2	0.1	3.0	0.7	100.0	7,033
South East	11.0	1.8	54.1	8.2	0.4	24.0	0.7	100.0	2,930
South South	11.4	2.0	53.9	7.8	1.0	23.1	0.8	100.0	3,308
South West	12.6	1.6	64.8	12.7	0.8	7.4	0.2	100.0	4,721

Continued…

Table 3.6.1—*Continued*

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Missing	Total	Number of women
State									
North Central									
FCT-Abuja	19.6	3.3	53.3	9.8	2.5	11.6	0.0	100.0	181
Benue	2.8	0.2	18.7	2.7	0.0	74.8	0.8	100.0	971
Kogi	9.6	0.8	61.0	13.1	0.2	14.6	0.8	100.0	505
Kwara	14.9	1.8	63.5	14.6	0.4	4.4	0.5	100.0	376
Nasarawa	8.0	0.3	32.6	7.8	0.6	50.6	0.0	100.0	398
Niger	3.1	0.6	81.2	5.9	0.0	8.9	0.4	100.0	1,165
Plateau	8.8	1.3	43.4	8.7	0.6	36.4	0.7	100.0	346
North East									
Adamawa	5.5	1.5	40.8	19.5	0.2	31.9	0.6	100.0	486
Bauchi	2.1	0.1	52.0	41.1	0.1	3.3	1.2	100.0	653
Borno	8.0	1.5	44.6	23.4	0.0	21.2	1.2	100.0	431
Gombe	3.8	0.3	58.8	15.7	5.8	4.5	11.1	100.0	286
Taraba	4.1	0.4	43.0	16.2	0.1	36.0	0.3	100.0	562
Yobe	4.6	0.9	56.7	17.4	0.0	20.1	0.4	100.0	335
North West									
Jigawa	0.3	0.0	67.5	27.9	0.1	2.9	1.3	100.0	739
Kaduna	6.4	0.2	81.5	7.1	0.7	4.2	0.0	100.0	1,308
Kano	1.3	0.0	60.6	37.0	0.0	0.8	0.3	100.0	1,795
Katsina	0.6	0.0	81.0	14.2	0.0	3.3	0.8	100.0	1,015
Kebbi	1.5	0.1	72.4	14.7	0.1	9.0	2.2	100.0	782
Sokoto	1.1	0.0	72.0	26.1	0.0	0.4	0.4	100.0	507
Zamfara	1.1	0.0	81.1	15.0	0.0	1.8	1.0	100.0	887
South East									
Abia	15.6	2.2	46.1	8.6	0.2	27.4	0.0	100.0	351
Anambra	13.6	1.0	69.7	4.7	0.5	10.3	0.1	100.0	597
Ebonyi	5.4	1.4	46.4	10.1	0.2	34.9	1.6	100.0	883
Enugu	10.6	1.7	53.9	7.0	0.4	26.0	0.4	100.0	609
Imo	15.3	3.1	54.7	10.1	0.3	16.1	0.4	100.0	489
South South									
Akwa Ibom	14.7	2.4	56.7	9.9	1.0	13.4	2.0	100.0	539
Bayelsa	8.5	1.3	60.5	3.6	0.1	24.8	1.1	100.0	234
Cross River	5.9	1.2	43.3	8.3	2.1	38.0	1.3	100.0	500
Delta	13.4	1.1	56.3	6.6	0.6	21.5	0.5	100.0	565
Edo	13.8	1.7	55.7	13.1	0.1	15.6	0.0	100.0	466
Rivers	10.9	3.2	53.8	5.6	1.2	25.0	0.3	100.0	1,005
South West									
Ekiti	19.9	2.4	58.7	12.6	0.2	6.3	0.0	100.0	208
Lagos	13.9	2.4	66.0	14.2	2.3	1.1	0.0	100.0	1,441
Ogun	8.7	0.6	65.7	10.3	0.2	14.3	0.2	100.0	711
Ondo	11.1	1.0	59.6	11.5	0.2	16.5	0.1	100.0	557
Osun	14.1	1.6	68.1	10.4	0.3	5.3	0.2	100.0	549
Oyo	11.9	1.4	64.8	13.7	0.0	7.8	0.3	100.0	1,256
Education									
No education	0.3	0.0	65.7	18.6	0.1	14.4	0.8	100.0	9,025
Primary	1.2	0.2	56.0	13.2	0.5	28.7	0.4	100.0	5,202
Secondary	6.1	1.5	65.0	13.0	1.0	12.5	0.9	100.0	8,081
More than secondary	52.2	5.2	35.0	5.2	0.2	1.7	0.6	100.0	2,379
Wealth quintile									
Lowest	0.2	0.0	63.4	20.6	0.0	15.0	0.8	100.0	4,104
Second	0.7	0.0	53.4	15.7	0.3	29.0	0.9	100.0	4,727
Middle	3.5	0.5	56.7	12.8	0.4	25.5	0.7	100.0	4,792
Fourth	8.8	1.2	65.8	13.4	0.3	9.9	0.5	100.0	5,246
Highest	19.9	2.8	62.5	10.9	1.3	2.1	0.7	100.0	5,818
Total	7.4	1.0	60.5	14.3	0.5	15.6	0.7	100.0	24,688

The proportion of women in professional, technical, or managerial positions increases with age, while the proportion of women in sales and services varies little by age. Women in the oldest age groups (21 percent); women who are divorced, separated, or widowed (26 percent); women with five or more children (20 percent); rural women (22 percent); and women with a primary education (29 percent) are more likely to work in the agricultural sector.

Men show a different pattern. Across age groups, men age 15-19 are most likely to be involved in agriculture (46 percent) (Table 3.6.2). In rural areas, one in two men are employed in agricultural work. Employment in the professional and managerial sector is most common among men with more than a secondary education (50 percent) and men in the highest wealth quintile (26 percent).

Table 3.6.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Nigeria 2013

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Missing	Total	Number of men
Age									
15-19	2.3	0.9	20.6	21.4	3.8	46.4	4.5	100.0	1,505
20-24	6.3	1.2	24.6	27.1	5.8	33.4	1.5	100.0	2,032
25-29	9.2	1.0	25.8	23.8	7.5	31.6	1.3	100.0	2,418
30-34	13.7	0.8	29.6	22.9	5.8	26.5	0.8	100.0	2,315
35-39	15.1	1.2	24.6	23.7	3.5	31.6	0.3	100.0	2,148
40-44	15.2	0.8	24.2	22.1	3.8	33.4	0.4	100.0	1,756
45-49	16.0	1.4	21.6	19.0	2.9	38.4	0.7	100.0	1,703
Marital status									
Never married	8.8	1.4	26.2	26.3	5.4	29.3	2.6	100.0	4,992
Married or living together	12.7	0.8	24.2	21.0	4.6	36.1	0.5	100.0	8,635
Divorced/separated/ widowed	11.3	0.5	16.4	27.9	6.5	37.3	0.0	100.0	250
Number of living children									
0	9.0	1.3	26.3	24.9	5.5	30.8	2.3	100.0	5,786
1-2	13.2	0.6	26.8	23.5	5.7	29.8	0.5	100.0	2,928
3-4	14.3	1.1	23.8	23.6	4.0	32.8	0.3	100.0	2,505
5+	11.3	1.0	20.3	17.9	3.6	45.1	0.7	100.0	2,656
Residence									
Urban	17.9	1.6	32.1	32.5	4.4	10.2	1.2	100.0	5,742
Rural	6.6	0.6	19.6	16.4	5.3	50.2	1.3	100.0	8,134
Zone									
North Central	13.0	1.0	15.6	19.4	4.0	43.3	3.7	100.0	2,267
North East	7.3	0.6	21.4	18.2	3.9	47.6	1.0	100.0	2,232
North West	7.8	0.6	28.5	18.2	5.8	38.5	0.6	100.0	4,051
South East	13.0	1.7	28.7	27.8	4.8	23.6	0.3	100.0	1,232
South South	13.4	0.9	28.7	29.7	5.9	20.0	1.3	100.0	1,841
South West	17.2	2.0	25.4	32.3	4.4	18.1	0.6	100.0	2,254
State									
North Central									
FCT-Abuja	26.7	0.9	40.0	13.1	1.0	17.3	1.0	100.0	130
Benue	8.7	0.8	7.7	11.1	4.3	60.9	6.5	100.0	485
Kogi	15.5	1.1	22.9	28.8	5.0	26.1	0.5	100.0	241
Kwara	21.9	2.7	16.8	39.4	4.2	14.3	0.6	100.0	202
Nasarawa	9.4	0.6	18.4	22.2	6.9	40.6	1.9	100.0	244
Niger	11.1	1.1	12.7	15.8	3.5	51.9	3.9	100.0	681
Plateau	13.3	0.4	15.7	20.5	2.0	41.8	6.4	100.0	285
North East									
Adamawa	8.8	1.5	27.5	21.5	7.9	32.0	0.8	100.0	289
Bauchi	6.3	0.0	23.2	18.3	5.8	45.2	1.3	100.0	497
Borno	7.4	0.9	17.9	18.9	0.8	52.8	1.3	100.0	607
Gombe	7.6	0.6	21.1	24.3	5.9	39.2	1.4	100.0	230
Taraba	9.4	0.5	18.2	16.6	4.5	50.3	0.5	100.0	278
Yobe	5.4	0.5	22.3	10.9	1.2	59.1	0.6	100.0	332
North West									
Jigawa	3.7	0.0	33.4	13.4	5.9	42.7	0.9	100.0	481
Kaduna	13.2	0.7	22.8	23.8	6.7	32.4	0.5	100.0	813
Kano	8.1	0.3	37.1	20.6	5.2	28.6	0.1	100.0	1,018
Katsina	6.4	0.8	26.2	12.5	8.1	45.3	0.7	100.0	508
Kebbi	5.9	0.8	8.8	19.4	4.6	58.8	1.8	100.0	458
Sokoto	5.5	0.7	32.5	13.7	8.2	38.2	1.2	100.0	310
Zamfara	6.7	1.0	33.9	15.6	3.1	39.5	0.2	100.0	462
South East									
Abia	16.1	1.6	34.1	28.6	3.2	16.3	0.0	100.0	165
Anambra	11.5	0.2	46.9	22.8	4.5	14.1	0.0	100.0	301
Ebonyi	13.6	3.4	16.1	15.2	2.8	47.8	1.2	100.0	327
Enugu	12.2	1.8	20.0	40.9	6.7	18.2	0.1	100.0	224
Imo	12.3	1.2	27.4	40.0	7.9	11.2	0.0	100.0	215
South South									
Akwa Ibom	14.3	1.0	28.7	40.8	6.9	7.0	1.3	100.0	331
Bayelsa	16.0	1.6	28.4	23.1	3.0	27.7	0.2	100.0	141
Cross River	10.9	0.9	15.5	20.9	1.8	49.6	0.5	100.0	236
Delta	12.7	0.9	27.0	30.8	9.1	18.8	0.8	100.0	319
Edo	13.6	0.6	21.7	37.4	6.8	19.4	0.5	100.0	277
Rivers	13.5	0.9	39.3	23.8	5.7	14.1	2.7	100.0	537

Continued…

Table 3.6.2—*Continued*

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Missing	Total	Number of men
South West									
Ekiti	23.4	3.2	21.1	24.9	5.5	21.8	0.0	100.0	98
Lagos	20.1	3.1	34.2	36.3	2.4	3.2	0.8	100.0	807
Ogun	11.7	0.3	19.6	34.5	9.4	24.0	0.4	100.0	289
Ondo	15.4	0.7	21.8	21.6	5.5	34.5	0.5	100.0	288
Osun	13.8	2.3	21.3	32.6	7.0	22.6	0.5	100.0	280
Oyo	17.3	1.6	19.7	32.0	2.4	26.3	0.5	100.0	493
Education									
No education	2.1	0.1	19.1	10.6	4.6	62.7	0.8	100.0	3,386
Primary	2.7	0.3	24.0	26.8	6.1	39.3	0.8	100.0	2,596
Secondary	7.4	1.2	28.9	32.2	5.5	23.3	1.5	100.0	5,887
More than secondary	49.5	2.9	23.5	12.3	2.0	7.9	1.8	100.0	2,007
Wealth quintile									
Lowest	1.4	0.1	17.7	8.3	3.5	68.5	0.5	100.0	2,557
Second	3.1	0.2	19.5	14.2	6.3	55.4	1.3	100.0	2,531
Middle	7.7	1.2	22.1	23.2	5.7	38.7	1.5	100.0	2,589
Fourth	13.6	1.3	27.3	35.9	6.0	14.2	1.6	100.0	2,925
Highest	26.1	2.1	34.3	29.8	3.4	3.2	1.3	100.0	3,275
Total	11.3	1.0	24.8	23.0	4.9	33.7	1.3	100.0	13,876

3.7 TYPE OF EMPLOYMENT

Table 3.7.1 shows that 9 in 10 women are paid for their work, with 8 in 10 receiving cash only and 10 percent receiving payment in cash and in-kind. Women who work in agriculture are much less likely than women engaged in nonagricultural work to be paid in cash only (46 percent and 87 percent, respectively). The majority of women (79 percent) are self-employed. Eight in 10 women work all year, and 13 percent work seasonally. As expected, women employed in the agricultural sector are more likely to work according to season than those employed in nonagricultural occupations.

Table 3.7.1 Type of employment: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Nigeria 2013

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	45.5	87.3	80.4
Cash and in-kind	25.2	7.2	10.0
In-kind only	2.7	0.6	0.9
Not paid	26.3	4.5	8.2
Missing	0.3	0.4	0.4
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	22.9	6.3	9.0
Employed by non-family member	1.8	13.2	11.4
Self-employed	74.9	79.9	79.0
Missing	0.4	0.6	0.6
Total	100.0	100.0	100.0
Continuity of employment			
All year	57.5	87.1	82.4
Seasonal	39.7	8.2	13.2
Occasional	2.8	4.5	4.2
Missing	0.1	0.2	0.2
Total	100.0	100.0	100.0
Number of women employed during the last 12 months	3,850	20,664	24,688

Note: Total includes women with missing information on type of employment who are not shown separately.

Men are slightly less likely than women to be paid in cash only (80 percent and 74 percent, respectively) and to work all year (82 percent and 76 percent, respectively) (Table 3.7.2). Similar to women, seasonal work is mostly in the agricultural sector (41 percent).

Table 3.7.2 Type of employment: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by type of earnings and continuity of employment, according to type of employment (agricultural or nonagricultural), Nigeria 2013

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	48.4	87.5	73.9
Cash and in-kind	27.9	10.0	16.0
In-kind only	3.9	0.4	1.8
Not paid	19.5	1.8	8.1
Missing	0.3	0.2	0.2
Total	100.0	100.0	100.0
Continuity of employment			
All year	57.0	86.5	76.3
Seasonal	41.2	8.2	19.4
Occasional	1.8	5.2	4.1
Total	100.0	100.0	100.0
Number of men employed during the last 12 months	4,673	9,029	13,876

Note: Total includes men with missing information on type of employment who are not shown separately.

The appendix tables show the differentials in earnings and employment by state. Appendix Table A.3.7.1 shows that women in the majority of states receive cash earnings for their work. Women in Benue, Taraba, and Ebonyi are more likely than those in other states to receive both cash and in-kind payment (37 percent, 28 percent, and 30 percent, respectively). Gombe has the highest proportion of women (34 percent) who are not paid for their work.

As is the case for women, men in the majority of states receive payment for their work; 8 percent are not paid for their work (Table A.3.7.2). Three in 10 men in Yobe (32 percent), Adamawa (31 percent), and Ebonyi (29 percent) are not paid for their work.

Table A.3.7.3 shows that type of employer varies by state. Overall, 11 percent of women are employed by a family member, while this proportion is more than double in Niger and Delta (26 percent each). In contrast, 31 percent of women in FCT-Abuja are employed by non-family members, and 64 percent are self-employed.

Appendix Tables A.3.7.4 and A.3.7.5 show continuity of employment by state for women and men, respectively. Practically all women (95 percent or more) in Kwara, Ekiti, Ogun, Osun, and Oyo work throughout the year. The states with the highest proportions of men who work throughout the year are Kwara, Lagos, and Oyo. Overall, two in five men work seasonally, while the proportion is as high as 4 in 10 in Plateau, Taraba, and Kebbi.

3.8 HEALTH INSURANCE COVERAGE

Although Nigeria's National Health Insurance Scheme was established in 1999 to ensure health insurance coverage for the general population, very few people have registered. Less than 2 percent of women age 15-49 have health insurance, and this figure has changed only minimally since the 2008 NDHS (NPC and ICF Macro, 2009). Although most coverage is employer-based, it accounts for only 1 percent of women and 2 percent of men age 15-49 (Tables 3.8.1 and 3.8.2). The practice of purchasing health insurance is basically urban-centred and is more common among those living in the South West, South South, and North Central than among those residing in the other zones. Health insurance coverage is also more common among better-educated women and men and those in the highest wealth quintile.

Table 3.8.1 Health insurance coverage: Women

Percentage of women age 15-49 with specific types of health insurance coverage, according to background characteristics, Nigeria 2013

Background characteristic	Employer-based insurance	Mutual Health Organization/ community-based insurance	Privately purchased commercial insurance	Other	None	Number of women
Age						
15-19	0.7	0.1	0.0	0.0	99.1	7,820
20-24	1.1	0.4	0.3	0.0	98.3	6,757
25-29	1.2	0.2	0.3	0.0	98.3	7,145
30-34	2.1	0.2	0.2	0.0	97.5	5,467
35-39	2.1	0.3	0.2	0.1	97.4	4,718
40-44	2.0	0.3	0.2	0.1	97.5	3,620
45-49	1.3	0.2	0.1	0.0	98.4	3,422
Residence						
Urban	2.7	0.3	0.4	0.0	96.7	16,414
Rural	0.5	0.2	0.1	0.0	99.3	22,534
Zone						
North Central	1.8	0.6	0.2	0.0	97.4	5,572
North East	1.5	0.1	0.2	0.0	98.3	5,766
North West	0.5	0.1	0.0	0.0	99.4	11,877
South East	1.3	0.3	0.5	0.0	97.9	4,476
South South	2.5	0.4	0.5	0.1	96.6	4,942
South West	1.8	0.1	0.2	0.1	97.8	6,314
Education						
No education	0.1	0.1	0.0	0.0	99.8	14,729
Primary	0.5	0.1	0.1	0.0	99.4	6,734
Secondary	1.4	0.3	0.3	0.0	98.1	13,927
More than secondary	8.6	0.9	0.9	0.2	89.4	3,558
Wealth quintile						
Lowest	0.0	0.0	0.0	0.0	100.0	7,132
Second	0.0	0.0	0.0	0.0	99.9	7,428
Middle	0.4	0.1	0.1	0.0	99.3	7,486
Fourth	1.2	0.2	0.2	0.0	98.3	7,992
Highest	4.6	0.7	0.5	0.1	94.1	8,910
Total	1.4	0.2	0.2	0.0	98.2	38,948

Table 3.8.2 Health insurance coverage: Men

Percentage of men age 15-49 with specific types of health insurance coverage, according to background characteristics, Nigeria 2013

Background characteristic	Employer-based insurance	Mutual Health Organization/ community-based insurance	Privately purchased commercial insurance	Other	None	Number of men
Age						
15-19	0.6	0.1	0.1	0.2	99.1	3,619
20-24	1.0	0.3	0.2	0.3	98.1	2,892
25-29	1.8	0.3	0.1	0.1	97.7	2,757
30-34	3.5	0.6	0.0	0.1	95.9	2,414
35-39	3.5	0.4	0.3	0.1	95.8	2,175
40-44	4.4	0.4	0.4	0.0	94.8	1,777
45-49	4.5	0.4	0.2	0.0	94.9	1,724
Residence						
Urban	4.1	0.5	0.3	0.1	95.0	7,611
Rural	1.1	0.2	0.1	0.1	98.5	9,748
Zone						
North Central	3.4	1.0	0.1	0.4	95.2	2,685
North East	1.6	0.3	0.1	0.5	97.6	2,515
North West	1.0	0.2	0.1	0.0	98.7	5,185
South East	2.1	0.1	0.1	0.0	97.6	1,686
South South	3.5	0.3	0.2	0.0	96.0	2,445
South West	4.1	0.1	0.3	0.0	95.4	2,843
Education						
No education	0.0	0.0	0.0	0.0	100.0	3,685
Primary	0.5	0.2	0.0	0.0	99.3	2,907
Secondary	1.8	0.2	0.1	0.1	97.8	8,281
More than secondary	10.1	1.5	0.9	0.7	86.8	2,486
Wealth quintile						
Lowest	0.0	0.0	0.0	0.0	100.0	2,862
Second	0.1	0.1	0.0	0.0	99.7	2,992
Middle	1.0	0.1	0.1	0.1	98.6	3,338
Fourth	1.8	0.4	0.1	0.1	97.6	3,835
Highest	7.1	0.8	0.5	0.3	91.3	4,332
Total	2.4	0.3	0.2	0.1	97.0	17,359

3.9 USE OF TOBACCO

Tobacco is used in various ways. It is dried and rolled into cigarettes and cigars for smoking, shredded and inserted into pipes (also for smoking), and finely pulverised for inhalation as snuff. Smoking has been shown to have significant adverse health effects, including increased risk of respiratory and cardiovascular illnesses, both for the individual smoker and for other people exposed to secondhand or "environmental" tobacco smoke (WHO, 2002). Information on women's and men's use of tobacco was collected during the 2013 NDHS.

The majority of women in Nigeria do not use tobacco (data not shown). Thus, an in-depth assessment of tobacco smoking among women is not possible. Table 3.9 shows that 92 percent of men in Nigeria do not smoke tobacco.

The majority of men who use tobacco tend to smoke cigarettes (7 percent). Cigarette smoking among men is highest in the 30-34 and 40-44 age groups (10 percent each). Men in the South East (17 percent) are more likely to use tobacco products than those in the other zones. Tobacco use is highest among men with a primary education (17 percent).

Among men who smoke, 25 percent smoked 10 or more cigarettes in the 24 hours before the survey, 30 percent smoked 3-5 cigarettes, and 22 percent smoked 1 or 2 cigarettes. Older men, those in the North West, those with no education, and those in the second wealth quintile were most likely to have smoked 10 or more cigarettes in the past 24 hours.

Table 3.9 Use of tobacco: Men

Percentage of men age 15-49 who smoke cigarettes or a pipe or use other tobacco products and the percent distribution of cigarette smokers by number of cigarettes smoked in the preceding 24 hours, according to background characteristics, Nigeria 2013

Background characteristic	Uses tobacco			Does not use tobacco	Number of men	Percent distribution of men who smoke cigarettes by number of cigarettes smoked in the past 24 hours						Total	Number of cigarette smokers
	Cigarettes	Pipe	Other tobacco			0	1-2	3-5	6-9	10+	Don't know/ missing		
Age													
15-19	0.7	0.1	0.5	99.0	3,619	*	*	*	*	*	*	100.0	24
20-24	4.4	0.3	1.9	94.4	2,892	4.8	34.8	27.6	9.6	16.2	7.0	100.0	127
25-29	8.9	0.5	3.8	89.4	2,757	2.0	23.9	24.7	11.8	29.9	7.7	100.0	245
30-34	9.5	0.2	3.5	88.1	2,414	1.8	16.9	36.5	17.8	21.1	5.8	100.0	230
35-39	7.6	0.4	3.3	90.0	2,175	3.6	22.2	32.7	17.4	17.5	6.7	100.0	166
40-44	9.5	0.3	5.4	86.7	1,777	2.1	18.9	30.5	10.2	29.2	9.2	100.0	169
45-49	9.3	0.5	4.9	87.1	1,724	4.2	19.9	26.7	13.1	33.5	2.5	100.0	161
Residence													
Urban	6.7	0.2	2.8	91.7	7,611	3.3	24.7	27.5	12.6	24.1	7.6	100.0	512
Rural	6.3	0.4	3.1	91.6	9,748	2.4	19.6	31.9	15.1	25.1	6.0	100.0	610
Zone													
North Central	8.4	0.5	4.5	88.5	2,685	1.6	17.3	28.3	18.9	24.5	9.5	100.0	226
North East	4.2	0.2	3.2	93.5	2,515	1.1	17.2	33.1	17.1	26.0	5.5	100.0	105
North West	4.0	0.3	1.4	95.2	5,185	0.0	19.1	18.3	14.1	47.6	0.8	100.0	209
South East	10.9	0.4	5.2	85.2	1,686	5.8	26.0	37.5	9.9	13.2	7.6	100.0	183
South South	9.3	0.4	2.4	89.0	2,445	3.5	20.7	34.3	15.0	20.9	5.6	100.0	228
South West	6.0	0.0	3.4	92.5	2,843	4.7	31.9	30.3	8.3	13.2	11.6	100.0	171
Education													
No education	4.6	0.5	2.7	93.5	3,685	1.3	7.8	29.0	19.4	40.1	2.4	100.0	169
Primary	10.6	0.3	5.9	85.5	2,907	2.2	19.6	32.8	16.1	22.6	6.7	100.0	309
Secondary	6.3	0.2	2.5	92.2	8,281	2.7	26.7	28.5	11.9	22.1	8.2	100.0	524
More than secondary	4.8	0.1	1.7	94.1	2,486	7.0	27.3	29.9	9.8	19.7	6.3	100.0	120
Wealth quintile													
Lowest	4.1	0.6	2.5	93.9	2,862	1.4	19.0	33.6	18.1	25.5	2.4	100.0	118
Second	7.3	0.3	3.4	90.3	2,992	0.8	16.9	27.0	18.5	31.6	5.2	100.0	219
Middle	7.1	0.3	4.1	90.4	3,338	2.8	20.6	28.7	12.7	27.1	8.0	100.0	237
Fourth	6.9	0.2	2.9	91.2	3,835	3.3	25.9	33.0	11.2	22.2	4.4	100.0	265
Highest	6.5	0.2	2.1	92.4	4,332	4.5	24.6	28.7	12.3	19.2	10.8	100.0	283
Total	6.5	0.3	3.0	91.6	17,359	2.8	22.0	29.9	14.0	24.7	6.7	100.0	1,122

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

MARRIAGE AND SEXUAL ACTIVITY 4

Key Findings

- The median age at first marriage among women age 25-49 is 18.1 years; the median age at first marriage among men age 30-49 is 27.2 years.
- Women and men in Nigeria tend to initiate sexual activity before marriage. The median age at first sexual intercourse is 17.6 years for women and 21.1 years for men age 25-49.
- Thirty-three percent of currently married women are married to men who are in a polygynous union; 17 percent of currently married men are in a polygynous union.

Marriage is a primary indication of women's exposure to the risk of pregnancy; therefore, it is important for an understanding of fertility. Populations in which women marry at a young age tend to have high fertility and early childbearing. For this reason, there is an interest in age at marriage. In addition to marriage patterns and age at first marriage, this chapter includes information on two other direct measures of exposure to pregnancy, namely age at first sexual intercourse and frequency of intercourse.

4.1 MARITAL STATUS

Table 4.1 presents the percent distribution of women and men by current marital status. The proportion of women who have never married (or lived with a man) declines sharply with age, from 70 percent among women age 15-19 to 1 percent among women age 45-49. Marriage is thus nearly universal in Nigeria. Although most men eventually marry, men tend to marry later than women; therefore, a higher percentage of men than women age 15-49 are not currently married (48 percent versus 24 percent). Seven in 10 women and 5 in 10 men age 15-49 are currently married or living together with a partner as though married.

Table 4.1 Current marital status

Percent distribution of women and men age 15-49 by current marital status, according to age, Nigeria 2013

Age	Marital status						Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed			
					WOMEN				
15-19	70.4	28.2	0.6	0.5	0.1	0.1	100.0	28.8	7,820
20-24	33.1	61.3	3.3	1.3	0.8	0.3	100.0	64.6	6,757
25-29	14.1	79.8	3.0	1.1	1.1	0.9	100.0	82.8	7,145
30-34	6.7	86.6	2.5	1.1	1.5	1.6	100.0	89.1	5,467
35-39	2.7	89.4	1.7	1.3	1.4	3.4	100.0	91.2	4,718
40-44	1.5	87.8	1.3	1.4	1.4	6.6	100.0	89.1	3,620
45-49	0.7	83.9	1.0	1.4	1.8	11.1	100.0	85.0	3,422
Total	23.9	69.4	2.0	1.1	1.0	2.5	100.0	71.5	38,948
					MEN				
15-19	98.7	1.1	0.0	0.1	0.0	0.1	100.0	1.1	3,619
20-24	84.8	14.0	0.5	0.4	0.3	0.0	100.0	14.4	2,892
25-29	53.3	43.7	1.2	0.8	0.7	0.2	100.0	45.0	2,757
30-34	25.6	70.6	1.9	0.7	1.0	0.3	100.0	72.5	2,414
35-39	8.8	87.3	1.8	0.8	1.0	0.4	100.0	89.0	2,175
40-44	3.1	92.8	2.3	0.8	0.7	0.4	100.0	95.0	1,777
45-49	1.0	94.0	1.7	0.7	1.4	1.3	100.0	95.7	1,724
Total	48.3	49.1	1.2	0.5	0.6	0.3	100.0	50.2	17,359

Two percent of women and 1 percent of men are separated or divorced, the same percentages observed in the 2008 NDHS. Three percent of women and less than 1 percent of men are widowed.

4.2 POLYGYNY

Polygyny (the practice of having more than one wife) has implications for frequency of exposure to sexual activity and therefore fertility. The extent of polygyny in Nigeria was measured by asking all women currently married or living with a man the following question: "Does your husband/partner have other wives, or does he live with other women as if married?" If the answer was yes, the woman was asked "Including yourself, in total, how many wives or live-in partners does he have?" Currently married men or men living with a woman were asked "Do you have other wives, or do you live with other women as if married?" If the answer was yes, the man was asked "Altogether, how many wives or live-in partners do you have?"

Table 4.2.1 shows the distribution of currently married women by number of co-wives, according to selected background characteristics. The majority of married women report that their husband or partner has no other wives (67 percent). Thirty-three percent of women report that their husbands have more than one wife, while less than 1 percent do not know if their husbands have other wives. These figures are similar to those reported in the 2008 NDHS.

Table 4.2.1 Number of women's co-wives

Percent distribution of currently married women age 15-49 by number of co-wives, according to background characteristics, Nigeria 2013

Background characteristic	Number of co-wives					Total	Number of women
	0	1	2+	Don't know	Missing		
Age							
15-19	74.8	21.7	3.1	0.0	0.5	100.0	2,251
20-24	74.2	21.7	3.3	0.2	0.5	100.0	4,362
25-29	70.5	24.0	4.7	0.3	0.4	100.0	5,913
30-34	65.9	26.8	6.5	0.3	0.5	100.0	4,869
35-39	62.0	28.9	8.4	0.4	0.3	100.0	4,302
40-44	60.4	28.6	10.5	0.2	0.3	100.0	3,226
45-49	57.9	29.5	12.3	0.1	0.2	100.0	2,907
Residence							
Urban	77.6	16.2	5.4	0.4	0.4	100.0	10,124
Rural	60.7	31.3	7.4	0.2	0.4	100.0	17,705
Zone							
North Central	69.6	24.2	5.6	0.1	0.6	100.0	3,895
North East	59.2	31.1	9.3	0.1	0.3	100.0	4,679
North West	56.0	35.5	8.2	0.0	0.3	100.0	10,034
South East	86.9	9.1	2.4	0.3	1.3	100.0	2,333
South South	85.9	9.8	3.3	0.7	0.4	100.0	2,699
South West	75.4	18.0	5.8	0.7	0.1	100.0	4,189
State							
North Central							
FCT-Abuja	81.6	12.9	4.6	0.1	0.8	100.0	200
Benue	74.5	20.0	5.5	0.0	0.0	100.0	827
Kogi	68.2	25.1	6.0	0.0	0.7	100.0	433
Kwara	66.0	27.8	6.0	0.1	0.1	100.0	384
Nasarawa	61.3	27.2	10.8	0.4	0.2	100.0	420
Niger	67.5	27.7	4.2	0.0	0.6	100.0	1,190
Plateau	72.9	20.9	4.2	0.0	2.0	100.0	442
North East							
Adamawa	59.3	28.0	12.2	0.0	0.4	100.0	586
Bauchi	48.9	40.3	10.9	0.0	0.0	100.0	1,051
Borno	73.6	21.1	4.2	0.4	0.7	100.0	1,120
Gombe	54.5	35.1	10.4	0.0	0.0	100.0	467
Taraba	56.4	28.3	15.1	0.1	0.1	100.0	632
Yobe	57.5	34.9	7.4	0.0	0.2	100.0	824
North West							
Jigawa	55.5	35.5	8.6	0.0	0.4	100.0	1,256
Kaduna	71.3	23.8	4.7	0.2	0.0	100.0	1,594
Kano	54.9	35.2	9.8	0.0	0.1	100.0	2,521
Katsina	47.3	40.1	11.2	0.1	1.2	100.0	1,408
Kebbi	55.7	39.2	4.7	0.0	0.4	100.0	1,074
Sokoto	58.8	32.8	7.8	0.0	0.6	100.0	956
Zamfara	46.7	44.9	8.4	0.0	0.0	100.0	1,226

Continued…

Table 4.2.1—*Continued*

Background characteristic	Number of co-wives					Total	Number of women
	0	1	2+	Don't know	Missing		
South East							
Abia	84.7	9.1	3.1	0.0	3.1	100.0	292
Anambra	92.6	5.7	0.4	0.4	0.8	100.0	564
Ebonyi	72.7	19.5	7.9	0.0	0.0	100.0	564
Enugu	91.0	7.2	0.0	0.0	1.7	100.0	467
Imo	94.7	2.3	0.2	1.0	1.9	100.0	446
South South							
Akwa Ibom	92.9	5.3	1.4	0.1	0.3	100.0	410
Bayelsa	74.3	17.6	6.8	1.3	0.0	100.0	202
Cross River	84.6	11.0	1.1	3.0	0.4	100.0	437
Delta	82.1	11.0	6.5	0.2	0.2	100.0	551
Edo	83.4	11.9	4.3	0.2	0.2	100.0	395
Rivers	90.3	7.4	1.6	0.0	0.7	100.0	704
South West							
Ekiti	75.4	16.2	7.2	0.4	0.8	100.0	194
Lagos	85.1	10.0	3.0	1.9	0.0	100.0	1,236
Ogun	70.9	23.0	5.7	0.5	0.0	100.0	655
Ondo	67.5	22.4	9.2	0.7	0.2	100.0	510
Osun	79.3	15.2	5.5	0.0	0.0	100.0	465
Oyo	69.5	23.2	7.3	0.0	0.0	100.0	1,129
Education							
No education	54.0	36.7	8.8	0.1	0.4	100.0	13,470
Primary	68.7	23.8	7.0	0.3	0.2	100.0	5,336
Secondary	83.4	11.9	3.6	0.5	0.6	100.0	6,981
More than secondary	89.7	7.4	2.2	0.3	0.4	100.0	2,043
Wealth quintile							
Lowest	54.0	38.4	7.3	0.0	0.3	100.0	6,424
Second	58.7	33.4	7.5	0.1	0.3	100.0	5,986
Middle	66.4	24.6	8.1	0.3	0.6	100.0	4,983
Fourth	74.5	18.4	6.5	0.3	0.3	100.0	5,042
Highest	84.4	10.6	3.9	0.6	0.5	100.0	5,395
Total	66.8	25.8	6.7	0.2	0.4	100.0	27,830

The proportion of women with co-wives increases with age. The proportions of women who report having no co-wives is highest in the South East (87 percent) and lowest in the North West (56 percent). The percentage of women with co-wives is highest in Zamfara state (53 percent) and lowest in Imo (3 percent). The high proportion of co-wives in Zamfara may be attributed to the Islamic religion and culture, which allow a man to have more than one wife.

There is an inverse relationship between education and polygyny. Women with no education are more likely to report having co-wives (46 percent) than women who are educated. The difference is especially pronounced in the case of women who have more than a secondary education (10 percent). Overall, the percentage of women who report having one or more co-wives decreases with increasing wealth quintile, from 46 percent among women in the lowest quintile to 15 percent among women in the highest quintile.

Table 4.2.2 shows the results for men. Overall, 17 percent of currently married men are in polygynous unions. Similar to women, older men are more likely to be in polygynous unions. The percentage of men age 15-49 who report being in a polygynous union is higher in rural areas (21 percent) than in urban areas (9 percent).

Men in the northern zones are more likely than men in the southern zones to report more than one wife. For instance, 26 percent of currently married men in the North West, 21 percent in the North East, and 16 percent in the North Central zone report having more than one wife. In contrast, 9 percent of men in the South West, 7 percent in the South South, and 4 percent in the South East report having more than one wife. Among the states, the proportion of men in polygynous unions is highest in Zamfara (36 percent). Almost no men in Abia and Imo report having more than one wife.

The percentage of men age 15-49 who report being in a polygynous union declines with increasing education and wealth quintile.

Table 4.2.2 Number of men's wives

Percent distribution of currently married men age 15-49 by number of wives, according to background characteristics, Nigeria 2013

Background characteristic	Number of wives		Total	Number of men
	1	2+		
Age				
15-19	(96.8)	(3.2)	100.0	41
20-24	98.4	1.6	100.0	418
25-29	94.4	5.6	100.0	1,240
30-34	88.0	12.0	100.0	1,750
35-39	82.8	17.2	100.0	1,937
40-44	77.0	23.0	100.0	1,688
45-49	72.1	27.9	100.0	1,649
Residence				
Urban	90.6	9.4	100.0	3,302
Rural	78.7	21.3	100.0	5,421
Zone				
North Central	83.6	16.4	100.0	1,395
North East	79.3	20.7	100.0	1,404
North West	74.4	25.6	100.0	2,846
South East	95.9	4.1	100.0	643
South South	93.1	6.9	100.0	1,020
South West	91.2	8.8	100.0	1,414
State				
North Central				
FCT-Abuja	92.8	7.2	100.0	96
Benue	87.4	12.6	100.0	283
Kogi	87.8	12.2	100.0	142
Kwara	80.5	19.5	100.0	132
Nasarawa	81.6	18.4	100.0	136
Niger	79.9	20.1	100.0	447
Plateau	82.2	17.8	100.0	158
North East				
Adamawa	83.1	16.9	100.0	174
Bauchi	71.6	28.4	100.0	325
Borno	87.7	12.3	100.0	368
Gombe	72.0	28.0	100.0	131
Taraba	78.9	21.1	100.0	177
Yobe	78.6	21.4	100.0	229
North West				
Jigawa	73.7	26.3	100.0	334
Kaduna	86.1	13.9	100.0	569
Kano	72.4	27.6	100.0	691
Katsina	68.4	31.6	100.0	390
Kebbi	77.1	22.9	100.0	314
Sokoto	73.6	26.4	100.0	236
Zamfara	63.8	36.2	100.0	312
South East				
Abia	100.0	0.0	100.0	77
Anambra	99.5	0.5	100.0	188
Ebonyi	87.1	12.9	100.0	145
Enugu	93.4	6.6	100.0	104
Imo	100.0	0.0	100.0	129
South South				
Akwa Ibom	96.0	4.0	100.0	175
Bayelsa	88.1	11.9	100.0	80
Cross River	96.2	3.8	100.0	131
Delta	89.0	11.0	100.0	199
Edo	89.2	10.8	100.0	131
Rivers	95.6	4.4	100.0	304
South West				
Ekiti	92.3	7.7	100.0	70
Lagos	95.5	4.5	100.0	435
Ogun	88.2	11.8	100.0	210
Ondo	90.2	9.8	100.0	183
Osun	90.0	10.0	100.0	167
Oyo	88.4	11.6	100.0	349
Education				
No education	73.5	26.5	100.0	2,594
Primary	80.3	19.7	100.0	1,854
Secondary	89.6	10.4	100.0	2,961
More than secondary	91.7	8.3	100.0	1,313

Continued…

Table 4.2.2—*Continued*

Background characteristic	Number of wives 1	Number of wives 2+	Total	Number of men
Wealth quintile				
Lowest	72.5	27.5	100.0	1,795
Second	77.2	22.8	100.0	1,732
Middle	82.1	17.9	100.0	1,506
Fourth	88.7	11.3	100.0	1,697
Highest	94.1	5.9	100.0	1,992
Total	83.2	16.8	100.0	8,723

Note: Figures in parentheses are based on 25-49 unweighted cases.

4.3 AGE AT FIRST MARRIAGE

In most societies, marriage marks the point in a woman's life when childbearing first becomes socially acceptable. Women who marry early will, on average, have longer exposure to pregnancy and a greater number of lifetime births. Information on age at first marriage was obtained by asking all ever-married respondents the month and year they started living together with their first spouse.

Table 4.3 presents the percentages of both women and men who first married by specific exact ages and the median age at first marriage, according to current age. The results show that almost half (49 percent) of women age 25-49 were married by age 18, and 61 percent were married by age 20. The proportion of women who married by age 18 decreases from 56 percent among women who are currently age 45-49 to 43 percent among women age 20-24. The median age at first marriage increases from 17.3 years among women age 45-49 to 19 years among women age 20-24. This is an indication of a gradual increase in age at marriage among the younger generation.

Table 4.3 Age at first marriage

Percentage of women and men age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Nigeria 2013

Current age	Percentage first married by exact age: 15	18	20	22	25	Percentage never married	Number of respondents	Median age at first marriage
				WOMEN				
15-19	11.6	na	na	na	na	70.4	7,820	a
20-24	17.3	42.8	56.0	na	na	33.1	6,757	19.0
25-29	21.8	46.3	58.1	67.7	78.9	14.1	7,145	18.6
30-34	23.7	48.8	59.9	69.2	79.6	6.7	5,467	18.2
35-39	22.3	48.3	61.5	72.1	83.8	2.7	4,718	18.2
40-44	24.8	50.1	64.7	74.6	84.2	1.5	3,620	18.0
45-49	28.9	55.5	66.8	76.5	85.7	0.7	3,422	17.3
20-49	22.4	47.7	60.2	na	na	12.3	31,128	18.3
25-49	23.8	49.1	61.4	71.1	81.8	6.5	24,372	18.1
				MEN				
15-19	0.0	na	na	na	na	98.7	3,619	a
20-24	0.0	2.4	7.2	na	na	84.8	2,892	a
25-29	0.0	3.7	9.5	17.8	34.7	53.3	2,757	a
30-34	0.0	3.6	11.0	20.4	35.4	25.6	2,414	27.4
35-39	0.0	4.8	10.4	20.4	38.2	8.8	2,175	26.9
40-44	0.0	4.8	11.9	19.9	35.2	3.1	1,777	27.5
45-49	0.0	4.5	12.1	21.5	38.3	1.0	1,724	27.1
20-49	0.0	3.8	10.1	na	na	35.0	13,740	a
25-49	0.0	4.2	10.8	19.8	36.2	21.7	10,848	a
30-49	0.0	4.4	11.3	20.5	36.7	10.9	8,090	27.2

Note: Age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
na = Not applicable due to censoring
a = Omitted because less than 50 percent of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group

Nigerian men enter into marriage at a later age than women. For this reason, the analysis for men was carried out for the 30-49 age group in addition to the 25-49 age group. The median age at first marriage among men age 30-49 is 27.2 years. A comparison between women and men in the 30-34 age group indicates that the median age at first marriage among men in that age group is 27.4 years, nine years later than women (18.2 years). Only 1 in 10 men age 20-49 marry by age 20, as compared with 6 in 10 women in the same age group.

Table 4.4 presents the median age at first marriage among women and men, by background characteristics. Among women age 25-49, the median age at marriage is four years higher among those living in urban areas (20.8 years) than among those residing in rural areas (16.6 years). By zone, the lowest median age at marriage among women is observed in the North West (15.3 years), while the highest is in the South East (22.7 years). Among the states, the median age at marriage is as low as 14.4 years in Zamfara.

There is a marked relationship between women's level of education and their median age at first marriage. The median age at first marriage among women age 25-49 with no formal education is 15.5 years, and it rises steadily to 21.5 years among those with a secondary education. There is a positive association between wealth and age at marriage. The median age at marriage among women age 25-49 in the lowest wealth quintile is eight years lower than among women in the highest quintile (15.2 and 23.2 years, respectively).

Differences in the median age at first marriage among men age 30-49 by background characteristics are not as large as those observed among women. However, urban men (29.3 years) and those living in the South South (29.2 years) tend to marry later than other men. Median age at marriage increases with increasing education and wealth.

4.4 AGE AT FIRST SEXUAL INTERCOURSE

Age at first marriage can be used as a proxy for the beginning of exposure to the risk of pregnancy. However, because some women are sexually active before marriage, the age at which women initiate sexual intercourse more precisely marks the beginning of their exposure to reproductive risks.

Table 4.4 Median age at first marriage by background characteristics

Median age at first marriage among women age 20-49 and age 25-49, and median age at first marriage among men age 30-49, according to background characteristics, Nigeria 2013

Background characteristic	Women age 20-49	Women age 25-49	Men age 30-49
Residence			
Urban	a	20.8	29.3
Rural	16.7	16.6	25.6
Zone			
North Central	19.1	18.9	26.4
North East	16.4	16.3	25.5
North West	15.4	15.3	25.6
South East	a	22.7	a
South South	a	21.5	29.2
South West	a	21.8	28.4
State			
North Central			
FCT-Abuja	a	22.7	a
Benue	17.9	17.6	26.4
Kogi	a	19.8	29.6
Kwara	a	20.9	27.8
Nasarawa	19.7	19.4	26.6
Niger	17.7	17.7	23.6
Plateau	a	20.4	27.2
North East			
Adamawa	17.5	17.1	26.9
Bauchi	15.0	15.0	22.5
Borno	17.3	17.4	27.5
Gombe	16.0	15.8	23.1
Taraba	17.3	17.1	25.5
Yobe	16.3	16.1	25.5
North West			
Jigawa	15.2	15.1	22.6
Kaduna	17.5	17.3	26.7
Kano	15.6	15.4	28.5
Katsina	15.0	14.9	23.6
Kebbi	15.7	15.5	25.2
Sokoto	14.8	14.7	24.8
Zamfara	14.5	14.4	23.4
South East			
Abia	a	24.3	a
Anambra	a	23.8	a
Ebonyi	a	20.7	a
Enugu	a	22.1	a
Imo	a	23.7	a
South South			
Akwa Ibom	a	21.0	28.7
Bayelsa	18.7	18.1	27.6
Cross River	a	21.2	29.2
Delta	a	21.0	28.4
Edo	a	21.3	28.8
Rivers	a	23.7	a
South West			
Ekiti	a	22.2	28.7
Lagos	a	23.8	a
Ogun	a	20.5	26.7
Ondo	a	21.0	28.2
Osun	a	22.4	28.3
Oyo	a	20.3	26.6
Education			
No education	15.6	15.5	24.4
Primary	17.9	18.0	26.3
Secondary	a	21.5	28.3
Higher	a	a	a
Wealth quintile			
Lowest	15.3	15.2	23.7
Second	16.2	16.0	25.1
Middle	18.2	17.9	26.6
Fourth	19.9	19.5	28.4
Highest	a	23.2	a
Total	18.3	18.1	27.2

Note: Age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
a = Omitted because less than 50 percent of the respondents began living with their spouse or partner for the first time before reaching the beginning of the age group

The percentages of women and men who had sexual intercourse by specific exact ages are presented in Table 4.5. The median age at first intercourse among women age 25-49 is 17.6 years. Twenty-four percent of women report that they had sexual intercourse by age 15 and 54 percent by age 18. Approximately 7 in 10 Nigerian women reported having had sexual intercourse by age 20.

Table 4.5 Age at first sexual intercourse

Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Nigeria 2013

Current age	Percentage who had first sexual intercourse by exact age: 15	18	20	22	25	Percentage who never had intercourse	Number	Median age at first intercourse
				WOMEN				
15-19	15.6	na	na	na	na	56.2	7,820	a
20-24	18.7	51.1	71.0	na	na	13.0	6,757	17.9
25-29	22.0	51.7	67.4	79.1	88.0	3.1	7,145	17.8
30-34	23.7	53.4	68.0	78.3	85.7	1.2	5,467	17.6
35-39	22.1	53.9	69.0	79.7	87.4	0.3	4,718	17.6
40-44	24.7	53.4	68.4	78.0	84.3	0.2	3,620	17.6
45-49	28.4	57.0	69.4	78.9	85.0	0.1	3,422	17.1
20-49	22.6	53.0	68.9	na	na	3.8	31,128	17.7
25-49	23.7	53.5	68.3	78.8	86.4	1.3	24,372	17.6
15-24	17.0	na	na	na	na	36.2	14,576	a
				MEN				
15-19	2.9	na	na	na	na	84.5	3,619	a
20-24	4.0	18.6	40.1	na	na	43.2	2,892	a
25-29	3.1	19.2	39.2	57.8	74.8	15.8	2,757	20.9
30-34	2.5	19.4	38.2	55.9	70.9	5.4	2,414	21.0
35-39	2.1	18.8	36.8	53.3	68.6	1.3	2,175	21.4
40-44	3.1	19.7	37.0	53.7	67.8	0.6	1,777	21.2
45-49	2.2	17.4	33.7	52.9	66.3	0.3	1,724	21.4
20-49	2.9	18.9	37.8	na	na	13.5	13,740	a
25-49	2.6	19.0	37.2	55.0	70.2	5.6	10,848	21.1
15-24	3.4	na	na	na	na	66.2	6,511	a

na = Not applicable due to censoring
a = Omitted because less than 50 percent of the respondents had sexual intercourse for the first time before reaching the beginning of the age group

Nigerian men exhibit a slightly older median age at first intercourse than women. Among men age 25-49, the median age at first intercourse is 21.1 years. Three percent of men reported having had sexual intercourse by age 15 and 19 percent by age 18. By age 20, more than one in three men had initiated sexual intercourse (37 percent).

Table 4.6 presents the median age at first sexual intercourse among women and men by background characteristics. The most notable pattern is the increasing median age with increasing education among women. The median age rises steadily from 15.6 years among women with no education to 21.2 years among women with more than a secondary education. Similarly, median age at first sexual intercourse among women increases from 15.3 years in the lowest wealth quintile to 20.1 years in the highest quintile. However, this pattern does not apply for men. Men with no education and those in the lowest wealth quintile have a higher median age at first sexual intercourse than men who are educated and are in the higher wealth quintiles.

Table 4.6 Median age at first sexual intercourse by background characteristics

Median age at first sexual intercourse among women age 20-49 and age 25-49, and median age at first sexual intercourse among men age 25-49, according to background characteristics, Nigeria 2013

Background characteristic	Women age		Men age
	20-49	25-49	25-49
Residence			
Urban	19.0	18.9	20.9
Rural	16.4	16.4	21.3
Zone			
North Central	18.7	18.7	20.7
North East	16.4	16.2	23.0
North West	15.5	15.4	24.9
South East	a	20.2	20.2
South South	18.5	18.6	19.0
South West	19.6	19.7	20.1
State			
North Central			
FCT-Abuja	a	19.9	23.5
Benue	16.9	16.8	18.7
Kogi	a	20.1	23.7
Kwara	19.8	19.7	20.6
Nasarawa	18.9	19.0	19.2
Niger	18.3	18.4	21.0
Plateau	a	20.1	22.0
North East			
Adamawa	16.9	16.6	22.9
Bauchi	15.1	15.1	22.4
Borno	17.6	17.7	24.8
Gombe	16.0	15.9	22.4
Taraba	16.5	16.4	20.2
Yobe	16.3	16.2	a
North West			
Jigawa	15.3	15.2	23.0
Kaduna	16.8	16.8	21.3
Kano	15.6	15.5	a
Katsina	15.1	15.0	23.8
Kebbi	15.9	15.7	24.9
Sokoto	14.9	14.8	a
Zamfara	14.6	14.4	23.7
South East			
Abia	a	20.9	20.8
Anambra	a	20.5	19.8
Ebonyi	18.8	18.8	20.6
Enugu	a	20.6	20.4
Imo	a	20.3	19.5
South South			
Akwa Ibom	18.1	18.2	18.9
Bayelsa	16.3	16.1	17.8
Cross River	18.6	18.8	19.1
Delta	18.5	18.5	18.9
Edo	19.5	19.5	19.8
Rivers	18.8	18.8	19.1
South West			
Ekiti	19.4	19.6	18.8
Lagos	a	20.4	20.2
Ogun	19.1	19.1	19.8
Ondo	19.0	19.1	18.4
Osun	a	20.3	21.0
Oyo	18.7	18.8	20.6
Education			
No education	15.6	15.6	23.7
Primary	17.3	17.4	20.7
Secondary	19.2	19.3	20.5
More than secondary	a	21.2	20.9
Wealth quintile			
Lowest	15.3	15.3	23.0
Second	16.0	15.9	22.6
Middle	17.6	17.5	20.9
Fourth	18.5	18.4	20.6
Highest	a	20.1	20.5
Total	17.7	17.6	21.1

a = Omitted because less than 50 percent of the respondents had intercourse for the first time before reaching the beginning of the age group

4.5 RECENT SEXUAL ACTIVITY

In the absence of effective contraception, the probability of pregnancy is highly dependent upon the frequency of intercourse. Therefore, information on sexual activity can be used to refine measures of exposure to pregnancy. Men and women who have had sex were asked how long ago their most recent sexual intercourse occurred. Tables 4.7.1 and 4.7.2 shows the distribution of women and men by timing of last sexual intercourse, according to background characteristics.

Sixty percent of women age 15-49 were sexually active during the four weeks preceding the interview. Another 17 percent reported that they had been sexually active in the 12 months preceding the survey (excluding the past month).

Eight percent said that they had not been sexually active for one or more years, and 14 percent reported that they had never had sex. The proportion of women who were sexually active in the four weeks preceding the survey increases with age, peaking in the 30-34 age group (74 percent) and decreasing thereafter.

As expected, the frequency of sexual activity among teenagers and women who are not currently in a union is lower than that among older women and women who are married or living with a man. Twenty-nine percent of women age 15-19 were sexually active in the four weeks preceding the survey, and 14 percent of never-married women were sexually active during the same period. Women in urban areas were less likely to be sexually active during the past four weeks (53 percent) than their counterparts in rural areas (66 percent).

By zone, the proportion of women who were sexually active during the four weeks preceding the survey was highest in the North West (77 percent) and lowest in the South East (39 percent). The results show that women with no education (77 percent) are more likely to have been sexually active in the past four weeks than educated women, while women with a secondary education are least likely to have been sexually active in the past weeks (44 percent). The prevalence of recent sexual activity decreases with increasing wealth status.

Five in 10 men age 15-49 reported having had sexual intercourse within the four weeks preceding the interview. Sixteen percent of men had been sexually active within the 12-month period prior to the survey but not in the month prior to the interview, and 5 percent had not been sexually active for one or more years. Twenty-eight percent of men reported never having had sexual intercourse.

The proportion of men who were sexually active in the four weeks preceding the survey increases with age, peaking in the 45-49 age group (82 percent). Men who are in a union are much more likely to have been sexually active in the past four weeks than men who have never been married or lived together with a woman (84 percent and 16 percent, respectively).

In addition, men in rural areas are more likely to have been sexually active in the past four weeks than men in urban areas (55 percent and 44 percent, respectively). Recent sexual activity among men is highest in the North East (55 percent) and lowest in the South East (35 percent). As in the 2008 NDHS, men with a secondary education are less likely to have been sexually active in the past four weeks (39 percent) and more likely to report never having had sexual intercourse (37 percent) than their counterparts in other categories. Recent sexual activity among men decreases from the lowest to the middle wealth quintile (from 60 to 44 percent) before increasing in the fourth (46 percent) and highest (48 percent) quintiles.

Table 4.7.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Nigeria 2013

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of women
	Within the past 4 weeks	Within 1 year[1]	One or more years	Missing			
Age							
15-19	29.1	10.8	3.7	0.2	56.2	100.0	7,820
20-24	59.3	21.3	6.2	0.2	13.0	100.0	6,757
25-29	70.4	20.1	6.3	0.1	3.1	100.0	7,145
30-34	73.5	18.5	6.5	0.3	1.2	100.0	5,467
35-39	73.1	18.2	8.1	0.2	0.3	100.0	4,718
40-44	71.5	15.8	12.1	0.4	0.2	100.0	3,620
45-49	63.2	16.9	19.3	0.4	0.1	100.0	3,422
Marital status							
Never married	14.4	16.4	9.2	0.2	59.8	100.0	9,326
Married or living together	78.9	17.1	3.8	0.2	0.0	100.0	27,830
Divorced/separated/widowed	12.9	25.9	60.5	0.6	0.1	100.0	1,793
Marital duration[2]							
0-4 years	77.8	18.9	3.0	0.1	0.1	100.0	5,772
5-9 years	79.6	17.4	2.8	0.2	0.0	100.0	5,025
10-14 years	79.8	16.7	3.2	0.3	0.0	100.0	4,663
15-19 years	80.8	15.4	3.6	0.2	0.0	100.0	3,510
20-24 years	78.9	16.1	4.7	0.3	0.0	100.0	2,851
25+ years	76.0	16.2	7.4	0.3	0.0	100.0	3,101
Married more than once	79.2	17.2	3.5	0.1	0.0	100.0	2,907
Residence							
Urban	52.6	18.0	9.6	0.3	19.5	100.0	16,414
Rural	66.1	16.8	6.3	0.2	10.6	100.0	22,534
Zone							
North Central	49.6	22.1	10.5	0.3	17.5	100.0	5,572
North East	71.0	12.3	4.8	0.2	11.6	100.0	5,766
North West	77.3	9.2	2.9	0.2	10.4	100.0	11,877
South East	38.6	23.5	16.7	0.2	20.9	100.0	4,476
South South	52.6	22.5	9.3	0.2	15.3	100.0	4,942
South West	50.0	24.3	9.3	0.3	16.0	100.0	6,314
State							
North Central							
FCT-Abuja	53.5	18.3	10.4	0.9	16.9	100.0	315
Benue	51.4	25.7	7.1	0.1	15.7	100.0	1,240
Kogi	43.3	22.1	10.9	0.0	23.6	100.0	704
Kwara	39.7	24.1	12.9	0.9	22.4	100.0	596
Nasarawa	52.8	21.8	11.4	0.2	13.9	100.0	594
Niger	56.3	18.5	9.7	0.3	15.1	100.0	1,462
Plateau	42.5	23.4	15.0	0.3	18.7	100.0	662
North East							
Adamawa	58.0	18.7	6.8	0.1	16.3	100.0	828
Bauchi	75.8	13.6	2.7	0.5	7.3	100.0	1,161
Borno	75.1	5.4	5.3	0.1	14.1	100.0	1,412
Gombe	76.0	10.1	3.4	0.4	10.1	100.0	550
Taraba	55.0	26.0	8.7	0.4	9.8	100.0	844
Yobe	81.3	4.8	2.2	0.0	11.7	100.0	971
North West							
Jigawa	78.9	14.5	2.4	0.1	4.0	100.0	1,353
Kaduna	76.2	7.8	5.0	0.1	10.9	100.0	2,136
Kano	70.7	9.0	2.8	0.1	17.4	100.0	3,189
Katsina	89.2	3.5	2.0	0.2	5.0	100.0	1,525
Kebbi	80.2	7.0	2.3	0.0	10.5	100.0	1,244
Sokoto	71.8	14.6	3.2	0.5	9.9	100.0	1,098
Zamfara	81.6	10.8	1.4	0.2	6.0	100.0	1,332
South East							
Abia	44.6	26.5	11.4	0.1	17.4	100.0	518
Anambra	42.1	20.0	17.2	0.3	20.4	100.0	1,052
Ebonyi	35.3	25.0	19.9	0.1	19.8	100.0	1,122
Enugu	33.2	25.4	15.7	0.0	25.8	100.0	951
Imo	41.4	22.1	16.5	0.2	19.8	100.0	833
South South							
Akwa Ibom	48.9	24.8	11.4	0.2	14.6	100.0	864
Bayelsa	58.4	19.1	6.5	0.2	15.8	100.0	364
Cross River	47.0	30.6	11.3	0.1	11.1	100.0	703
Delta	56.2	19.4	6.9	0.0	17.5	100.0	993
Edo	46.6	22.5	8.3	0.4	22.2	100.0	742
Rivers	57.2	20.1	10.1	0.5	12.1	100.0	1,276
South West							
Ekiti	46.9	27.5	8.4	0.0	17.2	100.0	326
Lagos	51.4	23.5	9.1	0.4	15.7	100.0	1,964
Ogun	53.8	25.6	7.9	0.2	12.4	100.0	883
Ondo	40.4	31.5	13.3	0.9	14.0	100.0	808
Osun	49.5	18.1	9.1	0.0	23.3	100.0	765
Oyo	52.1	23.4	8.8	0.2	15.5	100.0	1,568

Continued…

Table 4.7.1—*Continued*

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Missing	Never had sexual intercourse	Total	Number of women
Education							
No education	77.4	12.7	5.6	0.2	4.1	100.0	14,729
Primary	60.8	20.2	10.4	0.2	8.4	100.0	6,734
Secondary	44.0	19.5	7.7	0.2	28.6	100.0	13,927
More than secondary	53.7	22.3	11.4	0.5	12.1	100.0	3,558
Wealth quintile							
Lowest	78.2	11.8	3.4	0.1	6.5	100.0	7,132
Second	67.2	15.7	7.0	0.2	9.9	100.0	7,428
Middle	53.6	19.4	10.3	0.3	16.4	100.0	7,486
Fourth	52.7	20.0	8.9	0.2	18.2	100.0	7,992
Highest	53.3	18.9	8.4	0.3	19.1	100.0	8,910
Total	60.4	17.3	7.7	0.2	14.3	100.0	38,948

[1] Excludes women who had sexual intercourse within the last 4 weeks
[2] Excludes women who are not currently married

Table 4.7.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Nigeria 2013

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Missing	Never had sexual intercourse	Total	Number of men
Age							
15-19	4.5	7.2	3.7	0.0	84.5	100.0	3,619
20-24	27.1	20.8	8.9	0.0	43.2	100.0	2,892
25-29	55.0	21.5	7.6	0.2	15.8	100.0	2,757
30-34	69.4	19.6	5.2	0.4	5.4	100.0	2,414
35-39	78.7	16.2	3.4	0.4	1.3	100.0	2,175
40-44	80.5	15.4	3.3	0.3	0.6	100.0	1,777
45-49	81.7	13.6	4.3	0.2	0.3	100.0	1,724
Marital status							
Never married	15.8	17.3	8.1	0.1	58.7	100.0	8,378
Married or living together	83.6	14.4	1.7	0.3	0.0	100.0	8,723
Divorced/separated/widowed	29.0	32.7	38.3	0.0	0.0	100.0	258
Marital duration[2]							
0-4 years	82.7	15.2	1.8	0.2	0.1	100.0	2,157
5-9 years	80.3	17.5	1.6	0.6	0.0	100.0	1,650
10-14 years	81.9	15.7	2.2	0.2	0.0	100.0	1,295
15-19 years	82.6	15.3	1.7	0.4	0.0	100.0	752
20-24 years	79.8	17.2	2.6	0.5	0.0	100.0	401
25+ years	78.0	16.0	6.0	0.0	0.0	100.0	179
Married more than once	89.1	9.6	1.0	0.3	0.0	100.0	2,289
Residence							
Urban	43.5	19.2	6.1	0.3	30.9	100.0	7,611
Rural	55.2	13.6	4.8	0.1	26.3	100.0	9,748
Zone							
North Central	49.1	21.1	8.0	0.1	21.7	100.0	2,685
North East	55.3	9.2	4.1	0.1	31.3	100.0	2,515
North West	54.5	4.2	1.4	0.2	39.8	100.0	5,185
South East	34.8	27.9	12.0	0.4	24.9	100.0	1,686
South South	52.1	23.5	6.3	0.1	18.0	100.0	2,445
South West	45.5	25.6	6.5	0.5	21.9	100.0	2,843
State							
North Central							
FCT-Abuja	51.0	17.6	5.6	0.7	25.2	100.0	175
Benue	50.6	27.5	3.3	0.0	18.6	100.0	616
Kogi	51.5	14.3	6.1	0.1	28.0	100.0	333
Kwara	41.0	24.8	11.4	0.0	22.8	100.0	274
Nasarawa	48.4	22.1	9.3	0.0	20.2	100.0	282
Niger	51.9	17.1	11.1	0.0	19.8	100.0	701
Plateau	43.4	22.7	9.9	0.0	24.0	100.0	302
North East							
Adamawa	42.9	16.6	10.7	0.0	29.8	100.0	358
Bauchi	59.9	7.5	1.7	0.0	30.9	100.0	512
Borno	58.0	6.5	3.9	0.2	31.3	100.0	676
Gombe	50.5	9.2	5.3	0.7	34.4	100.0	255
Taraba	57.1	18.5	3.5	0.0	21.0	100.0	325
Yobe	57.7	1.7	1.2	0.0	39.4	100.0	390

Continued…

Table 4.7.2—*Continued*

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Missing	Never had sexual intercourse	Total	Number of men
North West							
Jigawa	63.9	3.0	1.9	0.2	31.0	100.0	510
Kaduna	57.9	11.0	2.5	0.1	28.6	100.0	1,033
Kano	42.9	0.5	0.4	0.0	56.2	100.0	1,592
Katsina	65.7	3.5	1.7	0.6	28.5	100.0	596
Kebbi	55.0	4.3	1.3	0.0	39.3	100.0	551
Sokoto	53.7	1.9	2.8	0.6	41.0	100.0	424
Zamfara	61.7	5.3	0.1	0.0	32.9	100.0	479
South East							
Abia	31.6	30.3	13.0	0.0	25.1	100.0	229
Anambra	41.2	25.5	12.9	0.6	19.8	100.0	446
Ebonyi	33.0	30.5	9.5	0.6	26.5	100.0	368
Enugu	26.1	25.6	12.8	0.4	35.1	100.0	320
Imo	39.0	29.1	12.0	0.0	19.9	100.0	323
South South							
Akwa Ibom	46.9	31.6	5.9	0.0	15.6	100.0	451
Bayelsa	52.6	23.2	6.3	0.0	17.9	100.0	187
Cross River	45.5	28.4	6.2	0.0	19.9	100.0	310
Delta	57.3	17.1	7.4	0.0	18.2	100.0	473
Edo	43.0	25.3	7.6	0.8	23.3	100.0	365
Rivers	59.8	19.4	5.0	0.0	15.7	100.0	658
South West							
Ekiti	45.3	24.9	6.1	0.0	23.7	100.0	148
Lagos	43.6	28.7	6.8	0.7	20.3	100.0	948
Ogun	54.2	19.4	5.3	0.8	20.4	100.0	358
Ondo	40.2	29.5	8.6	0.5	21.3	100.0	404
Osun	46.8	23.0	3.9	0.0	26.2	100.0	356
Oyo	46.1	23.7	6.9	0.4	22.8	100.0	629
Education							
No education	66.0	6.6	2.2	0.2	25.1	100.0	3,685
Primary	56.8	17.0	5.1	0.1	20.9	100.0	2,907
Secondary	38.6	18.0	6.5	0.1	36.9	100.0	8,281
More than secondary	56.7	22.7	6.6	0.6	13.4	100.0	2,486
Wealth quintile							
Lowest	60.3	5.2	2.6	0.2	31.7	100.0	2,862
Second	55.0	11.8	4.0	0.1	29.1	100.0	2,992
Middle	44.3	18.1	7.0	0.1	30.5	100.0	3,338
Fourth	45.8	19.4	6.1	0.1	28.6	100.0	3,835
Highest	48.1	21.6	6.1	0.5	23.6	100.0	4,332
Total	50.0	16.1	5.4	0.2	28.3	100.0	17,359

[1] Excludes men who had sexual intercourse within the last 4 weeks
[2] Excludes men who are not currently married

FERTILITY 5

Key Findings

- The total fertility rate for the three years preceding the survey is 5.5 births per woman, as compared with 5.7 births per woman in 2003 and 2008.
- Twenty-three percent of women age 15-19 have already begun childbearing and about one-third (32 percent) of women age 20-49 have had a birth by age 18.
- The median age at first birth among women age 25-49 is 20.2 years.
- Among women who had a live birth in the three years preceding the survey, the median duration of insusceptibility to pregnancy is 12.6 months.
- Nine percent of women age 30-49 are menopausal.

Fertility is one of the principal components of population dynamics that determine the size, structure, and composition of the population in any country. This chapter looks at a number of fertility indicators, including levels, patterns, and trends in both current and cumulative fertility; the length of birth intervals; and the age at which women begin childbearing. Information on current and cumulative fertility is essential to project population growth. Data on birth intervals are important because short intervals are associated with higher childhood mortality. The age at which childbearing begins can also have a major impact on the health and well-being of both the mother and the child.

Data on childbearing patterns were collected in the 2013 NDHS in several ways. First, each woman was asked a series of questions on the number of sons and daughters currently living with her, the number living elsewhere, and the number who were born alive and later died. Next, a complete history of all of the woman's births was obtained, including the name, sex, month and year of birth, age, and survival status for each of the births. For living children, a question was asked about whether the child was living in the household or away. For dead children, the age at death was recorded. Finally, information was collected on whether female respondents were pregnant at the time of the survey.

5.1 CURRENT FERTILITY

The level of current fertility is one of the most important topics in this report because of its direct relevance to population policies and programmes. The goal of the National Policy on Population for Sustainable Development is to achieve a reduction in the total fertility rate of at least 0.6 children every five years (National Population Commission, 2004). The fertility measures outlined here will provide insight into current fertility rates, allowing a determination of whether Nigeria is achieving this target and what efforts need to be put in place to achieve it.

Measures of current fertility presented in this chapter include age-specific fertility rates (ASFRs), the total fertility rate (TFR), the general fertility rate (GFR), and the crude birth rate (CBR). The rates are generally presented for the period 1-36 months preceding the survey, determined from the date of the interview and a child's birth date. A three-year period is chosen for calculating these rates to provide the most current information, to reduce sampling error, and to avoid problems associated with displacement of births.

Age-specific fertility rates show the age pattern of fertility. Numerators for the ASFRs are calculated by identifying live births that occurred in the three-year period preceding the survey and

classifying them by the age of the mother (in five-year age groups) at the time of the child's birth. The denominators of the rates represent the number of woman-years lived by the survey respondents in each of the five-year age groups during the specified period. The TFR refers to the average number of live births a woman would have if she were subject to the current age-specific fertility rates throughout her reproductive years (15-49 years). The GFR represents the number of live births per 1,000 women of reproductive age. The CBR is the number of live births per 1,000 population. The latter two measures are based on the birth history data for the three-year period before the survey and the age-sex distribution of the household population.

Current fertility rates for the three years preceding the survey are presented in Table 5.1 for the country as a whole and by urban-rural residence. The 2013 NDHS results indicate that the TFR is 5.5 births per woman. This means that, on average, Nigerian women will give birth to 5.5 children by the end of their childbearing years. The current TFR of 5.5 is 0.2 children per woman less than that reported in the 2003 and 2008 NDHS surveys (5.7 each). Fertility peaks in the 25-29 age group in urban areas (237 births per 1,000 women) and the 20-24 age group in rural areas (267 births per 1,000 women) and declines thereafter.

Table 5.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Nigeria 2013

	Residence		
Age group	Urban	Rural	Total
15-19	62	162	122
20-24	188	267	235
25-29	237	265	253
30-34	218	247	234
35-39	148	169	160
40-44	59	91	78
45-49	20	35	29
TFR (15-49)	4.7	6.2	5.5
GFR	159	213	190
CBR	35	42	39

Notes: Age-specific fertility rates are per 1,000 women. Rates for the 45-49 age group may be slightly biased due to truncation. Rates are for the period 1-36 months prior to the interview.
TFR: Total fertility rate, expressed per woman
GFR: General fertility rate, expressed per 1,000 women age 15-44
CBR: Crude birth rate, expressed per 1,000 population

The general fertility rate is 190, which means that there were 190 births for every 1,000 women during the three-year period preceding the survey. Table 5.1 shows that the crude birth rate was 39 per 1,000 population for the same period.

Rural areas have a much higher TFR than urban areas (6.2 versus 4.7), and there are large urban-rural differences in ASFRs for all age groups. The largest variations are in the 15-19 and 20-24 age groups; in these groups, the rates for rural women exceed those for urban women by 100 and 79 births per 1,000 women, respectively. Adolescent fertility in rural areas more than doubles that in urban areas. Figure 5.1 shows age-specific fertility rates by urban-rural residence.

Figure 5.1 **Trends in age-specific fertility rates by urban-rural residence**

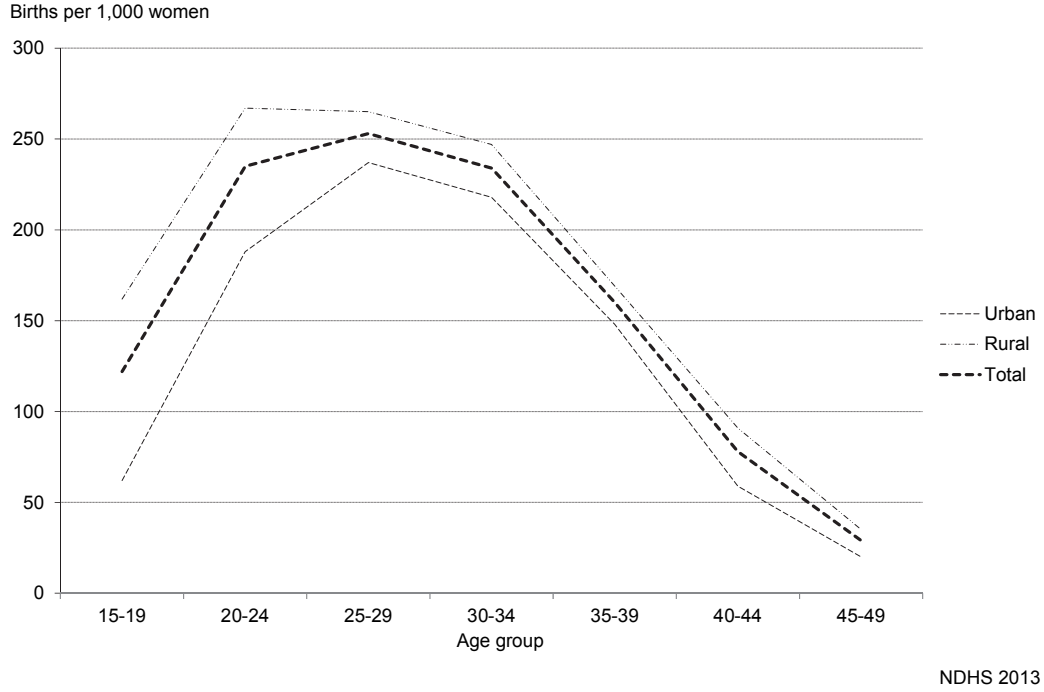
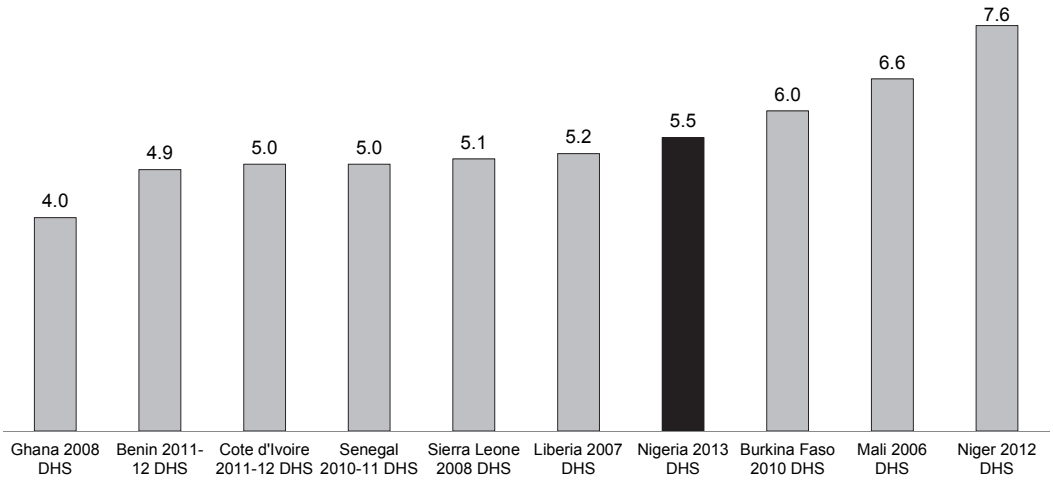


Figure 5.2 **Total fertility rates of selected ECOWAS countries**



Source: MEASURE DHS STATcompiler, 2014

Figure 5.2 shows the fertility levels of selected countries in the Economic Community of West African States (ECOWAS). Nigeria's fertility rate falls roughly in the middle of this group of countries, whose TFRs range from 4.0 in Ghana to 7.6 in Niger.

5.2 FERTILITY DIFFERENTIALS

Table 5.2 presents several fertility indicators (TFR, percentage of women age 15-49 who are currently pregnant, and mean number of births among women age 40-49), by background characteristics. These indicators provide a basis for inferring long-term trends in fertility by comparing the TFR with the mean number of children ever born to women age 40-49. The latter indicator summarises the fertility behaviour of older women who are nearing the end of their reproductive period. It serves as a marker of average completed fertility for women who began childbearing in the three decades preceding the survey.

If fertility is stable over time in a population, the TFR and the mean number of children ever born for women age 40-49 will be similar. If fertility levels have been falling, the TFR will be lower than the mean number of children ever born. The mean number of children ever born in Nigeria to women age 40-49 is 6.3. This is about one child more than the current TFR, suggesting that fertility has decreased over the past few decades. Some caution should be taken when assessing trends in fertility from comparisons of the TFR and the mean number of children ever born because older women may understate their total childbearing experience.

Table 5.2 shows variations in TFR by residence, zone, states, education, and wealth quintile. Figure 5.3 shows variations in TFR by zone. The more urbanised zones, the South East (4.7), South South (4.3), and South West (4.6), have lower fertility rates than the three mostly rural northern zones. The highest TFR is seen in the North West (6.7), followed by the North East (6.3). The TFR decreases with increasing level of education. Women with more than a secondary education have a TFR of 3.1, as compared with a TFR of 6.9 among women with no education. Women in the highest wealth quintile have an average of three fewer children than women in the lowest quintile (3.9 and 7.0 births per woman, respectively).

Table 5.2 shows that 12 percent of interviewed women were pregnant at the time of the survey. The percentage of women who are currently pregnant provides another measure of current fertility, although it is recognised that the survey may not capture all pregnancies because some women may not know they are pregnant or may be reluctant to report early-stage pregnancies.

Table 5.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49 years, by background characteristics, Nigeria 2013

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	4.7	9.5	5.6
Rural	6.2	14.0	6.8
Zone			
North Central	5.3	11.7	5.8
North East	6.3	13.9	7.1
North West	6.7	16.1	7.6
South East	4.7	7.9	5.7
South South	4.3	8.6	5.4
South West	4.6	9.0	4.8
States			
North Central			
FCT-Abuja	4.5	8.3	4.7
Benue	5.2	13.0	6.8
Kogi	4.2	9.4	5.7
Kwara	5.1	7.2	5.2
Nasarawa	5.4	10.8	5.8
Niger	6.1	14.8	5.8
Plateau	5.4	11.2	5.6
North East			
Adamawa	5.8	15.6	6.7
Bauchi	8.1	16.9	8.4
Borno	4.7	12.7	5.2
Gombe	7.0	14.3	7.9
Taraba	6.0	10.6	7.1
Yobe	6.6	13.4	7.4
North West			
Jigawa	7.6	15.1	7.6
Kaduna	4.1	21.0	5.7
Kano	6.8	12.6	7.7
Katsina	7.4	17.3	8.4
Kebbi	6.7	16.9	8.2
Sokoto	7.0	14.1	7.3
Zamfara	8.4	17.0	8.7

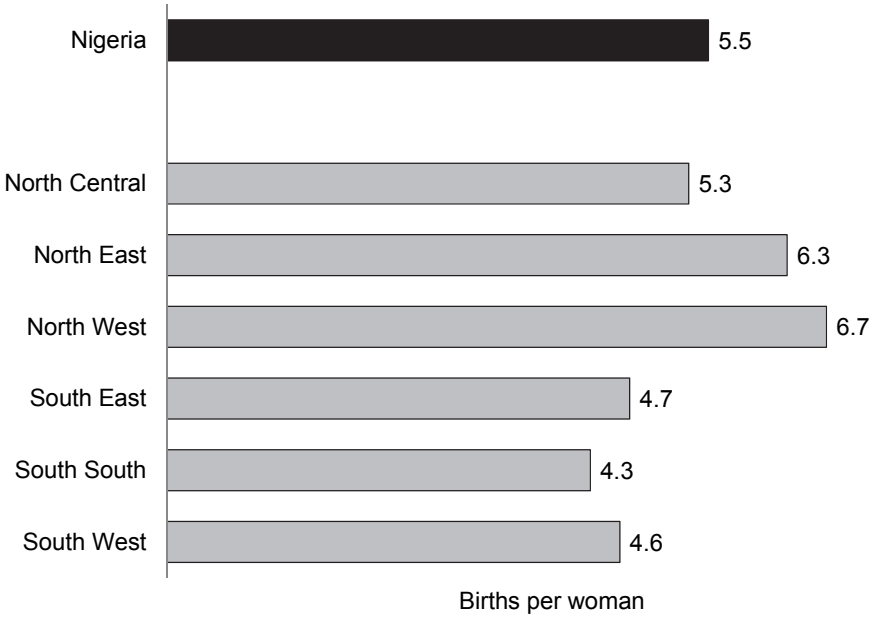
Continued…

Table 5.2—*Continued*

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
South East			
Abia	4.2	7.3	5.0
Anambra	4.2	6.0	4.7
Ebonyi	5.3	9.1	7.1
Enugu	4.8	8.4	5.9
Imo	4.8	8.3	5.0
South South			
Akwa Ibom	3.9	5.3	5.4
Bayelsa	4.5	11.3	6.1
Cross River	5.4	9.1	5.5
Delta	4.1	10.6	5.6
Edo	4.4	6.3	5.7
Rivers	3.8	9.5	4.9
South West			
Ekiti	4.3	7.0	5.2
Lagos	4.1	7.2	4.3
Ogun	5.4	10.6	4.9
Ondo	5.2	9.1	5.2
Osun	4.1	6.8	4.3
Oyo	4.5	11.9	5.1
Education			
No education	6.9	15.6	7.3
Primary	6.1	12.6	6.3
Secondary	4.6	9.2	4.9
More than secondary	3.1	8.0	3.9
Wealth quintile			
Lowest	7.0	16.2	7.6
Second	6.7	15.0	7.2
Middle	5.7	11.6	6.5
Fourth	4.9	10.2	5.7
Highest	3.9	8.4	4.5
Total	5.5	12.1	6.3

Note: Total fertility rates are for the period 1-36 months prior to the interview.

Figure 5.3 Fertility differentials by zone



NDHS 2013

5.3 FERTILITY TRENDS

Table 5.3.1 uses information from the retrospective birth histories obtained from the 2013 NDHS respondents to examine trends in age-specific fertility rates for successive five-year periods before the survey. To calculate these rates, births are classified according to the period of time in which the birth occurred and the mother's age at the time of the birth. Because birth histories were not collected for women age 50 and older, the rates for older age groups become progressively more truncated for periods more distant from the survey date. For example, rates cannot be calculated for women age 45-49 for periods 5-9 years or more preceding the survey because women in that age group would have been age 50 or older at the time of the survey.

Table 5.3.1 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Nigeria 2013

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	123	146	148	147
20-24	239	255	259	257
25-29	260	290	284	283
30-34	240	264	253	[278]
35-39	163	189	[218]	
40-44	81	[112]		
45-49	[33]			

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of the interview.

The results in Table 5.3.1 show that fertility decreased in all age groups over the most recent five-year period preceding the survey. Another way to examine fertility trends is to compare current estimates with earlier surveys. Table 5.3.2 and Figure 5.4 show estimates of ASFRs from the 2003, 2008, and 2013 NDHS surveys. Overall, fertility remained constant at 5.7 births per woman between 2003 and 2008 and is estimated at 5.5 births in 2013.

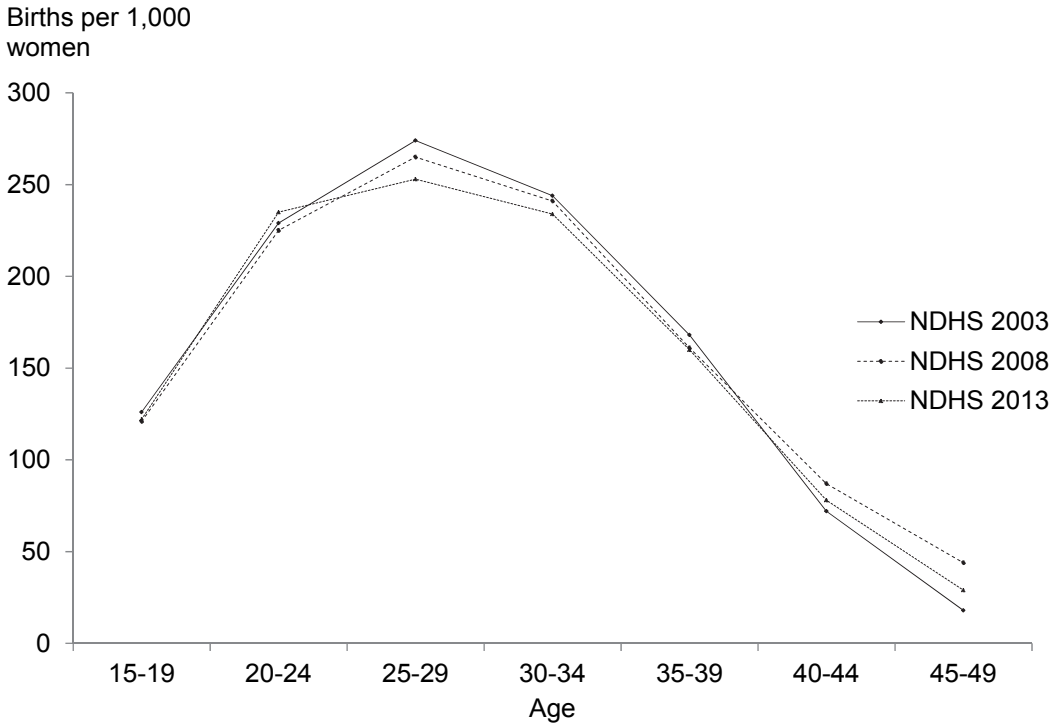
Table 5.3.2 Trends in age-specific and total fertility rates

Trends in age-specific and total fertility rates for the three-year period preceding the 2003, 2008, and 2013 NDHS surveys, by mother's age at the time of the birth

Mother's age at birth	Survey		
	2003 NDHS	2008 NDHS	2013 NDHS
15-19	126	121	122
20-24	229	225	235
25-29	274	265	253
30-34	244	241	234
35-39	168	161	160
40-44	72	87	78
45-49	18	44	29
TFR 15-49	5.7	5.7	5.5

Note: Age-specific fertility rates are per 1,000 women. Rates exclude the month of the interview.

Figure 5.4 **Trends in age-specific fertility rates, 2003-2013**



5.4 CHILDREN EVER BORN AND LIVING

Table 5.4 shows the distribution of all women and currently married women by the number of children ever born, according to five-year age groups. The table also shows the mean number of children ever born and the mean number of living children. Information on the number of children ever born reflects the accumulation of births over a woman's entire reproductive period (parity) and therefore has limited reference to current fertility levels, particularly when the country has experienced a decline in fertility. However, as an indicator, the number of children ever born to all women is useful for observing how average family size varies across age groups and for observing the level of primary infertility. Comparisons of the mean number of children ever born to all women and the mean number of living children show the cumulative effects of mortality during the childbearing period.

More than four-fifths of women age 15-19 (83 percent) have never given birth (Table 5.4). However, this proportion declines to 9 percent among women age 30-34 and 5 percent or less among women age 35 and older, indicating that childbearing among Nigerian women is nearly universal. On average, Nigerian women nearing the end of their reproductive years have attained a parity of about seven (6.8) children.

The same pattern is seen for currently married women, except that the mean number of children ever born is higher (4.0 children) in this group than among all women (3.1 children). The difference in mean number of children ever born between all women and currently married women can be attributed to the substantial proportion of young and unmarried women in the former category.

The percentage of women in their 40s who have never had children is an indicator of the level of primary infertility, that is, the proportion of women who are unable to bear children at all. Voluntary childlessness is rare in Nigeria; therefore, it is likely that married women with no births are unable to have children. The 2013 NDHS results suggest that primary infertility is low, with 3 percent of all women unable to have children. It should be noted, however, that this estimate of primary infertility does not include women who have had one or more births but are unable to have more children (secondary infertility).

Table 5.4 Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Nigeria 2013

Age	Number of children ever born											Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	82.9	13.6	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	7,820	0.21	0.19
20-24	38.7	24.2	20.3	12.1	3.6	0.9	0.1	0.0	0.0	0.0	0.0	100.0	6,757	1.21	1.07
25-29	17.5	13.6	18.0	18.8	15.9	9.7	4.4	1.4	0.5	0.0	0.0	100.0	7,145	2.60	2.24
30-34	9.3	7.1	10.6	14.1	17.1	15.8	12.7	7.3	3.9	1.5	0.6	100.0	5,467	3.96	3.37
35-39	4.6	3.9	7.2	9.9	13.8	14.2	13.4	12.2	9.7	6.3	4.8	100.0	4,718	5.25	4.39
40-44	4.2	3.1	5.0	8.1	11.7	13.3	13.9	11.2	9.7	8.5	11.4	100.0	3,620	5.90	4.82
45-49	3.0	2.0	3.9	6.5	9.5	11.5	11.3	12.6	9.7	8.3	21.8	100.0	3,422	6.76	5.20
Total	29.1	11.3	10.6	10.1	9.5	8.1	6.5	4.9	3.6	2.5	3.6	100.0	38,948	3.06	2.54
CURRENTLY MARRIED WOMEN															
15-19	48.2	40.1	9.9	1.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2,251	0.65	0.57
20-24	13.4	31.5	29.8	18.3	5.4	1.4	0.2	0.0	0.0	0.0	0.0	100.0	4,362	1.76	1.56
25-29	6.1	13.6	20.6	22.0	18.6	11.5	5.1	1.7	0.7	0.1	0.0	100.0	5,913	3.01	2.59
30-34	3.8	6.6	10.8	14.8	18.5	17.1	13.9	8.0	4.3	1.7	0.6	100.0	4,869	4.27	3.63
35-39	2.5	3.2	6.8	9.9	13.7	14.7	14.0	12.9	10.4	6.7	5.2	100.0	4,302	5.48	4.58
40-44	2.9	3.0	4.6	8.1	11.2	13.3	13.6	11.8	10.3	9.0	12.4	100.0	3,226	6.09	4.95
45-49	2.1	1.8	3.2	5.9	9.3	11.6	10.7	12.5	10.1	8.5	24.3	100.0	2,907	7.02	5.37
Total	8.9	13.3	13.6	13.4	12.4	10.7	8.4	6.4	4.7	3.3	4.9	100.0	27,830	4.00	3.32

5.5 BIRTH INTERVALS

A birth interval is defined as the period of time between two successive live births. Information about birth intervals is important in understanding the health status of young children. Research has shown that short birth intervals (less than 24 months) are associated with poor health outcomes, especially during infancy. Children born too soon after a previous birth, especially if the interval between the births is less than two years, have an increased risk of sickness and death at an early age. Longer birth intervals (more than two years), on the other hand, contribute to improved health status for both mother and child.

Table 5.5 presents the distribution of second- and higher-order births in the five years preceding the survey by the number of months since the previous birth, according to background characteristics. The median number of months since the last birth is also shown.

Table 5.5 shows that 7 percent of births are less than 18 months apart and 23 percent have an interval of less than two years. Two in five births (39 percent) take place 24-35 months after the previous birth, and 20 percent occur 36-47 months after the previous birth. The median birth interval is 31.7 months, roughly the same as the median interval in the 2008 NDHS (31.4 months). Thirty-nine percent of all non-first births occur at least 36 months after the previous birth.

The median number of months since the preceding birth increases markedly with age, from 26.3 months among mothers age 15-19 to 37.7 months among mothers age 40-49. The median birth interval does not vary substantially by birth order or sex of the preceding birth. However, there are notable variations in the median birth interval according to age, survival of the preceding birth, and zone.

The median birth interval is higher (32.3 months) when the preceding sibling is living than when the preceding sibling has died (27.3 months). The median birth interval varies by zone from 28.4 months among women in the South East to 35.1 months among women in the South West. There is little variation in median birth interval by birth order, residence, educational attainment, or wealth quintile.

Table 5.5 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Nigeria 2013

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Age									
15-19	12.9	26.0	46.7	11.6	2.4	0.5	100.0	301	26.3
20-29	8.0	18.7	43.1	18.2	6.9	5.1	100.0	10,827	29.6
30-39	6.5	14.9	37.7	21.0	9.5	10.4	100.0	11,240	32.7
40-49	4.4	12.0	29.9	21.4	11.8	20.6	100.0	3,175	37.7
Sex of preceding birth									
Male	7.1	16.5	38.7	20.1	8.6	9.0	100.0	13,000	31.7
Female	6.8	16.1	39.6	19.4	8.6	9.5	100.0	12,542	31.7
Survival of preceding birth									
Living	5.2	15.8	40.0	20.5	9.0	9.6	100.0	21,990	32.3
Dead	17.9	19.4	33.9	15.1	6.3	7.4	100.0	3,552	27.3
Birth order									
2-3	7.2	17.2	40.6	18.4	7.6	9.1	100.0	10,311	30.9
4-6	6.3	15.5	38.7	20.3	9.1	10.0	100.0	10,011	32.3
7+	7.6	16.0	37.1	21.4	9.7	8.1	100.0	5,221	32.3
Residence									
Urban	7.0	15.9	37.4	19.2	9.5	11.0	100.0	8,617	32.5
Rural	6.9	16.5	40.0	20.0	8.1	8.4	100.0	16,926	31.3
Zone									
North Central	5.5	14.0	40.8	19.3	9.0	11.5	100.0	3,405	32.3
North East	8.1	17.8	40.2	19.9	7.8	6.1	100.0	4,608	30.2
North West	6.6	16.8	40.0	21.2	8.3	7.1	100.0	9,854	31.6
South East	10.5	20.0	41.3	13.4	6.3	8.4	100.0	2,190	28.4
South South	6.9	16.4	35.3	18.4	9.0	14.0	100.0	2,168	32.4
South West	5.3	12.6	34.4	20.9	11.4	15.4	100.0	3,318	35.1
State									
North Central									
FCT-Abuja	6.9	15.2	37.3	17.0	13.8	9.8	100.0	158	32.3
Benue	7.3	14.9	47.5	16.5	6.5	7.4	100.0	785	29.9
Kogi	4.0	11.3	34.0	22.9	12.6	15.2	100.0	300	36.3
Kwara	2.4	10.2	40.4	22.9	9.1	14.9	100.0	314	34.9
Nasarawa	6.8	13.0	36.4	22.5	8.6	12.7	100.0	354	34.0
Niger	4.5	16.5	40.8	17.4	8.8	12.0	100.0	1,109	31.6
Plateau	6.6	10.2	38.0	22.8	10.5	12.0	100.0	386	34.3
North East									
Adamawa	7.7	15.8	41.9	18.9	7.5	8.1	100.0	587	30.1
Bauchi	10.6	17.6	39.3	19.5	7.6	5.4	100.0	1,230	30.0
Borno	10.3	16.7	40.3	19.8	7.2	5.8	100.0	874	29.7
Gombe	6.6	18.7	41.5	19.9	7.3	6.1	100.0	494	30.0
Taraba	5.8	17.9	38.2	21.0	8.8	8.3	100.0	625	31.3
Yobe	5.0	20.4	41.3	20.4	8.5	4.4	100.0	797	30.1
North West									
Jigawa	9.0	17.9	41.6	19.6	6.1	5.8	100.0	1,340	29.9
Kaduna	4.7	12.7	38.9	25.1	10.1	8.5	100.0	1,134	34.4
Kano	6.1	17.3	37.6	22.0	9.1	8.0	100.0	2,538	32.3
Katsina	5.9	17.0	40.7	20.4	10.3	5.8	100.0	1,426	32.1
Kebbi	6.7	18.1	34.2	23.5	7.5	10.1	100.0	1,059	32.6
Sokoto	6.7	16.7	43.6	19.9	7.2	5.9	100.0	987	30.7
Zamfara	7.6	17.3	45.1	18.0	6.7	5.3	100.0	1,371	29.6
South East									
Abia	12.2	18.8	40.1	12.1	6.1	10.8	100.0	249	28.7
Anambra	14.1	21.6	37.0	12.1	5.6	9.5	100.0	501	27.6
Ebonyi	5.8	15.4	49.5	15.5	8.3	5.4	100.0	590	29.5
Enugu	11.1	18.3	37.6	13.9	7.5	11.5	100.0	430	29.9
Imo	11.3	26.8	39.5	12.4	3.2	6.8	100.0	419	26.1
South South									
Akwa Ibom	7.0	16.7	33.1	15.0	9.7	18.4	100.0	324	33.3
Bayelsa	7.1	13.9	36.2	19.7	10.2	12.9	100.0	188	32.8
Cross River	3.4	13.9	38.4	20.6	11.2	12.6	100.0	408	33.5
Delta	9.6	16.2	34.9	17.2	8.1	13.9	100.0	430	31.8
Edo	5.2	17.2	37.3	20.8	7.1	12.5	100.0	316	31.7
Rivers	8.2	18.7	33.1	18.0	8.4	13.6	100.0	502	30.5

Continued…

Table 5.5—*Continued*

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
South West									
Ekiti	5.0	13.2	30.8	19.4	10.5	21.0	100.0	140	36.3
Lagos	9.4	15.7	33.3	17.3	10.3	13.9	100.0	945	32.7
Ogun	3.6	12.0	35.3	23.0	12.5	13.6	100.0	577	35.7
Ondo	5.9	11.7	35.1	21.8	10.1	15.5	100.0	444	35.3
Osun	2.8	10.0	35.2	25.2	11.1	15.7	100.0	336	36.5
Oyo	2.9	10.8	35.0	21.3	12.9	17.0	100.0	875	36.3
Education									
No education	6.8	16.9	40.3	20.3	8.3	7.5	100.0	13,342	31.2
Primary	6.1	14.9	38.9	20.0	9.4	10.6	100.0	5,241	32.6
Secondary	7.8	16.4	37.6	18.8	8.5	10.9	100.0	5,755	31.8
More than secondary	7.9	15.3	35.4	16.8	9.1	15.5	100.0	1,205	32.4
Wealth quintile									
Lowest	6.4	16.7	41.7	20.1	8.6	6.5	100.0	6,373	31.2
Second	7.9	17.4	39.8	20.2	7.6	7.2	100.0	6,052	30.4
Middle	6.1	16.2	38.8	20.4	8.1	10.3	100.0	4,785	32.0
Fourth	6.8	15.5	38.0	19.6	9.3	10.8	100.0	4,432	32.6
Highest	7.5	15.0	35.7	17.8	10.0	14.0	100.0	3,900	33.0
Total	6.9	16.3	39.1	19.8	8.6	9.3	100.0	25,543	31.7

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

5.6 POSTPARTUM AMENORRHOEA, ABSTINENCE, AND INSUSCEPTIBILITY

Postpartum amenorrhoea is the period between the birth of a child and the resumption of menstruation, during which the risk of pregnancy is very low. Postpartum protection from conception can be influenced by the intensity and length of breastfeeding. Postpartum abstinence refers to the period of voluntary sexual inactivity after childbirth. Delaying the resumption of sexual relations after a birth prolongs the period of postpartum protection. A woman is considered insusceptible to pregnancy if she is not exposed to the risk of pregnancy either because she is amenorrheic or because she is abstaining from sexual intercourse following a birth. The durations of amenorrhoea and sexual abstinence following birth jointly determine the length of insusceptibility.

Postpartum amenorrhoea and sexual abstinence affect the duration of a woman's insusceptibility to pregnancy, which affects birth spacing. The onset of menopause marks the end of a woman's reproductive life. These variables, taken together, determine the length and pace of a woman's reproductive life, and therefore they are important for understanding fertility levels and differentials.

In the 2013 NDHS, information was obtained about the duration of postpartum amenorrhoea, sexual abstinence, and insusceptibility for births in the three years preceding the survey. The median duration of postpartum insusceptibility to pregnancy is 12.6 months. Table 5.6 shows that Nigerian women are amenorrheic for a median duration of 10.6 months and abstain for a median duration of 2.8 months.

In general, the proportion of women who are amenorrheic or abstaining decreases with increasing months after delivery. The proportion of women who are amenorrheic drops from 95 percent in the first two months after birth to 29 percent at 16-17 months and less than 5 percent at 28 months or later. The majority of Nigerian women (89 percent) are still abstaining in the first two months following birth. Almost all women (98 percent) are insusceptible to pregnancy during the first two months following childbirth. The period of postpartum amenorrhoea is considerably longer than the period of postpartum abstinence and is by far the major determinant of the length of postpartum insusceptibility to pregnancy. At 10 to 11 months after birth, almost half of women are still amenorrheic, but only 16 percent are abstaining. At 16 to 17 months after birth, the proportion of women who are amenorrheic is 29 percent, while 9 percent of women are abstaining.

Table 5.6 Postpartum amenorrhoea, abstinence, and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrheic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Nigeria 2013

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrheic	Abstaining	Insusceptible[1]	
<2	95.2	88.9	98.4	816
2-3	85.8	50.1	89.9	1,082
4-5	75.4	31.1	80.3	1,182
6-7	67.1	23.1	72.8	1,160
8-9	56.0	18.1	62.9	1,173
10-11	49.4	15.9	57.1	1,096
12-13	46.2	10.2	50.4	1,281
14-15	39.4	9.7	44.5	1,258
16-17	29.4	8.7	34.1	1,017
18-19	22.1	6.8	27.5	943
20-21	17.4	6.2	21.4	913
22-23	11.3	4.6	15.1	825
24-25	6.8	3.3	9.1	1,225
26-27	8.5	3.1	11.1	1,047
28-29	4.0	2.7	6.2	927
30-31	3.4	2.2	5.5	889
32-33	2.6	1.7	4.1	958
34-35	1.5	1.2	2.6	928
Total	35.8	15.7	39.9	18,722
Median	10.6	2.8	12.6	na
Mean	12.7	6.1	14.1	na

Note: Estimates are based on status at the time of the survey.
na = Not applicable
[1] Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

A comparison of the 2013 NDHS results with those of earlier NDHS surveys indicates that the duration of abstinence has decreased gradually. The median duration of postpartum amenorrhoea has steadily decreased over time, from 13.2 months in 2003 to 11.5 months in 2008 and 10.6 months in 2013. Similarly, there has been a slow but steady decline in the median duration of insusceptibility, from 15.1 months in 2003 to 13.8 months in 2008 and 12.6 months in 2013.

Table 5.7 shows that the median duration of postpartum amenorrhoea is longer among women age 30-49 (11.7 months) than among women age 15-29 (10.0 months). The duration of postpartum insusceptibility is also longer among older women (12.9 months) than younger women (12.4 months). However, the median length of postpartum abstinence is approximately the same for younger and older women.

Rural women have a much longer period of postpartum amenorrhoea than urban women (12.7 and 8.4 months, respectively) and a longer median period of postpartum insusceptibility (14.5 and 10.0 months, respectively). However, the median length of postpartum abstinence is almost the same.

There are considerable regional variations in postpartum amenorrhoea and abstinence. The median duration of postpartum amenorrhoea ranges from 6.4 months in the South East to 15.5 months in the North West.

While the median durations of amenorrhoea and insusceptibility decline as education increases, the median duration of abstinence is lowest among women with no education (2.3 months). The pattern is similar with respect to wealth quintile.

Table 5.7 Median duration of amenorrhoea, postpartum abstinence, and postpartum insusceptibility

Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Nigeria 2013

Background characteristic	Postpartum amenorrhoea	Postpartum abstinence	Postpartum insusceptibility[1]
Mother's age			
15-29	10.0	2.8	12.4
30-49	11.7	2.9	12.9
Residence			
Urban	8.4	2.7	10.0
Rural	12.7	2.9	14.5
Zone			
North Central	9.8	8.8	13.1
North East	13.1	2.4	13.9
North West	15.5	2.0	15.7
South East	6.4	4.6	10.6
South South	6.6	3.7	7.8
South West	8.9	3.8	10.5
State			
North Central			
FCT-Abuja	(8.0)	(3.8)	9.6
Benue	11.3	8.9	13.0
Kogi	9.5	10.9	13.5
Kwara	8.0	7.1	11.1
Nasarawa	9.5	7.2	13.2
Niger	9.7	7.9	13.1
Plateau	11.4	12.0	14.0
North East			
Adamawa	10.0	4.1	11.6
Bauchi	13.9	2.3	14.5
Borno	9.2	(1.9)	9.6
Gombe	14.9	2.5	15.2
Taraba	12.9	6.1	14.3
Yobe	20.8	1.5	20.8
North West			
Jigawa	16.2	1.9	16.2
Kaduna	8.3	2.1	8.9
Kano	17.1	2.1	17.2
Katsina	13.2	1.4	13.8
Kebbi	14.8	1.9	14.8
Sokoto	16.5	2.7	16.7
Zamfara	16.4	2.1	16.4
South East			
Abia	5.2	2.7	10.2
Anambra	(5.6)	(2.4)	7.5
Ebonyi	8.7	8.3	13.6
Enugu	7.0	7.1	13.3
Imo	4.5	3.4	8.6
South South			
Akwa Ibom	6.8	3.5	7.8
Bayelsa	6.3	3.6	7.0
Cross River	7.9	6.1	11.2
Delta	7.9	2.4	8.5
Edo	7.3	4.1	9.3
Rivers	(4.3)	(3.0)	5.2
South West			
Ekiti	8.6	4.9	9.9
Lagos	7.7	2.3	9.0
Ogun	8.9	4.1	9.9
Ondo	10.1	7.7	12.7
Osun	6.3	4.5	7.5
Oyo	11.6	6.0	12.1
Education			
No education	15.3	2.3	16.2
Primary	10.5	3.8	13.4
Secondary	7.4	3.6	9.6
More than secondary	5.6	2.8	7.0
Wealth quintile			
Lowest	15.9	2.3	16.5
Second	14.5	3.0	16.0
Middle	10.3	3.6	12.9
Fourth	8.4	3.2	10.1
Highest	6.2	2.6	7.7
Total	10.6	2.8	12.6

Note: Medians are based on status at the time of the survey (current status). Figures in parentheses are based on 25-49 unweighted cases (smoothed data).

[1] Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

5.7 MENOPAUSE

The risk of becoming pregnant declines with age. After age 30, women's susceptibility to pregnancy declines as an increasing proportion of women become infecund. The term infecundity denotes a process rather than a well-defined event. Although the onset of infecundity is difficult to determine for an individual woman, there are ways of estimating it for a group of women. One indicator of infecundity is the onset of menopause. Menopause is the culmination of a gradual decline in fecundity with increasing age. The 2013 NDHS defines menopausal women as women who are neither pregnant nor postpartum amenorrheic and who have not had a menstrual period in the six months preceding the survey. Women who report that they have had a hysterectomy are also defined as menopausal. Table 5.8 presents data on menopause for women age 30 and older. Nine percent of women age 30-49 are estimated to be menopausal. The proportion of women who are menopausal increases with age, from 1 percent among women age 30-34 to 44 percent among women age 48-49. These findings are similar to those in the 2008 NDHS.

Table 5.8 Menopause

Percentage of women age 30-49 who are menopausal, by age, Nigeria 2013

Age	Percentage menopausal[1]	Number of women
30-34	0.9	5,467
35-39	1.3	4,718
40-41	6.5	2,004
42-43	10.4	1,241
44-45	18.7	1,509
46-47	26.8	823
48-49	44.0	1,465
Total	8.8	17,227

[1] Percentage of all women who are not pregnant and not postpartum amenorrheic whose last menstrual period occurred six or more months preceding the survey

5.8 AGE AT FIRST BIRTH

The age at which childbearing commences is an important determinant of the overall level of fertility as well as the health and welfare of the mother and child. In some societies, delays in first births as a result of an increase in the age at marriage have contributed to a decrease in fertility. Table 5.9 shows the percentage of women who have given birth by specific ages, according to age at the time of the survey. Overall, the median age at first birth among women age 25-49 in Nigeria is 20.2 years. The median age at first birth increases from 19.5 years among women age 45-49 to 20.3 years among women age 25-29.

In Nigeria, 8 percent of women age 25-49 have given birth by age 15, and 49 percent have become mothers by age 20. Comparing the proportions of women who have given birth by age 18 across age groups is another way to view trends in age at first birth over time. Whereas 29 percent of women age 20-24 gave birth by age 18, the corresponding proportion for women age 45-49 is 37 percent. This reduction in the percentage of women giving birth early supports the findings indicating that age at first childbirth has been increasing slowly.

Table 5.9 Age at first birth

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Nigeria 2013

	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
Current age	15	18	20	22	25			
15-19	2.4	na	na	na	na	82.9	7,820	a
20-24	5.9	29.1	46.7	na	na	38.7	6,757	a
25-29	7.0	31.9	47.5	61.1	75.1	17.5	7,145	20.3
30-34	7.8	32.7	48.0	60.8	74.9	9.3	5,467	20.3
35-39	7.7	31.7	48.5	62.2	77.5	4.6	4,718	20.2
40-44	8.1	32.0	48.1	62.9	77.4	4.2	3,620	20.2
45-49	9.5	36.9	54.0	65.8	79.6	3.0	3,422	19.5
20-49	7.4	31.9	48.4	na	na	15.6	31,128	a
25-49	7.8	32.7	48.8	62.2	76.5	9.2	24,372	20.2

na = Not applicable due to censoring
a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

Table 5.10 shows the median age at first birth across age cohorts for key subgroups of women. The measures are presented for women age 25-49 to ensure that half of the women have already had a birth. Urban women age 25-49 have a higher median age at first birth (22.0 years) than their rural counterparts (19.0 years). A comparison of the zones shows that the median age at first birth among women age 25-49 ranges from 17.9 years in the North West to 23.7 years in the South East.

The median age at first birth increases with level of education. Women with no education have their first birth at a median age of 18.1 years, as compared with 22.4 years among women who have a secondary education, a difference of almost four years. There is also a positive correlation between age at first birth and wealth quintile. As the socioeconomic status of household increases, so does the median age at first birth, from 18.0 years among women in the lowest wealth quintile to 24.1 years among those in the highest quintile.

5.9 TEENAGE PREGNANCY AND MOTHERHOOD

Teenage pregnancy is a major health concern because of its association with higher morbidity and mortality for both the mother and the child. Additional childbearing during the teenage years frequently has adverse social consequences, particularly regarding educational attainment, because women who become mothers in their teens are more likely to curtail their education. Table 5.11 shows the percentage of women age 15-19 who are mothers or who are pregnant with their first child.

Overall, 23 percent of women age 15-19 have begun childbearing (17 percent have had a child and 5 percent are pregnant with their first child). A larger proportion of teenagers in rural areas than in urban areas have begun childbearing (32 percent versus 10 percent). A comparison of the geopolitical zones shows that the North West has the largest proportion (36 percent) of teenagers who have started childbearing, while the South East (8 percent) and South West (8 percent) have the lowest proportions. The percentage of teenagers who have started childbearing decreases with increasing education. Teenagers with no education represent about half of those who have begun childbearing, while only 2 percent of teenagers with more than a secondary education have begun childbearing. Teenagers in the lowest wealth quintile are more than twice as likely to have started childbearing as those in the middle wealth quintile (43 percent and 21 percent, respectively) and almost 10 times as likely as those in the highest quintile.

Childbearing begins earlier in Katsina than in any other state in Nigeria; 53 percent of women age 15-19 have begun childbearing in that state, as compared with 1 percent of teenage women in Osun. Possible reasons for this wide variation are the high median age at first marriage in Osun relative to Katsina and the differences between the two states in educational and socioeconomic characteristics.

Table 5.10 Median age at first birth

Median age at first birth among women age 25-49, according to background characteristics, Nigeria 2013

Background characteristic	Women age 25-49
Residence	
Urban	22.0
Rural	19.0
Zone	
North Central	20.6
North East	18.8
North West	17.9
South East	23.7
South South	21.8
South West	22.7
State	
North Central	
FCT-Abuja	23.6
Benue	18.9
Kogi	21.0
Kwara	22.1
Nasarawa	20.6
Niger	19.8
Plateau	21.9
North East	
Adamawa	19.1
Bauchi	17.7
Borno	20.4
Gombe	18.1
Taraba	18.9
Yobe	18.9
North West	
Jigawa	17.7
Kaduna	19.4
Kano	18.2
Katsina	17.3
Kebbi	17.9
Sokoto	17.4
Zamfara	17.6
South East	
Abia	a
Anambra	24.8
Ebonyi	21.4
Enugu	22.9
Imo	a
South South	
Akwa Ibom	21.2
Bayelsa	19.2
Cross River	21.0
Delta	22.0
Edo	22.5
Rivers	23.1
South West	
Ekiti	22.8
Lagos	24.5
Ogun	21.6
Ondo	21.9
Osun	23.5
Oyo	21.4
Education	
No education	18.1
Primary	19.5
Secondary	22.4
More than secondary	a
Wealth quintile	
Lowest	18.0
Second	18.5
Middle	19.5
Fourth	20.8
Highest	24.1
Total	20.2

a = Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group

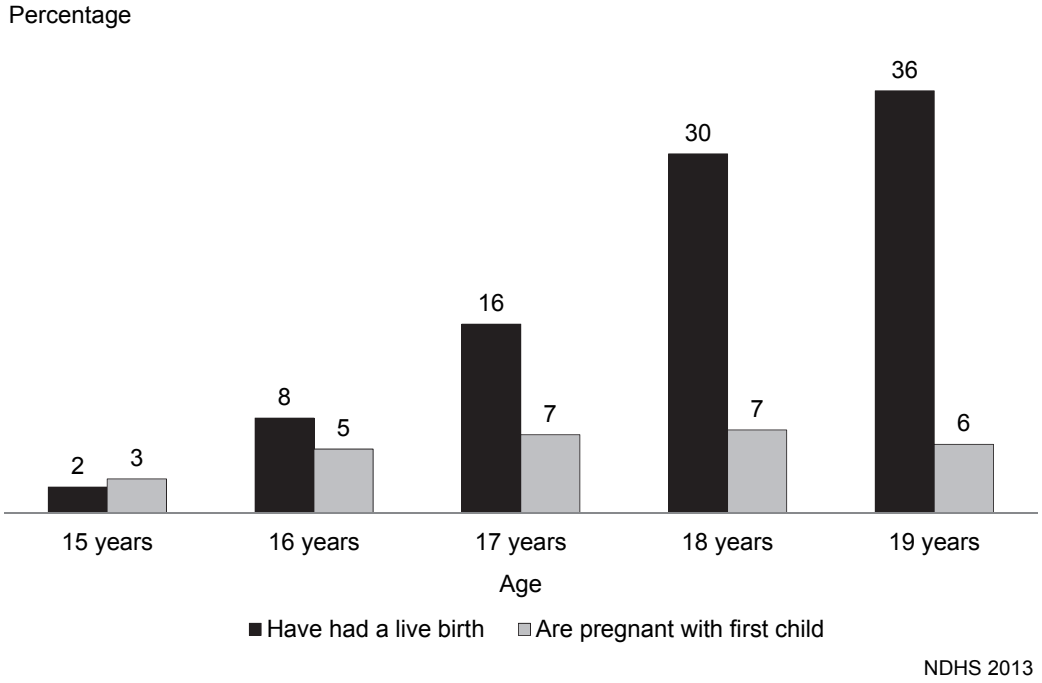
Table 5.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, by background characteristics, Nigeria 2013

Background characteristic	Percentage of women age 15-19 who: Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	Number of women
Age				
15	2.2	2.9	5.1	2,021
16	8.0	5.4	13.4	1,466
17	15.9	6.6	22.6	1,380
18	30.2	7.0	37.2	1,786
19	35.5	5.8	41.3	1,166
Residence				
Urban	7.5	2.2	9.7	3,308
Rural	24.1	7.7	31.8	4,511
Zone				
North Central	12.4	6.5	18.8	1,154
North East	25.4	6.6	32.1	1,190
North West	26.3	9.4	35.7	2,428
South East	6.9	1.3	8.2	894
South South	11.2	1.1	12.3	1,033
South West	6.5	1.7	8.2	1,121
State				
North Central				
FCT-Abuja	6.9	2.3	9.2	48
Benue	11.2	11.3	22.5	284
Kogi	13.7	4.0	17.8	190
Kwara	3.9	2.0	5.9	136
Nasarawa	11.9	3.5	15.4	96
Niger	19.6	7.7	27.3	284
Plateau	8.0	5.1	13.1	117
North East				
Adamawa	21.0	7.7	28.7	175
Bauchi	37.8	10.3	48.1	222
Borno	22.7	6.1	28.8	317
Gombe	28.7	7.6	36.4	104
Taraba	22.7	3.7	26.4	159
Yobe	20.7	4.4	25.1	213
North West				
Jigawa	43.5	8.2	51.7	239
Kaduna	20.9	12.2	33.2	464
Kano	17.3	5.9	23.2	739
Katsina	41.2	12.2	53.3	283
Kebbi	26.4	8.0	34.4	232
Sokoto	24.7	11.2	36.0	227
Zamfara	31.4	11.8	43.2	245
South East				
Abia	4.6	2.0	6.6	75
Anambra	2.7	0.0	2.7	187
Ebonyi	7.9	1.7	9.6	270
Enugu	8.5	0.9	9.4	206
Imo	9.3	2.1	11.4	157
South South				
Akwa Ibom	16.2	1.7	17.9	194
Bayelsa	14.2	2.5	16.7	95
Cross River	17.0	1.4	18.4	103
Delta	7.1	1.2	8.3	233
Edo	3.4	0.5	3.9	186
Rivers	13.7	0.2	13.9	223
South West				
Ekiti	4.5	0.8	5.3	71
Lagos	3.5	1.3	4.8	309
Ogun	7.1	2.9	10.0	120
Ondo	11.0	2.6	13.5	180
Osun	1.1	0.0	1.1	160
Oyo	10.3	2.0	12.4	281
Education				
No education	37.1	10.6	47.6	2,170
Primary	22.7	9.5	32.2	952
Secondary	6.9	2.2	9.1	4,571
More than secondary	0.7	1.0	1.7	126
Wealth quintile				
Lowest	34.1	9.1	43.3	1,322
Second	25.5	9.0	34.5	1,577
Middle	16.0	5.4	21.4	1,645
Fourth	9.8	3.2	13.0	1,658
Highest	3.5	1.1	4.6	1,618
Total	17.1	5.4	22.5	7,820

The 2013 NDHS findings on teenage pregnancy and motherhood by age are shown in Figure 5.5. Rates of teen motherhood increase steadily from age 15 to 19, with especially large increases between the ages of 17 and 18.

Figure 5.5 **Percentage of teenagers who have begun childbearing and who are pregnant with their first child by age**



NDHS 2013

FERTILITY PREFERENCES 6

Key Findings

- Nineteen percent of currently married women in Nigeria want no more children or have been sterilised, while 33 percent want to have another child within two years.
- The desire to stop childbearing among currently married women has changed only minimally over the past decade (18 percent in 2003 and 19 percent in 2013).
- Currently married women report an ideal family size of 7.1 children, a decrease of 0.2 children since 2003.
- Overall, Nigerian women have about one child more than the number they want. This implies that the total fertility rate of 5.5 children per woman is 15 percent higher than it would be if all unwanted births were avoided.

Information on fertility preferences is of considerable importance to family planning programs because it allows planners to assess the desire for children as well as the extent of unwanted and mistimed pregnancies. Data on fertility preferences also indicate possible future fertility trends. One of the objectives of Nigeria's National Policy on Population is to reduce the high level of fertility in the country (National Population Commission [NPC], 2004). The guiding principle in achieving this objective is to emphasise the voluntary acceptance of family planning methods in accordance with fundamental human rights; that is, all couples and individuals should decide freely and responsibly on the timing, number, and spacing of their children for a manageable family size, and the government has a responsibility to facilitate people's ability to make informed choices and to create an enabling environment in which they can effectively manage their lives.

As in previous NDHS surveys, the 2013 NDHS asked women a series of questions to ascertain their fertility preferences. The resulting data were used to quantify fertility preferences: whether couples want to cease childbearing altogether or merely delay the next pregnancy. Ideal number of children is an important indicator of fertility preferences that shows the number of children a woman or man would want in total if she or he could start afresh. Information on ideal family size provides two measures. First, for women and men who have not yet started a family, the data provide an idea of future fertility (to the extent that couples are able to realise their fertility desires). Second, the excess of past fertility over ideal family size provides a measure of unwanted fertility. Other topics discussed in this chapter are fertility planning, the effects of unwanted births on fertility rates, and how fertility preferences between women and men vary.

6.1 DESIRE FOR MORE CHILDREN

Information about the desire for more children is important in understanding future reproductive behaviour. The provision of adequate and accessible family planning services depends on the availability of such information. In the 2013 NDHS, currently married women (whether pregnant or not) and men were asked about their intentions to have another child and, if they had such intentions, how soon they wanted the child. The question was phrased differently in the case of pregnant women to refer to the wantedness of subsequent children after the completion of the current pregnancy. Sterilised women were considered to want no more children. Men who had been sterilised or who reported that their wife/wives or partners had been sterilised were considered to want no more children. This group of women and men were not asked questions about their desire for more children.

Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Nigeria 2013

Desire for children	Number of living children							Total 15-49
	0	1	2	3	4	5	6+	
				WOMEN[1]				
Have another soon[2]	84.2	43.4	37.4	31.6	25.5	22.9	17.8	33.4
Have another later[3]	3.2	48.7	47.4	42.2	32.3	27.9	21.5	34.3
Have another, undecided when	2.8	3.0	4.0	3.1	2.6	1.9	1.2	2.6
Undecided	3.8	2.7	4.4	6.9	9.4	10.4	12.5	7.5
Want no more	0.6	0.8	4.5	12.5	26.3	32.6	40.2	18.3
Sterilised[4]	0.1	0.0	0.2	0.6	0.3	0.5	0.6	0.4
Declared infecund	5.0	1.1	1.6	2.5	2.8	3.4	5.5	3.0
Missing	0.4	0.2	0.5	0.6	0.7	0.4	0.8	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,881	4,292	4,500	4,451	4,126	3,272	5,308	27,830
				MEN[5]				
Have another soon[2]	72.0	42.4	34.5	31.2	27.6	28.7	30.2	35.4
Have another later[3]	12.8	47.4	52.1	45.1	36.7	34.1	36.5	40.2
Have another, undecided when	10.5	7.6	5.6	6.4	5.7	9.5	7.6	7.2
Undecided	1.6	0.7	2.2	3.9	6.5	5.1	5.3	3.7
Want no more	1.7	0.4	4.1	12.1	22.0	22.2	18.6	12.0
Sterilised[4]	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Declared infecund	0.5	0.3	0.1	0.2	0.0	0.0	0.2	0.2
Missing	0.9	1.2	1.5	1.1	1.6	0.3	1.5	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	614	1,389	1,390	1,386	1,153	893	1,899	8,723

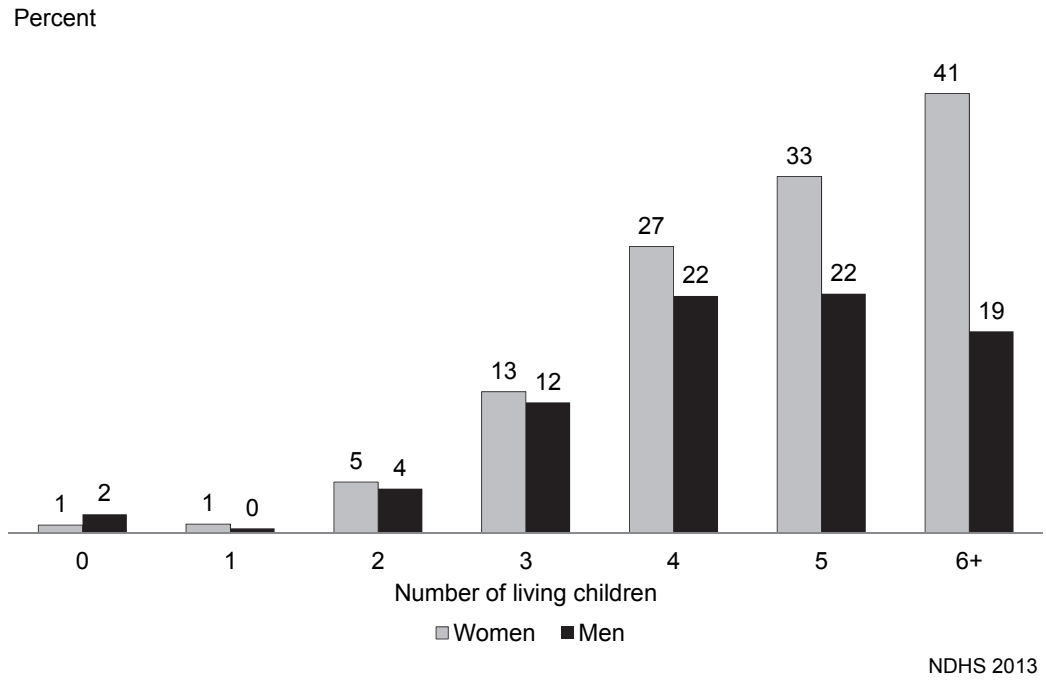
[1] The number of living children includes the current pregnancy.
[2] Wants next birth within 2 years
[3] Wants to delay next birth for 2 or more years
[4] Includes both female and male sterilisation
[5] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Table 6.1 shows the percent distribution of currently married women and men age 15-49 by desire for another child, according to the number of living children. Overall, 19 percent of currently married women in Nigeria want to limit childbearing (including those who have been sterilised), 33 percent say they want a child within two years, and 34 percent say they want to have another child but later. The proportion of women and men who want another child generally decreases with increasing number of living children. In contrast, the proportion of women and men who want to stop childbearing (including those who have been sterilised) increases with increasing number of living children.

The proportion of women who reported that they wanted to have another child in the next two years was lower than that in the 2003 NDHS (33 percent versus 37 percent). The proportion of women reporting that they wanted to have another child after two or more years was the same as in 2003 (34 percent), while the proportion who reported that they did not want any more children or had been sterilised changed only minimally over the past decade (18 percent in 2003 and 19 percent in 2013).

There are considerable differences in fertility preferences between women and men. Overall, the proportion of currently married men who want no more children is 12 percent, as compared with 19 percent among currently married women. There are also differences according to number of living children. Whereas 84 percent of women with no children want to have a child within two years, the corresponding proportion among men is 72 percent. In addition, 41 percent of women (including those who have been sterilised) and only 19 percent of men with six or more living children want to have no more children (Figure 6.1).

Figure 6.1 **Percentage of currently married women and men who want no more children, by number of living children**



6.2 DESIRE TO LIMIT CHILDBEARING BY BACKGROUND CHARACTERISTICS

The proportion of couples who want no more children is an important and easily understood measure of fertility preference. Tables 6.2.1 and 6.2.2 show the percentage of currently married women and men age 15-49 who want no more children by number of living children, according to background characteristics. The results provide information on variations in the potential demand for fertility control.

Women in urban areas are more likely than those in rural areas to want to limit childbearing (26 percent and 15 percent, respectively). Urban-rural variations are especially clear among women with three or more children. For example, more than twice as many urban women (49 percent) as rural women (24 percent) with five or more children want to limit childbearing.

At the zonal level, the proportion of women who want no more children varies from 8 percent in the North West to 35 percent in the South West. In all of the southern zones, at least 30 percent of women do not wish to have more children. However, women in the northern zones are less likely to want to limit childbearing, regardless of the number of living children they already have. Only 19 percent of women in the North West zone with six or more children say that they want no more children, as compared with 79 percent in the South West.

The desire to limit childbearing is lowest among women with no education. Overall, 11 percent of women with no education want to limit childbearing, compared with 27 percent of women with more than a secondary education. The desire to limit childbearing increases with increasing wealth, ranging from 9 percent of women in the lowest wealth quintile to 29 percent of women in the highest quintile.

Women and men exhibit similar patterns of desired fertility by background characteristics. Desire to limit childbearing is higher among men living in urban areas, those with more living children, those with more education, and those in the higher wealth quintiles. This is particularly true among men with three or more living children.

Table 6.2.1 Desire to limit childbearing: Women

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Nigeria 2013

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	0.3	1.0	6.3	20.7	42.7	49.3	50.2	25.7
Rural	0.8	0.7	3.6	8.2	16.2	24.4	36.4	14.6
Zone								
North Central	0.4	0.9	5.2	15.3	28.9	39.6	58.7	23.0
North East	0.9	0.6	2.9	3.9	9.8	13.1	29.4	10.2
North West	0.9	0.7	3.1	5.7	8.1	8.8	19.0	7.9
South East	0.0	1.1	4.3	9.8	36.4	56.4	78.5	31.5
South South	0.0	0.8	5.8	15.6	43.7	57.3	72.0	29.7
South West	0.0	1.2	8.3	30.3	56.9	77.5	79.3	35.4
Education								
No education	1.1	0.8	3.7	5.4	9.9	13.8	27.2	11.1
Primary	0.0	1.0	5.0	14.0	31.1	44.8	59.4	29.2
Secondary	0.0	0.8	4.6	17.8	43.0	59.3	65.2	22.8
More than secondary	0.0	0.7	9.1	34.8	59.5	63.7	71.2	26.6
Wealth quintile								
Lowest	1.4	0.9	2.8	3.7	7.7	10.8	22.2	8.7
Second	0.7	0.9	5.2	6.4	12.2	20.2	35.1	13.2
Middle	0.3	0.7	3.3	8.2	19.8	35.2	49.9	20.6
Fourth	0.0	0.5	4.0	13.3	38.2	48.4	53.8	25.0
Highest	0.0	1.1	7.5	29.4	53.1	65.0	65.3	28.8
Total	0.6	0.8	4.7	13.1	26.6	33.0	40.8	18.6

Note: Women who have been sterilised are considered to want no more children.
[1] The number of living children includes the current pregnancy.

Table 6.2.2 Desire to limit childbearing: Men

Percentage of currently married men age 15-49 who want no more children, by number of living children, according to background characteristics, Nigeria 2013

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	2.4	0.2	5.8	18.6	32.5	38.2	26.6	17.5
Rural	1.4	0.5	2.8	6.9	14.7	13.0	15.5	8.7
Zone								
North Central	0.3	0.6	7.1	12.0	22.1	17.4	26.2	13.9
North East	0.0	0.0	0.7	3.7	4.4	3.0	6.8	3.1
North West	2.4	0.4	0.6	3.0	2.3	2.9	3.2	2.2
South East	(5.1)	1.5	8.9	11.8	30.6	61.6	53.4	22.4
South South	2.9	0.0	3.6	16.3	38.7	49.7	53.3	22.8
South West	(1.1)	0.0	7.3	25.1	49.1	57.4	41.9	26.1
Education								
No education	1.9	0.5	0.6	1.6	1.6	3.8	4.7	2.5
Primary	1.5	0.8	3.4	7.3	22.0	21.9	24.6	14.6
Secondary	2.5	0.2	4.6	15.2	32.9	32.7	30.5	15.9
More than secondary	0.0	0.2	8.1	26.4	31.4	41.5	28.6	18.3
Wealth quintile								
Lowest	0.0	0.8	0.5	0.4	0.8	1.9	4.7	2.0
Second	0.9	0.0	1.9	2.7	9.4	10.5	10.5	5.7
Middle	3.4	0.0	2.0	8.4	19.4	14.1	23.9	11.9
Fourth	4.4	0.8	3.5	11.2	28.3	37.4	33.2	17.6
Highest	1.8	0.2	8.6	25.8	42.4	51.9	42.7	21.8
Total	1.7	0.4	4.1	12.1	22.0	22.2	18.7	12.0

Note: Men who have been sterilised or who state in response to the question about desire for children that their wife has been sterilised are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases.
[1] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

6.3 IDEAL FAMILY SIZE

Women and men who were interviewed in the 2013 NDHS were asked two questions to determine their ideal family size. Respondents who did not have any living children were asked "If you could choose exactly the number of children to have in your lifetime, how many would that be?" For respondents who had living children, the question was rephrased as follows: "If you could go back to the time you did not have any children and could choose exactly the number of children to have in your lifetime, how many would that be?" Table 6.3 shows the distribution of women and men age 15-49 by their ideal number of children, according to the number of living children.

Table 6.3 Ideal number of children by number of living children

Percent distribution of women and men age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to the number of living children, Nigeria 2013

	Number of living children							
Ideal number of children	0	1	2	3	4	5	6+	Total
				WOMEN[1]				
0	0.7	0.4	0.4	0.4	0.6	0.6	1.3	0.6
1	0.2	0.2	0.2	0.0	0.1	0.0	0.1	0.1
2	2.9	1.6	1.9	1.1	0.9	0.2	0.4	1.5
3	12.4	9.7	5.9	4.8	1.5	1.2	0.6	6.4
4	30.9	23.9	24.3	18.6	18.0	6.9	4.5	20.2
5	16.9	15.6	15.4	16.5	12.6	15.2	5.8	14.2
6+	31.3	42.7	45.2	51.3	58.1	65.8	75.9	49.5
Non-numeric response	4.8	5.9	6.9	7.4	8.2	10.1	11.4	7.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	10,723	5,087	4,873	4,740	4,420	3,478	5,628	38,948
Mean ideal number of children for:[2]								
All women	5.3	6.0	6.2	6.6	6.9	7.7	8.8	6.5
Number of women	10,204	4,785	4,539	4,390	4,058	3,127	4,988	36,091
Currently married women	6.9	6.3	6.2	6.7	7.0	7.8	8.9	7.1
Number of currently married women	1,697	4,030	4,194	4,125	3,793	2,941	4,699	25,480
				MEN[3]				
0	0.5	0.0	0.2	0.4	0.3	0.3	0.3	0.4
1	0.4	0.2	0.0	0.3	0.0	0.1	0.0	0.3
2	3.1	2.1	1.8	2.6	1.0	1.0	0.9	2.4
3	10.9	10.9	8.3	5.9	2.8	3.0	1.2	8.2
4	22.5	20.2	20.9	16.7	18.2	6.5	3.7	18.5
5	19.0	16.6	18.0	18.8	15.1	13.9	5.4	16.7
6+	39.6	44.3	45.7	49.1	57.1	67.1	78.2	48.2
Non-numeric response	4.0	5.6	5.2	6.2	5.5	8.2	10.4	5.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	8,894	1,571	1,471	1,421	1,178	909	1,916	17,359
Mean ideal number of children for:[2]								
All men	6.7	7.2	7.1	7.6	8.4	10.2	14.1	8.0
Number of men	8,541	1,483	1,395	1,332	1,114	835	1,717	16,415
Currently married men	8.2	7.4	7.2	7.6	8.5	10.3	14.2	9.3
Number of currently married men	583	1,303	1,318	1,297	1,090	819	1,702	8,112

[1] The number of living children includes the current pregnancy for women.
[2] Means are calculated excluding respondents who gave non-numeric responses.
[3] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Nigerian women consider a large family size to be desirable. Ideal numbers of children are 6.5 for all women and 7.1 for currently married women. About half of all women consider six or more children to be ideal. Only 9 percent of women think three or less children is ideal. Among all women, the mean ideal number of children increases with the number of living children, from 5.3 for those without any children to 8.8 among those with six or more living children.

On average, Nigerian men want more children than women: 8.0 children for all men age 15-49 compared with 6.5 for all women age 15-49. The mean ideal number of children among currently married men is more than two children higher than that reported by currently married women (9.3 versus 7.1). Ideal numbers of children for all women and men who currently have no children are 5.3 and 6.7, respectively. These findings are similar to those from the 1999, 2003, and 2008 NDHS surveys (NPC, 2000; NPC and ORC Macro, 2004, 2009).

Table 6.4 shows the mean ideal number of children for all women age 15-49 by background characteristics. The mean ideal number of increases steadily with age, from 5.7 children among women age 15-19 to 7.8 children among women age 45-49. Urban women prefer to have fewer children than rural women (5.6 versus 7.2). The mean ideal number of children is highest in the North West and North East (8.4 and 8.1 children, respectively) and lowest in the South West (4.5 children). Across states, the mean ideal number of children is lowest in Lagos (4.1 children) and highest in Katsina (9.1 children). The mean ideal number of children decreases as women's level of education and wealth status increase. Women with no education want 8.6 children, while those with more than a secondary education desire 4.5 children. Similarly, women in the lowest wealth quintile want 8.7 children, while women in the highest quintile want 4.7 children.

6.4 FERTILITY PLANNING STATUS

The issue of unplanned and unwanted fertility was further investigated in the 2013 NDHS by asking women with births in the five years preceding the survey whether the births were wanted at the time (planned), wanted but at a later time (mistimed), or not wanted at all (unwanted). For women who were pregnant at the time of the interview, this question was asked with reference to the current pregnancy. The procedure requires respondents to recall accurately their wishes at one or more points in time over the past five years. Table 6.5 shows the percent distribution of births in the five years preceding the 2013 survey, by the planning status of the birth. Ninety percent of the births were wanted at the time they occurred, 7 percent were wanted later (mistimed), and 2 percent were not wanted.

First-order births are more likely to be mistimed (11 percent). The proportion of mistimed births declines as the mother's age at birth increases.

Table 6.4 Mean ideal number of children

Mean ideal number of children for all women age 15-49 by background characteristics, Nigeria 2013

Background characteristic	Mean	Number of women[1]
Age		
15-19	5.7	7,351
20-24	6.1	6,378
25-29	6.4	6,676
30-34	6.7	5,058
35-39	7.1	4,342
40-44	7.2	3,242
45-49	7.8	3,044
Residence		
Urban	5.6	15,581
Rural	7.2	20,510
Zone		
North Central	5.6	5,011
North East	8.1	4,522
North West	8.4	11,551
South East	5.5	4,450
South South	4.9	4,605
South West	4.5	5,952
State		
North Central		
FCT-Abuja	4.6	277
Benue	5.6	1,222
Kogi	5.2	632
Kwara	5.0	558
Nasarawa	5.7	585
Niger	6.6	1,088
Plateau	4.6	648
North East		
Adamawa	7.1	692
Bauchi	9.0	746
Borno	8.5	917
Gombe	8.5	527
Taraba	6.8	723
Yobe	8.5	917
North West		
Jigawa	8.7	1,349
Kaduna	6.8	2,122
Kano	8.7	3,189
Katsina	9.1	1,487
Kebbi	8.8	982
Sokoto	8.7	1,092
Zamfara	8.8	1,330
South East		
Abia	5.1	518
Anambra	5.1	1,042
Ebonyi	6.4	1,118
Enugu	5.6	950
Imo	5.0	821
South South		
Akwa Ibom	4.8	861
Bayelsa	5.8	353
Cross River	5.3	645
Delta	5.0	853
Edo	4.5	717
Rivers	4.7	1,176
South West		
Ekiti	4.2	315
Lagos	4.1	1,862
Ogun	4.6	853
Ondo	5.0	726
Osun	4.2	753
Oyo	4.9	1,443
Education		
No education	8.6	13,068
Primary	6.5	6,168
Secondary	5.1	13,396
More than secondary	4.5	3,459
Wealth quintile		
Lowest	8.7	6,413
Second	7.7	6,843
Middle	6.6	6,837
Fourth	5.6	7,474
Highest	4.7	8,525
Total	6.5	36,091

[1] Number of women who gave a numeric response

Table 6.5 Fertility planning status

Percent distribution of births to women age 15-49 in the five years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Nigeria 2013

Birth order and mother's age at birth	Planning status of birth				Total	Number of births
	Wanted then	Wanted later	Wanted no more	Missing		
Birth order						
1	87.8	10.5	0.2	1.5	100.0	7,193
2	91.6	6.7	0.2	1.4	100.0	6,274
3	91.8	6.4	0.4	1.4	100.0	5,588
4+	89.9	5.0	3.2	1.9	100.0	17,483
Mother's age at birth						
<20	89.0	9.0	0.2	1.8	100.0	5,302
20-24	90.4	7.8	0.3	1.5	100.0	9,243
25-29	91.1	6.6	0.6	1.7	100.0	9,597
30-34	90.2	6.0	2.4	1.4	100.0	6,656
35-39	89.0	3.7	5.5	1.8	100.0	3,910
40-44	87.4	2.4	7.7	2.5	100.0	1,514
45-49	88.0	2.2	6.4	3.4	100.0	315
Total	90.0	6.6	1.7	1.7	100.0	36,538

6.5 WANTED FERTILITY RATES

The wanted fertility rate measures the potential demographic impact of avoiding unwanted births. It is calculated in the same manner as the total fertility rate but excludes unwanted births from the numerator. A birth is considered wanted if the number of living children at the time of conception is lower than the ideal number of children reported by the respondent. The gap between wanted and actual fertility shows how successful women are in achieving their reproductive intentions. This measure may be an underestimate to the extent that women may not report an ideal family size lower than their actual family size.

The total wanted fertility rates in Table 6.6 represent the levels of fertility that would have prevailed in the three years preceding the survey if all unwanted births had been avoided. Overall, Nigerian women have 0.7 children more than their wanted number of 4.8 children. This implies that the total fertility rate is 15 percent higher than it would be if unwanted births were avoided.

The wanted fertility rate is highest in the North West zone (6.3 children) and lowest in the South South zone (3.6 children). Across states, the highest wanted fertility rate is in Zamfara (8.0 children), while the lowest is in Borno (2.8 children).

The difference between wanted and observed total fertility rates decreases with increasing level of education and wealth quintile, indicating that educated and wealthier women are more likely than other women to translate their fertility desires into reality. Overall, there has been a considerable decrease in the total wanted fertility rate among Nigerian women, from 5.3 children in 2003 and 2008 to 4.8 in 2013 (NPC and ORC Macro, 2004, 2009).

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Nigeria 2013

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	4.1	4.7
Rural	5.3	6.2
Zone		
North Central	4.2	5.3
North East	4.6	6.3
North West	6.3	6.7
South East	4.3	4.7
South South	3.6	4.3
South West	4.0	4.6
State		
North Central		
FCT-Abuja	3.8	4.5
Benue	4.3	5.2
Kogi	3.5	4.2
Kwara	4.3	5.1
Nasarawa	4.9	5.4
Niger	4.1	6.1
Plateau	4.3	5.4
North East		
Adamawa	4.5	5.8
Bauchi	4.5	8.1
Borno	2.8	4.7
Gombe	6.4	7.0
Taraba	4.7	6.0
Yobe	6.1	6.6
North West		
Jigawa	7.3	7.6
Kaduna	3.8	4.1
Kano	6.5	6.8
Katsina	7.3	7.4
Kebbi	5.1	6.7
Sokoto	6.8	7.0
Zamfara	8.0	8.4
South East		
Abia	4.0	4.2
Anambra	3.8	4.2
Ebonyi	4.9	5.3
Enugu	4.6	4.8
Imo	4.2	4.8
South South		
Akwa Ibom	3.4	3.9
Bayelsa	3.9	4.5
Cross River	4.7	5.4
Delta	3.1	4.1
Edo	3.6	4.4
Rivers	3.3	3.8
South West		
Ekiti	4.0	4.3
Lagos	3.6	4.1
Ogun	4.6	5.4
Ondo	4.4	5.2
Osun	3.7	4.1
Oyo	3.9	4.5
Education		
No education	5.9	6.9
Primary	5.2	6.1
Secondary	4.0	4.6
More than secondary	2.8	3.1
Wealth quintile		
Lowest	6.0	7.0
Second	5.8	6.7
Middle	4.7	5.7
Fourth	4.2	4.9
Highest	3.5	3.9
Total	4.8	5.5

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2.

FAMILY PLANNING 7

Key Findings

- Knowledge of contraception is widespread in Nigeria; 85 percent of women and 95 percent of men report knowing about a contraceptive method.
- Fifteen percent of currently married women use a contraceptive method, an increase of only 2 percentage points from the 2003 NDHS. Ten percent of currently married women report using a modern method.
- Injectables remain the most popular contraceptive method, used by 3 percent of currently married women.
- Private sector facilities continue to be the chief providers of contraceptive methods in Nigeria; 60 percent of users of modern contraceptive methods obtain them from the private sector.
- Unmet need for family planning, currently 16 percent among married women, has improved since 2008 (when the figure was 20 percent).
- Reducing discontinuations of contraceptive use is important in addressing unmet need. Discontinuations occur most often because of a desire to become pregnant (42 percent), method failure (14 percent), and method-related side effects or health concerns (7 percent).

Family planning refers to a conscious effort by a couple to limit or space the number of children they want to have through the use of contraceptive methods. This chapter presents results from the 2013 NDHS on a number of aspects of contraception: knowledge of specific contraceptive methods, attitudes and behaviours regarding contraceptive use, current use, and source of current contraceptive methods. The chapter focuses on women who are sexually active because these women have the greatest risk of exposure to pregnancy and need for regulating their fertility. However, the results of interviews with men are presented alongside those with women because men play an equally important role in the realisation of reproductive health and family planning decisions and behaviours. Comparisons are also made, where feasible, with findings from previous surveys to evaluate changes in contraceptive measures over time.

The federal government of Nigeria, through the Federal Ministry of Health (FMoH), is unswerving in its efforts to ensure that Nigeria attains the Millennium Development Goals. In line with this, the Federal Ministry of Health distributed free contraceptives to states and to family planning and child spacing programmes in April 2011. Various studies on Nigerians' ability and willingness to pay for contraceptives have shown that, to achieve the desired increase in the contraceptive prevalence rate, cost barriers should be removed so that even the very poor can have unlimited access to contraceptives. This reasoning informed the federal government's intensified efforts to ensure that Nigerians have access to contraceptives. Recently, government efforts to meet the unmet need for family planning led to the approval of distribution of free family planning supplies in public health facilities and an increased commitment by reproductive health programmes (FMoH, 2013a).

7.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Information on knowledge and use of family planning methods was obtained from female and male respondents by asking them if they had heard of the various ways or methods by which a couple could delay or avoid pregnancy. In all, the interviewer asked the respondent about 15 different methods.

Contraceptive methods are classified as modern or traditional methods. Modern methods include female sterilisation, male sterilisation, the pill, the intrauterine device (IUD), injectables, implants, male condoms, female condoms, the diaphragm, foam/jelly, the lactational amenorrhoea method (LAM), and emergency contraception. Traditional methods include the rhythm (periodic abstinence) and withdrawal methods. Provision was also made in the questionnaire to record any other methods mentioned by the respondents, including folk methods such as strings and herbs.

Table 7.1 shows that knowledge of any contraceptive method is widespread in Nigeria, with 85 percent of all women and 95 percent of all men knowing at least one method of contraception. Modern methods are more widely known than traditional methods; 84 percent of all women know of a modern method, while only 56 percent know a traditional method. Similarly, 94 percent of all men know of a modern method, while 65 percent know of a traditional method.

Table 7.1 Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents, and sexually active unmarried respondents age 15-49 who know any contraceptive method, by specific method, Nigeria 2013

	Women			Men		
Method	All women	Currently married women	Sexually active unmarried women[1]	All men	Currently married men	Sexually active unmarried men[1]
Any method	85.2	84.6	97.9	94.6	97.0	99.4
Any modern method	83.8	82.8	97.8	93.7	95.7	99.3
Female sterilisation	42.0	43.6	47.2	42.8	50.2	41.8
Male sterilisation	15.5	15.6	23.3	26.9	30.4	28.6
Pill	70.9	72.9	83.9	64.9	71.5	76.5
IUD	31.8	33.5	41.5	20.0	24.0	17.3
Injectables	68.3	71.4	78.0	59.9	69.0	64.2
Implants	24.7	25.9	33.5	17.9	20.5	16.9
Male condom	67.1	61.5	96.7	90.8	92.4	99.2
Female condom	28.6	26.3	57.4	32.8	34.2	54.8
Lactational amenorrhea (LAM)	37.1	40.9	38.3	20.0	29.9	17.1
Emergency contraception	30.3	29.2	55.7	31.9	36.1	47.3
Other modern method	21.0	21.1	32.5	43.6	53.9	55.7
Any traditional method	56.2	57.9	81.7	65.1	76.6	86.7
Rhythm	41.2	40.5	68.8	41.8	50.4	58.2
Withdrawal	44.5	45.3	73.7	59.0	70.0	84.3
Other	11.9	14.1	13.1	7.7	10.3	6.0
Mean number of methods known by respondents	5.6	5.6	7.7	5.6	6.4	6.7
Number of respondents	38,948	27,830	1,577	17,359	8,723	1,409

[1] Had last sexual intercourse within 30 days preceding the survey

The modern method most commonly known among women is the pill (71 percent), followed by injectables and male condoms (68 percent and 67 percent, respectively). Although the least known modern methods are male sterilization, female condoms, and implants (16 percent, 29 percent, and 25 percent, respectively), knowledge of these three methods has increased markedly since 2008 (when the proportions were 8 percent, 15 percent and 10 percent, respectively). Currently married women are less likely than sexually active unmarried women to know of a contraceptive method (85 percent and 98 percent, respectively). Among traditional methods, withdrawal and rhythm are the most commonly known (45 percent and 41 percent, respectively) among women. Overall, women know a mean of 5.6 contraceptive methods.

The most commonly known modern method among men is the male condom (91 percent). Similar to women, withdrawal is the most commonly known traditional method among men (59 percent). Knowledge of the rhythm method is similar for men and women (42 percent and 41 percent, respectively). The mean number of methods known among men is the same as for women (5.6).

7.2 KNOWLEDGE OF CONTRACEPTIVE METHODS BY BACKGROUND CHARACTERISTICS

Table 7.2 shows knowledge of contraceptive methods among women and men according to background characteristics. Variations in contraceptive knowledge by background characteristics are greater for women than men. Younger women (age 15-19) and women living in the North East are least likely to know of a contraceptive method (67 percent and 73 percent, respectively). As expected, knowledge of contraceptive methods is higher among women living in urban areas (95 percent) than among those living in rural areas (78 percent). Among the states, knowledge of contraceptive methods is lowest for women in Niger (56 percent) and in Kebbi (51 percent). Similarly, knowledge of contraceptive methods is lowest among women with no education and those in the lowest wealth quintile (72 percent and 67 percent, respectively). Among men, there are only small differences in knowledge of any contraceptive method by age group, but the differentials are greater by place of residence, zone, educational level, and wealth quintile.

Table 7.2 Knowledge of contraceptive methods by background characteristics

Percentage of currently married women and currently married men age 15-49 who have heard of at least one contraceptive method and who have heard of at least one modern method by background characteristics, Nigeria 2013

	Women			Men		
Background characteristic	Heard of any method	Heard of any modern method[1]	Number	Heard of any method	Heard of any modern method[1]	Number
Age						
15-19	67.0	64.4	2,251	(86.7)	(85.7)	41
20-24	83.1	81.0	4,362	90.4	87.3	418
25-29	85.4	83.9	5,913	95.5	94.2	1,240
30-34	87.9	86.7	4,869	97.6	96.2	1,750
35-39	88.2	86.6	4,302	97.8	96.6	1,937
40-44	86.9	85.2	3,226	98.2	97.4	1,688
45-49	85.3	82.8	2,907	97.3	96.1	1,649
Residence						
Urban	95.4	95.0	10,124	99.4	99.1	3,302
Rural	78.4	75.8	17,705	95.6	93.7	5,421
Zone						
North Central	78.6	78.0	3,895	94.4	92.7	1,395
North East	73.2	70.1	4,679	94.1	91.3	1,404
North West	81.1	78.4	10,034	97.4	96.0	2,846
South East	95.9	95.4	2,333	99.6	99.3	643
South South	97.7	97.5	2,699	99.7	99.4	1,020
South West	96.4	95.7	4,189	98.8	98.4	1,414
State						
North Central						
FCT-Abuja	92.7	92.0	200	96.7	96.7	96
Benue	96.4	96.0	827	99.2	99.2	283
Kogi	77.5	77.0	433	96.3	96.1	142
Kwara	94.7	94.6	384	100.0	99.5	132
Nasarawa	84.4	83.6	420	97.8	97.8	136
Niger	55.5	54.6	1,190	89.1	84.0	447
Plateau	82.4	82.0	442	90.2	89.9	158
North East						
Adamawa	83.7	83.7	586	98.1	96.7	174
Bauchi	66.8	66.6	1,051	94.6	93.3	325
Borno	64.3	57.5	1,120	96.4	88.1	368
Gombe	64.0	61.8	467	91.3	90.5	131
Taraba	86.9	86.7	632	96.3	96.3	177
Yobe	80.5	74.2	824	86.3	86.0	229
North West						
Jigawa	75.1	70.9	1,256	95.9	94.2	334
Kaduna	98.2	93.7	1,594	98.2	98.2	569
Kano	82.0	79.8	2,521	99.1	95.9	691
Katsina	89.8	89.0	1,408	99.1	96.0	390
Kebbi	51.0	47.0	1,074	91.7	91.5	314
Sokoto	75.3	74.9	956	96.8	96.8	236
Zamfara	84.1	80.9	1,226	98.0	98.0	312

Continued…

Table 7.2—*Continued*

Background characteristic	Women			Men		
	Heard of any method	Heard of any modern method[1]	Number	Heard of any method	Heard of any modern method[1]	Number
South East						
Abia	95.4	94.5	292	98.7	98.7	77
Anambra	97.1	96.6	564	99.3	99.3	188
Ebonyi	89.1	88.8	564	100.0	100.0	145
Enugu	99.4	99.2	467	100.0	98.5	104
Imo	99.7	98.9	446	99.5	99.5	129
South South						
Akwa Ibom	98.2	98.0	410	99.7	98.8	175
Bayelsa	99.6	99.6	202	100.0	100.0	80
Cross River	96.0	95.8	437	98.2	97.7	131
Delta	94.8	94.4	551	100.0	100.0	199
Edo	98.5	98.5	395	100.0	99.3	131
Rivers	99.8	99.6	704	100.0	100.0	304
South West						
Ekiti	98.9	98.9	194	100.0	100.0	70
Lagos	99.9	99.9	1,236	100.0	100.0	435
Ogun	99.1	99.1	655	96.7	95.0	210
Ondo	92.8	91.3	510	94.8	94.1	183
Osun	99.5	99.5	465	100.0	99.6	167
Oyo	90.9	88.9	1,129	100.0	100.0	349
Education						
No education	72.3	68.9	13,470	92.3	88.7	2,594
Primary	92.5	92.0	5,336	97.7	97.3	1,854
Secondary	97.8	97.6	6,981	99.4	99.1	2,961
More than secondary	99.7	99.7	2,043	99.9	99.9	1,313
Wealth quintile						
Lowest	66.7	62.3	6,424	91.2	86.8	1,795
Second	79.5	77.0	5,986	96.2	94.8	1,732
Middle	87.0	86.1	4,983	98.5	98.1	1,506
Fourth	95.5	95.3	5,042	99.6	99.4	1,697
Highest	99.1	99.0	5,395	99.9	99.8	1,992
Total	84.6	82.8	27,830	97.0	95.8	8,723

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, diaphragm, foam or jelly, lactational amenorrhoea method (LAM), standard days method (SDM), and emergency contraception

7.3 CURRENT USE OF CONTRACEPTION

This section presents information on the prevalence of current contraceptive use among women age 15-49. The level of current use is a measure of actual contraceptive practices at the time of the survey. It is also the most widely used and valuable measure of the success of family planning programmes. Furthermore, it can be used to estimate reductions in fertility attributable to contraception. The contraceptive prevalence rate is usually defined as the percentage of currently married women who are using a method of contraception. This section focuses on levels of and differentials in current use of contraception in Nigeria.

Table 7.3 shows the percent distribution of all women, currently married women, and sexually active unmarried women who are currently using specific family planning methods, according to age. Overall, 15 percent of currently married women in Nigeria are using a contraceptive method, an increase of only 2 percentage points since the 2003 NDHS. Most of these contraceptive users rely on a modern method (10 percent); 5 percent use traditional methods. Injectables (3 percent), male condoms (2 percent), and the pill (2 percent) are the most commonly used modern methods. Other modern methods are used by 1 percent of women or less. Interestingly, 3 percent of currently married women use withdrawal as a method of contraception.

The use of contraceptive methods among currently married women increases with age from 2 percent among women age 15-19 to 22 percent among women age 40-44, after which it falls to 13 percent among women age 45-49.

Table 7.3 Current use of contraception by age

Percent distribution of all women, currently married women, and sexually active unmarried women age 15-49 by contraceptive method currently used, according to age, Nigeria 2013

			Modern method										Traditional method					
Age	Any method	Any modern method	Female sterili-sation	Pill	IUD	Inject-ables	Implants	Male condom	LAM	Standard days method	Other[1]	Any traditional method	Rhythm	With-drawal	Other	Not currently using	Total	Number of women
ALL WOMEN																		
15-19	6.1	4.8	0.0	0.5	0.0	0.1	0.0	3.8	0.1	0.0	0.3	1.3	0.5	0.6	0.2	93.9	100.0	7,820
20-24	17.1	13.2	0.0	1.9	0.1	1.3	0.1	8.7	0.4	0.0	0.7	3.9	1.4	1.8	0.7	82.9	100.0	6,757
25-29	18.4	12.6	0.1	2.1	0.5	2.4	0.2	6.2	0.5	0.1	0.6	5.8	2.5	2.6	0.7	81.6	100.0	7,145
30-34	20.3	13.7	0.2	2.5	1.2	3.7	0.8	4.1	0.7	0.1	0.5	6.6	2.2	3.7	0.8	79.7	100.0	5,467
35-39	20.6	13.6	0.4	2.7	1.6	5.0	0.5	2.3	0.4	0.1	0.5	7.1	3.3	3.0	0.8	79.4	100.0	4,718
40-44	21.2	14.0	1.1	2.4	2.1	5.1	0.3	2.2	0.2	0.2	0.5	7.2	3.5	2.7	1.0	78.8	100.0	3,620
45-49	12.4	8.0	0.9	1.6	1.8	2.3	0.2	0.9	0.0	0.1	0.3	4.4	2.4	1.2	0.8	87.6	100.0	3,422
Total	16.0	11.1	0.3	1.9	0.8	2.5	0.3	4.5	0.3	0.1	0.5	4.8	2.0	2.2	0.6	84.0	100.0	38,948
CURRENTLY MARRIED WOMEN																		
15-19	2.1	1.2	0.0	0.3	0.1	0.2	0.0	0.3	0.2	0.0	0.0	1.0	0.3	0.6	0.1	97.9	100.0	2,251
20-24	9.6	6.2	0.0	1.3	0.0	1.7	0.2	2.3	0.5	0.0	0.3	3.3	1.0	1.7	0.6	90.4	100.0	4,362
25-29	14.1	8.8	0.1	1.6	0.6	2.6	0.2	2.8	0.6	0.2	0.3	5.3	2.0	2.6	0.7	85.9	100.0	5,913
30-34	19.1	12.6	0.2	2.3	1.2	3.9	0.9	2.8	0.8	0.2	0.4	6.6	2.0	3.8	0.7	80.9	100.0	4,869
35-39	21.0	13.6	0.4	2.7	1.7	5.3	0.6	2.0	0.4	0.1	0.4	7.4	3.4	3.2	0.8	79.0	100.0	4,302
40-44	21.7	14.4	1.1	2.5	2.2	5.3	0.3	2.1	0.3	0.2	0.3	7.3	3.5	2.8	1.0	78.3	100.0	3,226
45-49	13.2	8.3	1.0	1.6	1.9	2.3	0.2	0.9	0.0	0.1	0.4	4.9	2.7	1.4	0.8	86.8	100.0	2,907
Total	15.1	9.8	0.3	1.8	1.1	3.2	0.4	2.1	0.4	0.1	0.3	5.4	2.2	2.5	0.7	84.9	100.0	27,830
SEXUALLY ACTIVE UNMARRIED WOMEN[2]																		
15-19	61.1	49.7	0.0	6.4	0.0	0.1	0.0	40.7	0.0	0.0	2.6	11.3	4.3	4.5	2.6	38.9	100.0	363
20-24	76.3	63.5	0.0	7.8	1.3	1.2	0.0	48.9	0.0	0.1	4.2	12.8	5.0	5.7	2.0	23.7	100.0	528
25-29	70.5	57.8	0.0	10.6	0.0	2.7	1.2	40.7	0.0	0.0	2.6	12.7	6.7	5.4	0.7	29.5	100.0	377
30-34	66.3	49.2	1.4	7.1	2.4	4.5	1.1	31.9	0.0	0.0	0.9	17.1	7.2	6.4	3.5	33.7	100.0	149
35-39	51.1	41.9	0.0	10.9	0.0	9.8	0.0	12.6	0.0	1.1	7.4	9.2	4.9	2.9	1.4	48.9	100.0	72
40-44	58.6	34.4	0.0	3.4	3.4	12.8	0.0	9.1	0.0	0.0	5.7	24.1	10.8	8.2	5.1	41.4	100.0	60
45-49	(46.4)	(30.5)	(0.0)	(4.2)	(14.0)	(7.5)	(0.0)	(4.9)	(0.0)	(0.0)	(0.0)	(16.0)	(16.0)	(0.0)	(0.0)	(53.6)	100.0	30
Total	68.1	54.9	0.1	8.0	1.0	2.5	0.4	39.5	0.0	0.1	3.3	13.2	5.9	5.3	2.0	31.9	100.0	1,577

Note: If more than one method is used, only the most effective method is considered in this tabulation. Figures in parentheses are based on 25-49 unweighted cases.
LAM = Lactational amenorrhoea method
[1] Includes male sterilisation, female condom, diaphragm, foam/jelly, and other modern methods
[2] Women who had sexual intercourse within 30 days preceding the survey

The overall contraceptive prevalence among women in Nigeria is 16 percent. The use of any family planning method increases with age from 6 percent among women age 15-19 to 21 percent among women age 35-39, after which it declines to 12 percent among women age 45-49. Most women currently using contraception use a modern method (11 percent), while 5 percent use traditional methods. The male condom is the most commonly used modern method (5 percent), followed by injectables and pills (3 percent and 2 percent, respectively), while female sterilisation and implants are the least used modern methods (less than 1 percent each). Among the traditional methods, the rhythm method and withdrawal are the most commonly used (2 percent each).

As expected, the use of family planning methods is higher among sexually active unmarried women than among currently married women (68 percent versus 15 percent). In addition, more sexually active unmarried women (55 percent) than currently married women (10 percent) use modern family planning methods. There is also a notable difference between sexually active unmarried women and currently married women in use of the pill (8 percent versus 2 percent).

The most striking difference between these two groups of women is that 40 percent of sexually active unmarried women use male condoms, as compared with only 2 percent of married women. Among sexually active unmarried women, the rhythm method and withdrawal are the most widely used traditional methods (6 percent and 5 percent, respectively).

Similar differences in modern contraceptive use between currently married women and sexually active unmarried women were observed in the 2008 NDHS.

7.4 CURRENT USE OF CONTRACEPTION BY BACKGROUND CHARACTERISTICS

Analysing current use of contraception by background characteristics is important because it helps identify subgroups of the population to target for family planning services. It also allows a comparison of levels of current contraceptive use across major population groups and an examination of differences in use within various subgroups.

Table 7.4 presents information on current use of contraceptives among currently married women age 15-49 by background characteristics. There is a direct association between women's use of family planning methods and the number of children they have. In general, women do not begin to use contraception until they have had at least one child. Few women without children use any contraceptive method (2 percent), while those with one or more children are more likely to use contraception. Contraceptive use is highest among women with three or four living children (21 percent).

Current use of contraception varies with residence, zone, education, and wealth quintile. Women in rural areas are less likely to use contraceptive methods than their counterparts in urban areas (9 percent versus 27 percent). This trend is observed across all modern methods of contraception.

The South West zone has the highest proportion of women currently using a family planning method (38 percent), followed by the South East (29 percent). The lowest proportion of married women using a family planning method is in the North East (3 percent). Among the states, Lagos and Kwara have the highest percentages of women using any method (48 percent and 40 percent, respectively). In six states—Jigawa, Kano, Katsina, Kebbi, Sokoto, and Yobe—only 1 percent of women use any method of contraception.

Contraceptive use is positively associated with women's level of education. Contraceptive use increases with educational attainment. Thirty-seven percent of women who have more than a secondary education use a contraceptive method, as compared with only 3 percent of women with no education. By wealth quintile, women in the lowest quintile are least likely to use a contraceptive method (2 percent), while women in the highest quintile are most likely to do so (37 percent).

Table 7.4 Current use of contraception by background characteristics

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to background characteristics, Nigeria 2013

Background characteristic	Any method	Any modern method	Modern method									Any tradi-tional method	Traditional method			Not currently using	Total	Number of women
			Female sterili-sation	Pill	IUD	Inject-ables	Implants	Male condom	LAM	Standard days method	Other[1]		Rhythm	With-drawal	Other			
Number of living children																		
0	2.4	1.2	0.0	0.2	0.0	0.0	0.0	0.8	0.0	0.1	0.1	1.1	0.6	0.4	0.1	97.6	100.0	2,823
1-2	12.9	8.2	0.1	1.6	0.4	1.8	0.2	3.1	0.5	0.1	0.3	4.7	1.5	2.4	0.8	87.1	100.0	8,637
3-4	20.9	13.0	0.4	2.3	1.5	4.4	0.5	2.6	0.6	0.2	0.5	7.8	3.5	3.7	0.7	79.1	100.0	8,305
5+	16.2	11.1	0.6	2.2	1.7	4.5	0.5	0.9	0.4	0.1	0.2	5.1	2.1	2.1	0.8	83.8	100.0	8,065
Residence																		
Urban	26.8	16.9	0.5	3.2	2.1	4.4	0.8	4.4	0.7	0.2	0.6	9.9	4.1	4.8	1.0	73.2	100.0	10,124
Rural	8.5	5.7	0.3	1.1	0.5	2.5	0.2	0.7	0.3	0.1	0.1	2.8	1.1	1.2	0.6	91.5	100.0	17,705
Zone																		
North Central	15.6	12.4	1.0	2.1	1.0	4.6	0.6	2.1	0.3	0.3	0.5	3.2	1.0	1.5	0.6	84.4	100.0	3,895
North East	3.2	2.7	0.3	0.5	0.1	1.2	0.2	0.2	0.0	0.1	0.0	0.4	0.1	0.2	0.2	96.8	100.0	4,679
North West	4.3	3.6	0.2	0.5	0.2	1.8	0.4	0.1	0.2	0.1	0.1	0.6	0.1	0.2	0.4	95.7	100.0	10,034
South East	29.3	11.0	0.3	1.8	1.5	2.2	0.3	4.1	0.5	0.3	0.1	18.2	7.9	9.9	0.5	70.7	100.0	2,333
South South	28.1	16.4	0.5	3.8	1.0	5.5	0.4	2.5	1.9	0.1	0.8	11.7	5.6	4.4	1.6	71.9	100.0	2,699
South West	38.0	24.9	0.2	5.0	4.0	6.4	0.3	7.5	0.8	0.1	0.8	13.1	5.1	6.3	1.7	62.0	100.0	4,189
State																		
North Central																		
FCT-Abuja	25.2	20.6	0.5	3.5	4.4	4.7	3.1	3.2	0.2	0.3	0.6	4.6	3.2	1.1	0.3	74.8	100.0	200
Benue	16.5	12.1	2.9	1.4	1.0	1.8	0.5	2.6	0.7	0.2	0.9	4.4	2.4	1.5	0.5	83.5	100.0	827
Kogi	10.5	8.5	0.1	2.3	0.4	3.0	0.0	1.5	0.1	0.4	0.8	2.0	1.1	0.4	0.5	89.5	100.0	433
Kwara	40.2	27.7	0.6	5.9	2.5	8.5	0.4	7.8	0.0	0.2	1.7	12.5	1.2	8.4	2.9	59.8	100.0	384
Nasarawa	18.1	16.3	1.1	3.0	0.7	9.1	1.4	0.7	0.1	0.1	0.0	1.8	0.1	0.6	1.1	81.9	100.0	420
Niger	6.6	5.6	0.2	0.8	0.4	2.7	0.3	0.6	0.2	0.4	0.1	1.0	0.3	0.6	0.1	93.4	100.0	1,190
Plateau	15.2	14.4	0.9	2.3	0.3	8.9	0.3	1.4	0.2	0.1	0.0	0.7	0.3	0.4	0.0	84.8	100.0	442
North East																		
Adamawa	4.4	3.5	0.4	0.8	0.0	1.2	0.2	0.6	0.0	0.3	0.0	0.8	0.0	0.7	0.1	95.6	100.0	586
Bauchi	2.2	2.1	0.1	0.6	0.0	1.4	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	97.8	100.0	1,051
Borno	1.8	1.8	0.4	0.2	0.2	0.7	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	98.2	100.0	1,120
Gombe	4.0	4.0	0.7	0.1	0.3	1.5	0.5	0.3	0.3	0.0	0.2	0.1	0.1	0.0	0.0	96.0	100.0	467
Taraba	8.0	6.5	0.5	1.2	0.3	3.0	0.6	0.6	0.0	0.0	0.2	1.5	0.5	0.5	0.5	92.0	100.0	632
Yobe	1.1	0.5	0.0	0.1	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.6	0.0	0.1	0.5	98.9	100.0	824
North West																		
Jigawa	0.9	0.6	0.0	0.2	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.4	0.1	0.0	0.3	99.1	100.0	1,256
Kaduna	20.2	18.5	1.0	2.1	1.2	9.0	2.6	0.8	0.8	0.3	0.6	1.7	0.2	1.0	0.5	79.8	100.0	1,594
Kano	0.6	0.5	0.0	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	99.4	100.0	2,521
Katsina	1.3	1.1	0.0	0.1	0.0	1.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.1	98.7	100.0	1,408
Kebbi	1.3	1.2	0.0	0.7	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	98.7	100.0	1,074
Sokoto	1.1	0.7	0.1	0.1	0.0	0.4	0.1	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0	98.9	100.0	956
Zamfara	3.0	1.3	0.0	0.1	0.2	0.9	0.1	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.7	97.0	100.0	1,226

Continued…

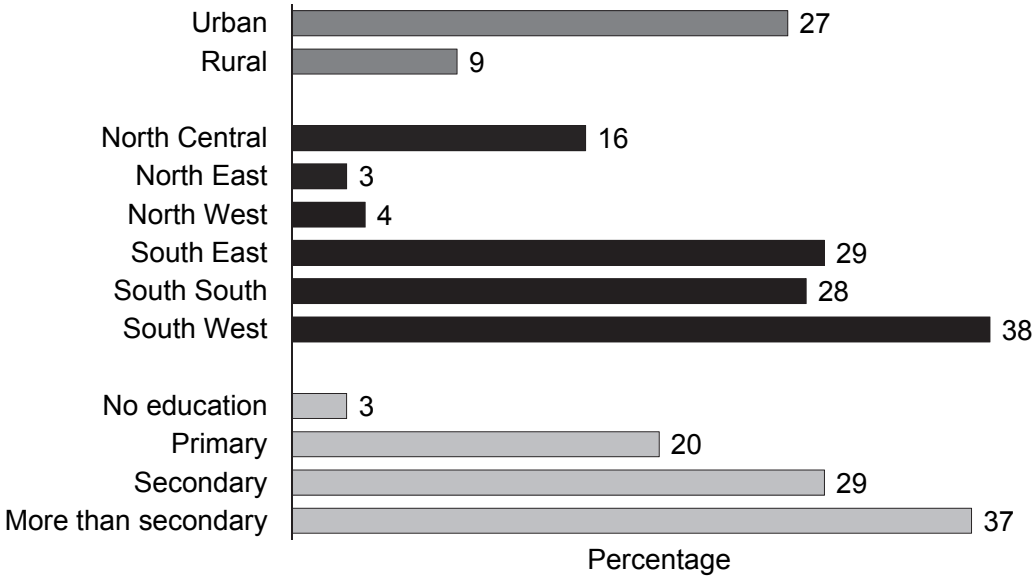
Table 7.4—*Continued*

Background characteristic	Any method	Any modern method	Modern method									Any traditional method	Traditional method			Not currently using	Total	Number of women
			Female sterilisation	Pill	IUD	Injectables	Implants	Male condom	LAM	Standard days method	Other[1]		Rhythm	Withdrawal	Other			
South East																		
Abia	33.4	15.6	0.0	2.0	1.5	7.0	0.0	3.5	0.9	0.7	0.0	17.9	7.8	9.5	0.6	66.6	100.0	292
Anambra	35.0	11.7	0.3	2.0	2.3	1.3	0.8	4.6	0.3	0.0	0.0	23.3	14.7	8.2	0.4	65.0	100.0	564
Ebonyi	15.7	5.6	0.2	1.3	0.2	1.0	0.4	1.7	0.2	0.7	0.0	10.1	3.2	6.7	0.2	84.3	100.0	564
Enugu	31.4	14.3	0.2	2.1	2.9	1.8	0.0	6.6	0.7	0.0	0.0	17.1	5.6	11.5	0.0	68.6	100.0	467
Imo	34.1	10.7	0.5	1.6	0.8	2.3	0.0	4.2	0.8	0.0	0.3	23.4	7.7	14.4	1.3	65.9	100.0	446
South South																		
Akwa Ibom	25.5	16.5	0.3	5.1	0.6	6.6	0.7	2.2	0.8	0.0	0.1	9.0	7.2	1.5	0.2	74.5	100.0	410
Bayelsa	13.3	10.1	0.0	2.9	0.0	4.2	0.0	1.8	0.4	0.0	0.8	3.2	1.0	1.1	1.1	86.7	100.0	202
Cross River	24.0	14.4	0.1	3.6	1.5	5.9	0.2	2.1	0.0	0.0	0.9	9.7	4.2	4.0	1.4	76.0	100.0	437
Delta	28.7	16.8	0.6	2.4	1.2	2.5	0.4	2.1	5.8	0.0	1.8	11.9	4.6	4.3	3.1	71.3	100.0	551
Edo	30.3	19.1	0.6	5.6	0.9	6.8	0.0	2.4	2.4	0.0	0.4	11.2	5.1	4.1	2.0	69.7	100.0	395
Rivers	34.5	17.5	1.0	3.3	1.1	6.6	0.5	3.3	0.8	0.3	0.5	17.1	8.1	7.6	1.3	65.5	100.0	704
South West																		
Ekiti	34.5	26.6	0.1	7.1	3.6	6.9	0.0	8.2	0.0	0.0	0.6	7.8	4.4	3.1	0.4	65.5	100.0	194
Lagos	48.3	26.4	0.1	6.5	2.4	4.6	0.3	10.3	0.9	0.0	1.2	21.9	10.2	9.0	2.7	51.7	100.0	1,236
Ogun	26.0	21.5	0.0	5.3	1.0	9.0	0.3	4.4	0.3	0.2	0.9	4.6	0.9	2.2	1.4	74.0	100.0	655
Ondo	31.1	20.4	0.4	3.0	5.9	5.7	0.0	4.1	0.4	0.3	0.7	10.7	4.6	4.9	1.2	68.9	100.0	510
Osun	38.3	31.6	0.0	5.0	5.3	7.2	0.0	13.1	0.6	0.0	0.4	6.7	1.5	4.7	0.5	61.7	100.0	465
Oyo	37.4	24.4	0.2	3.7	6.1	6.5	0.5	5.4	1.2	0.0	0.7	13.0	3.9	7.5	1.6	62.6	100.0	1,129
Education																		
No education	2.7	1.7	0.2	0.3	0.1	0.7	0.1	0.1	0.1	0.0	0.0	0.9	0.2	0.3	0.4	97.3	100.0	13,470
Primary	19.9	13.6	0.5	2.8	1.7	5.1	0.4	2.1	0.5	0.1	0.4	6.3	2.4	2.7	1.3	80.1	100.0	5,336
Secondary	29.2	18.7	0.4	3.5	1.6	6.1	0.7	4.6	0.8	0.2	0.7	10.5	4.4	5.3	0.8	70.8	100.0	6,981
More than secondary	37.0	22.4	1.0	3.5	3.6	4.5	1.3	6.5	1.0	0.3	0.7	14.6	7.1	6.9	0.6	63.0	100.0	2,043
Wealth quintile																		
Lowest	1.7	0.9	0.1	0.1	0.0	0.4	0.0	0.1	0.1	0.0	0.0	0.8	0.1	0.2	0.5	98.3	100.0	6,424
Second	5.1	3.7	0.3	0.7	0.3	1.7	0.1	0.3	0.3	0.0	0.1	1.4	0.5	0.6	0.3	94.9	100.0	5,986
Middle	13.3	9.1	0.6	1.3	1.0	3.8	0.3	1.3	0.4	0.2	0.2	4.1	1.3	2.3	0.5	86.7	100.0	4,983
Fourth	23.1	14.4	0.4	3.1	1.7	4.8	0.5	2.9	0.4	0.2	0.4	8.6	3.8	3.7	1.2	76.9	100.0	5,042
Highest	36.7	23.4	0.5	4.4	2.7	6.1	1.0	6.4	1.1	0.1	1.0	13.3	5.8	6.5	1.1	63.3	100.0	5,395
Total	15.1	9.8	0.3	1.8	1.1	3.2	0.4	2.1	0.4	0.1	0.3	5.4	2.2	2.5	0.7	84.9	100.0	27,830

Note: If more than one method is used, only the most effective method is considered in this tabulation.
LAM = Lactational amenorrhea method
[1] Includes male sterilisation, female condom, diaphragm, and other modern methods

Figure 7.1 presents differentials in contraceptive use by urban-rural residence, zone, and education. It is clear from these results that area of residence and educational level play a role in contraceptive use.

Figure 7.1 **Differentials in contraceptive use, Nigeria**



NDHS 2013

7.5 TRENDS IN CONTRACEPTIVE USE

Trends in current use of family planning can be used to monitor and evaluate the success of family planning programmes over time. Table 7.5 shows trends in current use of specific contraceptive methods among currently married women from 1990 to 2013. Over the 23-year period, contraceptive prevalence increased from 6 percent in 1990 to 15 percent in 2013. Use of modern methods increased from 4 percent to 10 percent.

Use of injectables increased from 1 percent in 1990 to 3 percent in 2013. Condom use increased from less than 1 percent to 2 percent within the same period. Use of traditional methods has also increased over the years (from 3 percent in 1990 to 5 percent in 2013).

Table 7.5 Trends in current use of contraception

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to several surveys, Nigeria 1990, 2003, 2008, and 2013

Method	1990 NDHS	2003 NDHS	2008 NDHS	2013 NDHS
Any method	6.0	12.6	14.6	15.1
Any modern method	3.5	8.2	9.7	9.8
Female sterilisation	0.3	0.2	0.4	0.3
Pill	1.2	1.8	1.7	1.8
IUD	0.8	0.7	1.0	1.1
Injectables	0.7	2.0	2.6	3.2
Male condom	0.4	1.9	2.4	2.1
LAM	u	1.4	1.6	0.4
Any traditional method	2.5	4.3	4.9	5.4
Rhythm	2.1	2.1	2.1	2.2
Withdrawal	2.0	1.3	2.0	2.5
Folk method	0.6	1.0	0.9	0.7
Not currently using	94.0	87.4	85.4	84.9
Total	100.0	100.0	100.0	100.0
Number of women	6,880	5,336	23,578	27,830

LAM = Lactational amenorrhoea method
u = Unknown (not available)

7.6 SOURCE OF MODERN CONTRACEPTIVE METHODS

Information on where women obtain their contraceptive method is important for programme managers and implementers in designing family planning policies and programmes. All current users of modern contraceptive methods at the time of the survey were asked the most recent source of their methods. Interviewers were instructed to note the full name of the source or facility, because some women may not know exactly in which category the source falls (e.g., government or private, health centre, or clinic). Supervisors and field editors were trained to verify that the name and source type were consistent, asking informants in the clusters for the names of local family planning outlets if necessary. This practice was designed to improve the accuracy of source reporting.

Table 7.6 shows that the private medical sector is the most common source for users of modern contraceptive methods (60 percent). Less than one-third (29 percent) of current users of modern methods obtain their method from the public sector, mostly public government hospitals (17 percent). Nine percent of users of modern methods use other sources.

The public sector supplies the majority of implants and IUDs (65 percent each), injectables (58 percent), and female sterilisation (56 percent). The private sector is the main source for male condoms (74 percent) and oral contraceptives (72 percent). Use of the public sector as a source has increased over the past five years (from 23 percent to 29 percent).

Table 7.6 Source of modern contraception methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Nigeria 2013

Source	Female sterilisation	Pill	IUD	Injectables	Implants	Male condom	Total
Public sector	56.1	22.5	64.5	58.3	65.4	4.9	28.9
Government hospital	52.2	8.8	41.0	31.9	48.2	2.7	16.6
Government health centre	4.0	9.7	16.9	21.5	13.3	1.0	9.2
Family planning clinic	0.0	3.6	6.6	3.6	3.9	0.9	2.6
Mobile clinic	0.0	0.1	0.0	0.5	0.0	0.0	0.2
Fieldworker	0.0	0.3	0.0	0.7	0.0	0.2	0.3
Other public sector	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Private sector	40.3	72.1	33.5	39.9	34.2	73.5	59.9
Private hospital/clinic	36.6	3.2	32.1	20.7	33.3	0.4	10.3
Pharmacy	0.0	16.4	0.0	3.7	0.0	13.9	10.0
Chemist/Patent Medical Store	0.0	51.8	0.0	12.6	0.0	58.3	38.2
Private doctor	3.3	0.2	1.4	1.2	0.9	0.2	0.7
Mobile clinic	0.0	0.3	0.0	0.3	0.0	0.1	0.2
NGO	0.4	0.0	0.0	0.0	0.0	0.2	0.1
Fieldworker	0.0	0.1	0.0	1.4	0.0	0.3	0.5
Other private medical sector	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Other source	0.0	1.8	0.0	0.0	0.0	19.6	9.0
Shop	0.0	0.5	0.0	0.0	0.0	4.1	1.9
Friend/relative	0.0	1.3	0.0	0.0	0.0	15.5	7.1
Other	0.0	0.6	0.0	0.0	0.0	0.4	0.3
Missing	3.5	2.9	2.0	1.8	0.4	1.7	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	105	724	322	963	112	1,771	4,014

Note: Total includes other modern methods but excludes lactational amenorrhoea method (LAM).

7.7 USE OF SOCIAL MARKETING BRAND PILLS

Women currently using oral contraceptives and injectables were asked for the brand name of the pills and injectables they last used. Information on women's use of social marketing brand contraceptives is useful for monitoring the success of social marketing programmes that promote a specific brand.

The Federal Ministry of Health has set a national target of increasing the contraceptive prevalence rate to 36 percent by 2018. DKT Nigeria will contribute to reaching that goal by providing a variety of contraceptive options such as condoms, IUDs, oral contraceptives, emergency contraceptives, injectables,

and implants using innovative marketing. In addition, DKT will target adolescents with youth-friendly reproductive services by branding and promoting products that consider the multicultural diversity of Nigeria. Product promotions will also target modern market advertising venues such as social media (DKT International, 2014).

Table 7.7 shows the percent distribution of women using pills and injectables by social marketing brand, according to background characteristics. Among pill users, the brands most commonly used are Duofem Confidence (44 percent) and Postinor (21 percent). Among women using injectables, Depo Provera (67 percent) and Noristerat (21 percent) are the most commonly used brands.

Table 7.7 Use of social marketing brand pills and injectables

Percent distribution of pill and injectables brand names used among women age 15-49, by background characteristics, Nigeria 2013

	Brand of pill							Brand of injectables[1]					
Background characteristic	Duofem Confidence	Micro-gynon	Lofemenal	Neogynon	Postinor	Total	Number of women using the pill	Noristerat (2 months)	Norigynon (2 months)	Depo Provera (3 months)	Other	Total	Number of women using injectables
Age													
15-19	(19.2)	(25.3)	(2.7)	(26.7)	(26.1)	100.0	28	*	*	*	*	100.0	9
20-24	33.9	18.1	1.3	6.1	40.6	100.0	89	26.8	17.8	54.8	0.7	100.0	82
25-29	40.0	23.7	3.8	7.7	24.8	100.0	106	29.2	14.6	55.4	0.8	100.0	169
30-34	48.8	14.4	4.3	14.7	17.7	100.0	90	22.8	14.6	60.2	2.5	100.0	199
35-39	54.3	15.1	7.6	13.0	9.9	100.0	98	17.0	8.4	74.3	0.4	100.0	237
40-44	45.3	20.8	6.8	19.9	7.2	100.0	58	18.1	7.1	73.7	1.1	100.0	180
45-49	(50.3)	(22.4)	(3.5)	(11.5)	(12.3)	100.0	39	6.6	7.2	86.1	0.0	100.0	76
Residence													
Urban	38.2	21.0	3.7	13.5	23.5	100.0	327	20.9	9.0	69.8	0.3	100.0	471
Rural	53.2	15.5	5.7	10.4	15.1	100.0	181	20.1	13.3	64.8	1.8	100.0	479
Zone													
North Central	68.5	14.6	3.0	13.2	0.8	100.0	69	31.6	17.5	49.2	1.7	100.0	184
North East	(35.8)	(23.9)	(11.6)	(28.7)	(0.0)	100.0	20	47.1	4.2	48.7	0.0	100.0	58
North West	(39.9)	(23.6)	(2.1)	(29.5)	(4.9)	100.0	59	15.5	12.4	71.7	0.5	100.0	180
South East	(35.0)	(31.7)	(4.6)	(17.0)	(11.7)	100.0	42	10.5	2.6	84.9	2.1	100.0	57
South South	35.0	27.8	3.6	7.6	25.9	100.0	143	21.5	12.7	63.2	2.6	100.0	176
South West	44.8	8.7	5.6	7.5	33.4	100.0	176	12.7	8.6	78.7	0.0	100.0	294
Education													
No education	(45.4)	(23.5)	(0.0)	(27.4)	(3.7)	100.0	30	25.5	6.1	64.8	3.6	100.0	100
Primary	43.9	19.0	6.7	14.1	16.4	100.0	116	15.0	13.4	71.0	0.5	100.0	301
Secondary	47.8	14.3	4.4	10.5	23.1	100.0	265	20.5	9.5	69.0	1.0	100.0	455
More than secondary	30.9	31.0	3.4	11.1	23.7	100.0	96	32.3	17.5	50.2	0.0	100.0	94
Wealth quintile													
Lowest	*	*	*	*	*	*	7	(17.9)	(0.0)	(78.9)	(3.2)	100.0	27
Second	(50.2)	(13.5)	(13.0)	(5.9)	(17.4)	100.0	33	20.3	14.2	63.5	2.0	100.0	112
Middle	49.3	10.2	4.5	25.1	10.9	100.0	57	15.6	18.1	65.4	1.0	100.0	207
Fourth	43.6	22.7	5.0	9.2	19.6	100.0	167	19.2	8.6	71.0	1.3	100.0	260
Highest	41.7	18.5	3.1	12.4	24.4	100.0	243	24.7	8.9	66.0	0.4	100.0	343
Total	43.5	19.1	4.4	12.4	20.5	100.0	507	20.5	11.2	67.3	1.0	100.0	950

Note: Table excludes pill and injectables users who do not know the brand name. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Among injectables users not also using the pill.

7.8 USE OF SOCIAL MARKETING BRAND CONDOMS

Women who reported that they currently use male condoms for contraception were asked for the brand name of the condoms they last used. Table 7.8.1 shows the percent distribution of women condom users age 15-49 by social marketing brand of condoms used, according to background characteristics. The most common brand of condom used is the Gold Circle male condom (77 percent). Eight percent of women use Rough Rider, and 6 percent use Durex. Nine percent of women do not know the brand of condom they last used.

Men age 15-49 who reported that they had sex within the 12 months preceding the survey and used a condom the last time they had sex were asked which brand of condoms they used. As reported for women, the majority of men use Gold Circle male condoms (81 percent), while 8 percent use Rough Rider (Table 7.8.2). Six percent of men do not know the brand of condom they last used.

Table 7.8.1 Use of social marketing brand condoms: Women

Percent distribution of condom brand names used among women age 15-49, by background characteristics, Nigeria 2013

Background characteristic	Brand of condoms						Number of women using condoms
	Gold Circle	Durex	Rough Rider	Twin Lotus	Other[1]	Total	
Age							
15-19	81.5	3.5	3.5	1.5	10.0	100.0	341
20-24	78.4	4.8	8.4	0.5	7.9	100.0	619
25-29	70.4	7.3	12.5	0.2	9.6	100.0	449
30-34	80.0	7.6	5.2	1.0	6.2	100.0	210
35-39	75.9	6.9	3.4	1.7	12.1	100.0	116
40-44	80.5	2.6	3.9	0.0	13.0	100.0	77
45-49	78.1	6.3	3.1	0.0	12.5	100.0	32
Residence							
Urban	75.4	6.7	8.2	1.0	8.6	100.0	1,215
Rural	80.4	3.3	6.2	0.2	9.9	100.0	629
Zone							
North Central	75.1	8.4	3.9	0.0	12.6	100.0	285
North East	57.1	0.0	8.2	0.0	34.7	100.0	49
North West	47.1	17.6	27.5	2.0	5.9	100.0	51
South East	77.2	2.8	8.6	2.3	9.1	100.0	429
South South	74.5	5.2	9.8	0.2	10.3	100.0	458
South West	84.6	5.9	4.9	0.2	4.4	100.0	572
Education							
No education	87.5	0.0	0.0	0.0	12.5	100.0	24
Primary	78.5	5.1	2.5	0.0	13.9	100.0	158
Secondary	79.6	3.9	6.8	0.8	8.8	100.0	1,120
More than secondary	71.0	9.4	10.9	0.7	7.9	100.0	542
Wealth quintile							
Lowest	85.7	0.0	0.0	0.0	14.3	100.0	14
Second	72.8	5.4	1.1	0.0	20.7	100.0	92
Middle	84.3	3.7	3.1	0.3	8.6	100.0	325
Fourth	79.5	3.9	8.1	0.5	8.1	100.0	570
Highest	73.1	7.6	9.7	1.1	8.5	100.0	843
Total	77.1	5.6	7.5	0.7	9.1	100.0	1,844

Note: Table excludes condom users who do not know the brand name. Condom use is based on women's reports.

[1] Includes plain condoms, female plain condoms, other condoms, don't know, and missing

Table 7.8.2 Use of social marketing brand condoms: Men

Percent distribution of condom brand names used among men age 15-49, by background characteristics, Nigeria 2013

Background characteristic	Brand of condoms						
	Gold Circle	Durex	Rough Rider	Twin Lotus	Other[1]	Total	Number of men using condoms
Age							
15-19	91.3	2.4	2.4	0.0	3.8	100.0	208
20-24	81.7	6.1	7.6	0.1	4.5	100.0	671
25-29	81.9	4.6	8.7	0.3	4.6	100.0	634
30-34	77.4	3.6	11.3	0.5	7.2	100.0	390
35-39	77.4	4.9	8.6	0.8	8.2	100.0	243
40-44	77.5	3.9	6.2	0.0	12.4	100.0	129
45-49	79.3	0.0	6.9	0.0	13.8	100.0	87
Residence							
Urban	78.3	5.8	9.7	0.4	5.8	100.0	1,354
Rural	84.9	2.7	5.9	0.1	6.4	100.0	1,008
Zone							
North Central	76.5	7.4	8.5	0.3	7.3	100.0	591
North East	83.8	1.5	4.6	0.8	9.2	100.0	130
North West	63.3	10.1	7.6	0.0	19.0	100.0	79
South East	77.1	5.5	13.2	0.3	3.9	100.0	363
South South	86.6	1.7	8.3	0.0	3.4	100.0	648
South West	84.2	3.8	4.7	0.5	6.7	100.0	551
Education							
No education	77.6	2.0	0.0	0.0	20.4	100.0	49
Primary	84.8	2.1	3.8	0.8	8.4	100.0	237
Secondary	84.9	2.9	6.7	0.4	5.1	100.0	1,387
More than secondary	72.4	8.7	12.8	0.0	6.1	100.0	689
Wealth quintile							
Lowest	78.6	0.0	0.0	0.0	21.4	100.0	28
Second	88.9	1.7	0.0	0.6	8.9	100.0	180
Middle	86.1	2.7	4.9	0.0	6.3	100.0	445
Fourth	85.3	3.4	6.8	0.1	4.4	100.0	770
Highest	73.9	6.9	12.4	0.5	6.3	100.0	939
Total	81.1	4.5	8.0	0.3	6.1	100.0	2,362

Note: Table excludes condom users who do not know the brand name. Condom use is based on men's reports.
[1] Includes plain condoms, femidom, other condoms, don't know, and missing

7.9 INFORMED CHOICE

Informed choice is an important principle in the delivery of family planning services. As an aspect of informed choice, it is required that all family planning providers inform users about potential side effects of a method and what they should do if they encounter such side effects. Contraceptive users should also be informed of other methods available to them. This information assists the user in coping with side effects and thus decreases discontinuation of temporary methods.

Women currently using a modern contraceptive method who started their last episode of use within five years of the survey were asked whether they were informed about side effects or problems they might have with the method, what to do if they experienced side effects, and other methods they could use. This is a measure of the quality of family planning service provision. Table 7.9 shows the results by method type and source of the method.

Sixty percent of contraceptive users were informed of the side effects of the method they use, 54 percent were informed about what to do if they experienced side effects, and 64 percent were informed of other available methods of contraception. Seventy-six percent of women who obtained their current family planning method from public sector facilities were informed about side effects or method-related problems, and 72 percent were told what to do if they experienced side effects. Women who used implants were most likely to be informed of side effects, what to do if they experienced side effects, and other methods they could use.

Users were slightly less likely to receive information about side effects or problems from a private medical facility (47 percent) than from a government hospital (79 percent). The same was true of information on what to do if side effects were experienced; 40 percent of users were given such information in private medical facilities, as compared with 76 percent in government hospitals.

Table 7.9 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the five years preceding the survey, the percentage who were informed about possible side effects or problems of that method, the percentage who were informed about what to do if they experienced side effects, and the percentage who were informed about other methods they could use, by method and initial source, Nigeria 2013

	Among women who started last episode of modern contraceptive method within five years preceding the survey:			
Method/source	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if side effects experienced	Percentage who were informed by a health or family planning worker of other methods that could be used	Number of women
Method				
Female sterilisation	(53.6)	(42.8)	(31.5)	42
Pill	43.2	36.9	52.6	637
IUD	77.7	74.4	78.6	237
Injectables	64.5	59.3	68.4	849
Implants	83.6	81.0	84.3	95
Initial source of method[1]				
Public sector	75.5	72.1	80.0	888
Government hospital	78.6	76.0	83.3	476
Government health centre	71.5	66.7	76.6	328
Family planning clinic	75.2	76.4	79.1	64
Other public sector	*	*	*	20
Private medical sector	47.1	39.8	51.9	865
Private hospital/clinic	66.8	61.0	68.1	307
Pharmacy	37.0	25.0	51.5	130
Chemist/PMS store	34.8	27.9	38.9	397
Private doctor	*	*	*	17
Mobile clinic/NGO/fieldworker	*	*	*	14
Other private sector	38.7	30.9	51.5	60
Friend/relative	41.7	33.3	55.5	56
Other	*	*	*	6
Missing	(14.2)	(10.1)	(7.1)	45
Total	59.6	54.3	64.3	1,861

Note: Table includes users of only the methods listed individually. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Source at start of current episode of use

7.10 RATES OF DISCONTINUING CONTRACEPTIVE METHODS

Couples can realise their reproductive goals only when they consistently and correctly use reliable contraceptive methods. A prominent concern for family planning programmes is the rate at which contraceptive users discontinue using their methods and the reasons for such discontinuation. Provided with this information, family planning providers will be able to better advise potential users of the advantages and disadvantages of each contraceptive method, allowing women to make a more informed decision about the method that best suits their needs.

The calendar section of the Woman's Questionnaire records all segments of contraceptive use from 3-59 months prior to the survey. The month of the interview and the two months prior to the survey are ignored in order to avoid bias that may be introduced by unrecognised pregnancies. One-year contraceptive discontinuation rates based on the calendar data are presented in Table 7.10.

Women who started an episode of contraceptive use within the five years preceding the survey and discontinued it within 12 months were asked the reason for the discontinuation. Overall, 28 percent of

episodes were discontinued within 12 months (Table 7.10). Eight percent of discontinuations occurred because the woman wanted to become pregnant and 4 percent because of method failure.

Discontinuation rates vary by method. Among modern methods, rates are highest for pills and injectables (26 percent and 23 percent, respectively), followed by male condoms (20 percent).

Table 7.10 Twelve-month contraceptive discontinuation rates

Among women age 15-49 who started an episode of contraceptive use within the five years preceding the survey, the percentage of episodes discontinued within 12 months, by reason for discontinuation and specific method, Nigeria 2013

Method	Method failure	Desire to become pregnant	Other fertility-related reasons[2]	Side effects/ health concerns	Wanted more effective method	Other method-related reasons[3]	Other reasons	Any reason[4]	Switched to another method[5]	Number of episodes of use[6]
Pill	5.2	11.1	1.3	3.2	0.8	1.5	2.9	26.1	1.8	1,077
IUD	1.0	5.2	0.0	2.2	0.0	0.0	0.7	9.1	0.5	296
Injectables	1.7	6.0	0.7	9.6	0.5	1.3	3.3	23.1	2.7	1,261
Male condom	1.9	7.3	3.9	0.5	1.0	0.9	4.7	20.1	1.6	2,125
Other modern method	0.8	7.8	2.3	2.3	2.0	0.1	2.3	17.6	1.5	252
Rhythm	6.5	9.3	1.0	0.0	1.3	0.0	3.3	21.5	1.6	956
Withdrawal	6.9	12.4	1.8	0.0	2.8	0.1	4.3	28.3	3.0	1,277
Other[1]	2.1	4.9	3.0	0.2	13.7	3.8	40.3	68.0	26.3	976
All methods	3.6	8.2	2.1	2.1	2.6	1.1	7.9	27.6	4.8	8,370

Note: Figures are based on life table calculations using information on episodes of use that began 3-62 months preceding the survey.
[1] Includes LAM and implants not shown separately
[2] Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation
[3] Includes lack of access/too far, costs too much, and inconvenient to use
[4] Reasons for discontinuation are mutually exclusive and add to the total given in this column.
[5] The episodes of use included in this column are a subset of the discontinued episodes included in the discontinuation rate. A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within 2 months of discontinuation.
[6] Number of episodes of use includes both episodes of use that were discontinued during the period of observation and episodes of use that were not discontinued during the period of observation.

7.11 REASONS FOR DISCONTINUING CONTRACEPTIVE METHODS

Table 7.11 shows the percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by the main reason stated for discontinuation, according to specific method. In total, 4,970 discontinuations occurred within this time period. Across all contraceptive methods, the most common reason for discontinuation was the desire to become pregnant (42 percent), followed by becoming pregnant while using the method (14 percent) and concern over side effects/health concerns (7 percent).

Across specific contraceptive methods, the reasons for discontinuation vary widely. For example, among pill users, 49 percent of discontinuations occurred because users wanted to become pregnant, 16 percent occurred because users became pregnant while using the pill, and 11 percent were due to side effects or health concerns. A similar pattern was observed among users of injectables: 42 percent of discontinuations occurred because the user wanted to become pregnant, 29 percent were due to side effects or health concerns, and 10 percent occurred because the user became pregnant during the episode of use.

Table 7.11 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by main reason stated for discontinuation, according to specific method, Nigeria 2013

Reason	Pill	IUD	Injection	Male condom	Lactational amenorrhoea	Rhythm	Withdrawal	Other	All methods
Became pregnant while using	16.0	4.1	9.7	12.1	0.7	21.1	24.7	17.7	14.3
Wanted to become pregnant	48.8	59.9	41.9	42.4	6.3	54.1	49.1	40.6	41.9
Husband disapproved	1.2	1.2	2.1	3.4	0.9	0.1	1.5	1.5	1.7
Wanted a more effective method	4.3	0.0	1.9	4.7	19.7	4.8	6.7	8.3	6.4
Side effects/health concerns	10.7	20.4	28.9	1.4	0.1	0.0	0.2	3.7	7.1
Lack of access/too far	0.7	1.5	0.8	0.4	0.8	0.0	0.0	0.3	0.5
Cost too much	1.1	0.0	0.6	0.8	0.0	0.1	0.0	0.0	0.4
Inconvenient to use	1.9	2.0	1.8	2.9	5.0	0.0	0.2	1.5	1.9
Up to God/fatalistic	0.0	0.7	0.3	0.6	0.0	0.0	0.0	0.0	0.2
Difficult to get pregnant/ menopausal	0.2	1.3	0.1	0.0	0.3	0.8	0.4	0.0	0.3
Infrequent sex/husband away	3.8	1.9	3.4	12.9	4.2	4.6	4.3	3.5	5.8
Marital dissolution/separation	0.2	0.0	0.2	0.5	0.0	0.1	0.4	0.0	0.2
Other	0.7	0.0	1.3	1.7	5.9	0.9	0.2	3.5	1.7
Don't know	0.2	0.0	0.2	0.5	1.2	0.1	0.3	0.8	0.4
Missing	10.2	6.9	7.0	15.6	54.8	13.3	12.1	18.5	17.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	764	130	750	1,014	585	584	806	302	4,970

Note: Total includes 34 women who reported discontinuation while using other modern methods not shown separately.

7.12 KNOWLEDGE OF THE FERTILE PERIOD

An elementary knowledge of reproductive physiology provides a useful background for successful practice of coitus-associated methods such as withdrawal and condoms. Such knowledge is particularly critical in the use of the rhythm method. The 2013 NDHS included a question designed to obtain information on the respondent's understanding of when a woman is most likely to become pregnant during the menstrual cycle. Respondents were asked, "From one menstrual period to the next, are there certain days when a woman is more likely to get pregnant if she has sexual relations?" If the reply was yes, the respondent was further asked whether that time was just before a woman's period begins, during her period, right after her period has ended, or halfway between two periods.

Table 7.12 shows the results for women who use the rhythm method and those who do not use it. Among all women, only 20 percent correctly reported when the fertile period occurs (i.e., a woman is most likely to conceive halfway between two periods). Users of natural family planning methods are more knowledgeable about the fertile period than nonusers; 37 percent of women who used the rhythm method correctly identified the middle of the cycle as the fertile period, as compared with 20 percent of women who did not use the rhythm method.

Table 7.12 generally shows that knowledge of the fertile period is minimal among women in Nigeria. These results indicate a continued need for education about women's reproductive physiology and the effective use of contraceptive methods.

Table 7.12 Knowledge of fertile period

Percent distribution of women age 15-49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm method, Nigeria 2013

Perceived fertile period	Users of rhythm method	Nonusers of rhythm method	All women
Just before her menstrual period begins	3.7	7.4	7.3
During her menstrual period	0.6	2.5	2.5
Right after her menstrual period has ended	54.0	45.6	45.7
Halfway between two menstrual periods	36.9	20.1	20.4
Other	0.8	0.1	0.1
No specific time	1.8	12.1	11.9
Don't know	0.5	11.5	11.3
Missing	1.7	0.8	0.8
Total	100.0	100.0	100.0
Number of women	793	38,155	38,948

7.13 NEED AND DEMAND FOR FAMILY PLANNING

This section provides information on the need and potential demand for family planning services in Nigeria. The definition of unmet need for family planning has been revised so that levels of unmet need

are comparable over time and across surveys (Bradley et al., 2012). In the past, the definition of unmet need was based on information from the contraceptive calendar and other questions that were not included in every survey. The revised definition includes only information that has been collected in every survey so that unmet need can be measured in the same way over time.

Unmet need for family planning refers to fecund women who are not using contraception but who wish to postpone their next birth (spacing) or stop childbearing altogether (limiting). Specifically, women are considered to have an unmet need for spacing if they are:

- At risk of becoming pregnant, not using contraception, and either do not want to become pregnant within the next two years or are unsure if or when they want to become pregnant.
- Pregnant with a mistimed pregnancy.
- Postpartum amenorrheic for up to two years following a mistimed birth and not using contraception.

Women are considered to have an unmet need for limiting if they are:

- At risk of becoming pregnant, not using contraception, and want no (more) children.
- Pregnant with an unwanted pregnancy.
- Postpartum amenorrheic for up to two years following an unwanted birth and not using contraception.

Women who are classified as infecund have no unmet need because they are not at risk of becoming pregnant.

Women who are using contraception are considered to have a met need. Women using contraception who say they want no (more) children are considered to have a met need for limiting, and women who are using contraception and say they want to delay having a child or are unsure if or when they want a (another) child are considered to have a met need for spacing.

Unmet need, total demand, percentage of demand satisfied, and percentage of demand satisfied by modern methods are defined as follows:

- **Unmet need:** the sum of unmet need for spacing and unmet need for limiting
- **Total demand for family planning:** the sum of unmet need and total contraceptive use
- **Percentage of demand satisfied:** total contraceptive use divided by the sum of unmet need and total contraceptive use (any method)
- **Percentage of demand satisfied by modern methods:** total modern contraceptive use divided by the sum of unmet need and total contraceptive use (any method)

Tables 7.13.1, 7.13.2, and 7.13.3 present data on unmet need, met need, and total demand for family planning among currently married women, all women, and women who are not currently married, respectively. These indicators help to evaluate the extent to which the family planning programme in Nigeria is meeting the demand for services.

Table 7.13.1 presents results among currently married women according to whether the need or demand is for spacing or limiting births. Overall, 16 percent of currently married women have an unmet need for family planning services (12 percent for spacing and 4 percent for limiting births). Fifteen percent

of married women have a met need for family planning or are currently using a contraceptive method. Thirty-one percent of currently married women have a demand for family planning. At present, about one-third of the potential demand for family planning is being met. Thus, if all currently married women who say they want to space or limit their children were to use family planning methods, the contraceptive prevalence rate would increase to 31 percent. Of the total demand for family planning methods, 49 percent is met by using any method and 31 percent is met by using modern methods.

As expected, unmet need for spacing is high among younger women, while unmet need for limiting childbearing is high among older women (Table 7.13.1). There is a slight difference in unmet need between rural (17 percent) and urban (15 percent) areas. The North Central zone has the highest unmet need (24 percent) and the North West the lowest (12 percent). Unmet need is inversely associated with a woman's education; it is lower among women with more than a secondary education (12 percent) than among those with a primary education or no education (19 percent and 15 percent, respectively). Unmet need is also inversely associated with a woman's wealth status. Among women in the lowest two wealth quintiles, 14 percent and 15 percent, respectively, have an unmet need, while 13 percent of their counterparts in the highest quintile have an unmet need. Unmet need is highest in the middle and fourth wealth quintiles (20 percent and 19 percent, respectively).

Wealth is positively associated with use of family planning services. Married women in the highest wealth quintile have a higher met need for family planning than those in the lowest quintile (37 percent and 2 percent, respectively).

Table 7.13.1 Need and demand for family planning among currently married women

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning, and the percentage of the demand for contraception that is satisfied, by background characteristics, Nigeria 2013

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	13.0	0.1	13.1	2.0	0.1	2.1	15.0	0.1	15.2	13.9	7.6	2,251
20-24	16.1	0.4	16.6	9.3	0.2	9.6	25.5	0.7	26.1	36.6	23.8	4,362
25-29	15.7	1.1	16.8	12.4	1.7	14.1	28.2	2.7	30.9	45.6	28.6	5,913
30-34	13.0	4.1	17.1	13.0	6.1	19.1	26.1	10.2	36.3	52.7	34.6	4,869
35-39	9.6	8.1	17.6	8.7	12.3	21.0	18.3	20.3	38.6	54.4	35.1	4,302
40-44	7.0	9.8	16.8	4.2	17.4	21.7	11.2	27.3	38.5	56.3	37.3	3,226
45-49	4.0	7.5	11.5	1.4	11.8	13.2	5.5	19.3	24.7	53.4	33.6	2,907
Residence												
Urban	10.3	4.7	14.9	15.2	11.6	26.8	25.4	16.3	41.7	64.2	40.5	10,124
Rural	12.8	3.9	16.8	4.8	3.7	8.5	17.6	7.7	25.2	33.6	22.6	17,705
Zone												
North Central	16.9	6.6	23.5	8.6	7.0	15.6	25.4	13.7	39.1	39.9	31.7	3,895
North East	14.2	3.3	17.5	1.8	1.4	3.2	16.0	4.7	20.7	15.2	13.1	4,679
North West	10.4	1.6	12.0	3.0	1.2	4.3	13.4	2.9	16.3	26.2	22.4	10,034
South East	7.4	5.1	12.5	16.0	13.2	29.3	23.4	18.3	41.8	70.0	26.4	2,333
South South	14.9	7.3	22.2	16.6	11.4	28.1	31.5	18.7	50.2	55.9	32.6	2,699
South West	9.0	6.5	15.4	19.9	18.1	38.0	28.9	24.6	53.5	71.1	46.6	4,189
State												
North Central												
FCT-Abuja	13.6	6.2	19.7	12.2	12.9	25.2	25.8	19.1	44.9	56.0	45.8	200
Benue	18.0	13.4	31.4	7.3	9.2	16.5	25.3	22.6	47.9	34.4	25.2	827
Kogi	11.4	9.6	20.9	7.1	3.4	10.5	18.5	13.0	31.5	33.4	27.2	433
Kwara	8.1	4.2	12.2	20.5	19.7	40.2	28.5	23.9	52.4	76.7	52.9	384
Nasarawa	14.6	6.2	20.8	9.0	9.1	18.1	23.6	15.4	38.9	46.5	41.9	420
Niger	22.5	1.8	24.3	5.2	1.4	6.6	27.7	3.2	30.9	21.4	18.2	1,190
Plateau	16.2	6.8	23.0	9.2	5.9	15.2	25.4	12.8	38.2	39.7	37.8	442
North East												
Adamawa	16.0	5.8	21.8	3.0	1.4	4.4	19.0	7.2	26.1	16.8	13.5	586
Bauchi	14.2	2.2	16.4	1.5	0.7	2.2	15.8	2.8	18.6	11.9	11.5	1,051
Borno	15.0	2.0	17.1	0.8	1.0	1.8	15.8	3.0	18.8	9.4	9.4	1,120
Gombe	14.3	5.1	19.4	2.3	1.7	4.0	16.6	6.8	23.4	17.2	16.9	467
Taraba	14.2	5.3	19.5	3.3	4.7	8.0	17.5	10.1	27.5	29.0	23.4	632
Yobe	11.8	2.3	14.1	1.0	0.1	1.1	12.9	2.4	15.3	7.5	3.6	824

Continued…

Table 7.13.1—*Continued*

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
North West												
Jigawa	14.8	1.8	16.5	0.7	0.3	0.9	15.4	2.1	17.5	5.4	3.2	1,256
Kaduna	4.2	1.6	5.8	13.4	6.8	20.2	17.6	8.3	25.9	77.7	71.3	1,594
Kano	9.4	1.6	11.1	0.4	0.1	0.6	9.9	1.8	11.6	5.1	4.4	2,521
Katsina	13.2	1.3	14.5	1.3	0.0	1.3	14.5	1.3	15.8	8.2	7.2	1,408
Kebbi	16.9	1.3	18.2	1.0	0.3	1.3	17.9	1.6	19.5	6.6	6.2	1,074
Sokoto	5.0	2.5	7.5	0.8	0.3	1.1	5.7	2.8	8.6	12.4	8.4	956
Zamfara	11.4	1.4	12.8	2.7	0.4	3.0	14.1	1.8	15.9	19.1	8.1	1,226
South East												
Abia	5.2	5.9	11.2	14.8	18.7	33.4	20.0	24.6	44.6	75.0	35.0	292
Anambra	5.1	2.0	7.1	19.2	15.8	35.0	24.3	17.7	42.1	83.2	27.9	564
Ebonyi	13.1	7.5	20.5	11.5	4.2	15.7	24.6	11.6	36.2	43.3	15.4	564
Enugu	5.8	5.9	11.7	15.0	16.4	31.4	20.8	22.3	43.1	72.9	33.2	467
Imo	6.3	4.8	11.1	19.6	14.5	34.1	25.9	19.3	45.2	75.5	23.6	446
South South												
Akwa Ibom	18.8	10.3	29.1	17.5	7.9	25.5	36.3	18.3	54.6	46.7	30.2	410
Bayelsa	22.2	6.3	28.5	10.7	2.6	13.3	32.9	8.8	41.7	31.8	24.3	202
Cross River	24.2	6.6	30.8	17.5	6.5	24.0	41.8	13.1	54.8	43.8	26.2	437
Delta	11.6	4.4	16.1	14.1	14.6	28.7	25.7	19.1	44.8	64.1	37.5	551
Edo	9.9	8.9	18.9	14.7	15.7	30.3	24.6	24.6	49.2	61.6	38.9	395
Rivers	9.9	7.6	17.6	20.3	14.2	34.5	30.3	21.8	52.1	66.3	33.5	704
South West												
Ekiti	11.4	7.4	18.7	12.6	21.9	34.5	23.9	29.3	53.2	64.8	50.1	194
Lagos	8.3	3.5	11.8	26.4	21.9	48.3	34.7	25.3	60.1	80.4	43.9	1,236
Ogun	14.6	8.7	23.4	14.8	11.2	26.0	29.4	20.0	49.4	52.7	43.5	655
Ondo	10.2	6.7	16.9	13.9	17.2	31.1	24.1	23.9	48.0	64.8	42.5	510
Osun	7.9	8.6	16.5	17.7	20.7	38.3	25.6	29.3	54.9	69.9	57.6	465
Oyo	5.8	7.4	13.2	20.8	16.6	37.4	26.6	24.0	50.6	73.9	48.2	1,129
Education												
No education	12.0	2.9	14.9	1.4	1.3	2.7	13.4	4.2	17.5	15.2	9.8	13,470
Primary	12.2	7.1	19.3	9.2	10.7	19.9	21.4	17.9	39.3	50.8	34.7	5,336
Secondary	12.7	4.6	17.3	18.0	11.1	29.2	30.7	15.7	46.4	62.8	40.2	6,981
More than secondary	8.0	3.7	11.7	21.5	15.5	37.0	29.5	19.2	48.7	75.9	46.0	2,043
Wealth quintile												
Lowest	12.0	2.3	14.3	0.8	0.8	1.7	12.8	3.1	15.9	10.4	5.3	6,424
Second	11.7	3.7	15.4	2.9	2.2	5.1	14.6	5.9	20.6	24.9	18.1	5,986
Middle	14.8	5.3	20.0	6.9	6.3	13.3	21.7	11.6	33.3	39.8	27.4	4,983
Fourth	12.9	5.8	18.7	13.7	9.3	23.1	26.6	15.2	41.8	55.2	34.6	5,042
Highest	8.5	4.5	13.0	20.6	16.1	36.7	29.1	20.5	49.6	73.9	47.0	5,395
Total	11.9	4.2	16.1	8.5	6.6	15.1	20.4	10.8	31.2	48.5	31.3	27,830

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al., 2012.
[1] Total demand is the sum of unmet need and met need.
[2] Percentage of demand satisfied is met need divided by total demand.
[3] Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, and lactational amenorrhoea method (LAM).

The data for all women and women who are not currently married follow the same trends observed among currently married women (Tables 7.13.2 and 7.13.3). Total demand for family planning is high among all women (between 30 percent and 37 percent) in each age group between 20 and 44 years. These groups represent women of childbearing age. Unmet need among unmarried women is higher than that among currently married women (22 percent versus 16 percent).

Table 7.13.2 Need and demand for family planning for all women

Percentage of all women age 15-49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning, and the percentage of the demand for contraception that is satisfied, by background characteristics, Nigeria 2013

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	6.2	0.0	6.2	6.1	0.1	6.1	12.2	0.1	12.3	49.8	39.3	7,820
20-24	12.3	0.3	12.6	16.9	0.2	17.1	29.2	0.5	29.7	57.6	44.4	6,757
25-29	14.1	0.9	15.0	17.0	1.4	18.4	31.0	2.4	33.4	55.1	37.8	7,145
30-34	12.2	3.8	15.9	14.5	5.8	20.3	26.7	9.5	36.3	56.0	37.8	5,467
35-39	9.0	7.6	16.6	8.9	11.8	20.6	17.8	19.4	37.2	55.5	36.5	4,718
40-44	6.5	9.0	15.5	4.5	16.7	21.2	10.9	25.7	36.7	57.8	38.3	3,620
45-49	3.4	6.5	9.9	1.5	11.0	12.4	4.9	17.5	22.4	55.5	35.7	3,422
Residence												
Urban	7.4	2.9	10.4	16.6	7.5	24.1	24.1	10.4	34.5	70.0	48.5	16,414
Rural	11.3	3.2	14.5	6.8	3.3	10.1	18.0	6.5	24.5	41.0	28.9	22,534
Zone												
North Central	12.8	4.9	17.7	9.0	5.3	14.3	21.8	10.2	32.0	44.7	36.7	5,572
North East	12.6	2.8	15.4	2.0	1.2	3.1	14.6	3.9	18.5	16.9	14.6	5,766
North West	9.1	1.4	10.4	3.6	1.1	4.6	12.6	2.5	15.1	30.8	27.2	11,877
South East	5.7	2.8	8.5	19.2	7.4	26.6	25.0	10.1	35.1	75.8	40.9	4,476
South South	11.1	4.2	15.3	21.4	7.2	28.6	32.6	11.3	43.9	65.2	43.7	4,942
South West	6.9	4.4	11.3	20.5	12.6	33.1	27.4	17.0	44.4	74.6	51.9	6,314
State												
North Central												
FCT-Abuja	9.6	4.1	13.7	13.8	8.3	22.0	23.4	12.4	35.8	61.6	50.9	315
Benue	13.7	10.0	23.7	9.6	7.3	16.9	23.3	17.3	40.6	41.6	32.6	1,240
Kogi	8.3	6.0	14.3	10.2	2.1	12.3	18.4	8.1	26.5	46.2	41.2	704
Kwara	5.4	2.7	8.1	17.3	13.2	30.5	22.7	15.9	38.6	79.0	55.8	596
Nasarawa	12.9	4.4	17.3	7.3	6.6	13.9	20.2	11.0	31.2	44.5	39.9	594
Niger	18.5	1.4	20.0	4.7	1.2	5.9	23.2	2.6	25.8	22.8	19.7	1,462
Plateau	11.5	4.6	16.1	8.1	4.3	12.5	19.6	8.9	28.5	43.7	42.0	662
North East												
Adamawa	14.3	4.1	18.4	2.5	1.0	3.5	16.7	5.1	21.8	15.9	13.1	828
Bauchi	13.0	2.0	15.0	1.4	0.6	2.0	14.4	2.6	17.0	11.8	11.4	1,161
Borno	12.4	1.6	14.0	1.0	0.8	1.7	13.4	2.4	15.8	11.1	11.1	1,412
Gombe	12.8	4.4	17.2	2.3	1.5	3.8	15.1	5.9	21.1	18.2	17.1	550
Taraba	13.3	4.4	17.7	4.9	3.7	8.7	18.3	8.1	26.4	32.9	27.1	844
Yobe	10.1	2.0	12.0	0.9	0.1	1.0	11.0	2.1	13.1	7.7	3.8	971
North West												
Jigawa	13.7	1.6	15.3	0.6	0.3	0.9	14.3	1.9	16.2	5.4	3.2	1,353
Kaduna	4.3	1.2	5.5	15.7	5.2	20.9	20.0	6.4	26.3	79.2	73.8	2,136
Kano	7.5	1.3	8.8	0.3	0.1	0.5	7.9	1.4	9.3	5.0	4.3	3,189
Katsina	12.2	1.2	13.4	1.2	0.0	1.2	13.4	1.2	14.6	8.2	7.2	1,525
Kebbi	14.9	1.1	16.0	0.9	0.2	1.1	15.8	1.4	17.1	6.5	6.1	1,244
Sokoto	4.4	2.2	6.6	0.7	0.3	0.9	5.0	2.5	7.5	12.4	8.3	1,098
Zamfara	10.6	1.3	11.9	2.5	0.3	2.8	13.0	1.7	14.7	19.0	8.0	1,332
South East												
Abia	4.6	3.3	8.0	19.9	11.7	31.6	24.5	15.0	39.6	79.9	49.5	518
Anambra	3.2	1.1	4.3	22.0	8.5	30.5	25.2	9.6	34.8	87.5	43.1	1,052
Ebonyi	10.7	3.9	14.6	14.1	2.3	16.4	24.8	6.2	31.0	52.9	28.1	1,122
Enugu	3.6	3.1	6.7	20.3	8.9	29.3	24.0	12.0	36.0	81.4	50.1	951
Imo	5.3	2.6	7.8	20.9	8.4	29.4	26.2	11.0	37.2	78.9	37.0	833
South South												
Akwa Ibom	13.3	5.3	18.6	23.4	4.4	27.8	36.7	9.7	46.4	59.9	41.3	864
Bayelsa	17.1	3.5	20.6	17.1	1.5	18.7	34.3	5.0	39.3	47.5	40.3	364
Cross River	17.7	4.2	21.9	19.5	5.3	24.7	37.2	9.4	46.6	53.1	36.6	703
Delta	9.8	2.5	12.2	21.3	8.6	29.9	31.0	11.1	42.1	71.0	50.2	993
Edo	6.3	5.0	11.2	19.8	8.8	28.6	26.1	13.8	39.9	71.8	52.6	742
Rivers	8.2	4.4	12.6	23.5	9.6	33.1	31.7	14.0	45.7	72.5	41.1	1,276
South West												
Ekiti	9.7	4.6	14.3	15.9	13.9	29.7	25.6	18.4	44.0	67.6	54.3	326
Lagos	5.9	2.2	8.1	25.8	14.7	40.5	31.7	16.9	48.6	83.4	51.1	1,964
Ogun	12.0	6.9	18.9	14.5	8.9	23.4	26.5	15.8	42.3	55.2	45.6	883
Ondo	8.6	4.2	12.8	18.1	11.4	29.5	26.7	15.6	42.4	69.7	48.9	808
Osun	4.9	5.2	10.1	19.5	12.9	32.4	24.4	18.1	42.5	76.3	63.5	765
Oyo	4.9	5.3	10.2	19.9	12.3	32.2	24.8	17.6	42.4	76.0	51.8	1,568
Education												
No education	11.2	2.7	13.9	1.4	1.2	2.6	12.6	3.9	16.5	16.0	10.3	14,729
Primary	10.9	5.8	16.7	8.9	9.4	18.3	19.8	15.2	35.0	52.3	36.6	6,734
Secondary	8.5	2.4	10.9	17.5	6.0	23.5	26.0	8.4	34.4	68.4	48.0	13,927
More than secondary	5.5	2.2	7.7	28.2	9.1	37.3	33.7	11.2	44.9	82.9	57.8	3,558

Continued…

Table 7.13.2—*Continued*

Background characteristic	Unmet need for family planning: For spacing	Unmet need for family planning: For limiting	Unmet need for family planning: Total	Met need for family planning (currently using): For spacing	Met need for family planning (currently using): For limiting	Met need for family planning (currently using): Total	Total demand for family planning[1]: For spacing	Total demand for family planning[1]: For limiting	Total demand for family planning[1]: Total	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]	Number of women
Wealth quintile												
Lowest	11.2	2.1	13.3	1.0	0.8	1.7	12.1	2.9	15.0	11.5	6.1	7,132
Second	10.7	3.2	13.8	3.9	2.0	5.9	14.6	5.2	19.7	29.9	22.0	7,428
Middle	11.4	3.6	15.1	9.3	4.7	14.0	20.7	8.3	29.1	48.1	34.6	7,486
Fourth	9.6	3.8	13.4	15.6	6.6	22.2	25.3	10.3	35.6	62.3	42.9	7,992
Highest	6.1	2.7	8.8	21.9	10.0	31.9	28.0	12.7	40.7	78.4	54.6	8,910
Total	9.7	3.1	12.7	10.9	5.1	16.0	20.6	8.1	28.7	55.7	38.8	38,948

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al., 2012.
[1] Total demand is the sum of unmet need and met need.
[2] Percentage of demand satisfied is met need divided by total demand.
[3] Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, and lactational amenorrhoea method (LAM).

Table 7.13.3 Need and demand for family planning for sexually active unmarried women

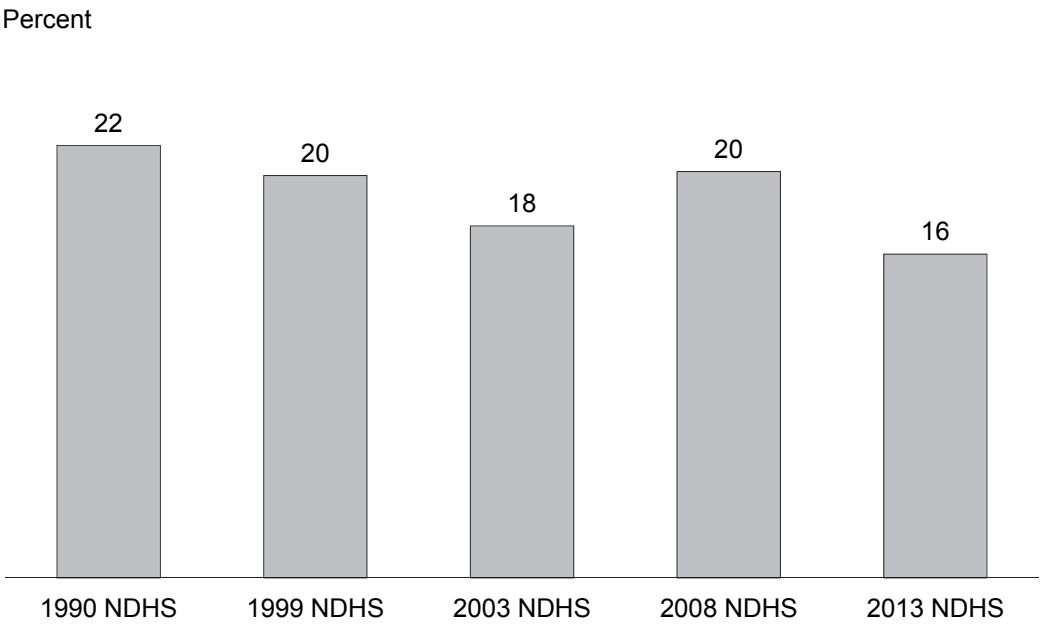
Percentage of sexually active unmarried women age 15-49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning, and the percentage of the demand for contraception that is satisfied, by background characteristics, Nigeria 2013

Background characteristic	Unmet need for family planning: For spacing	Unmet need for family planning: For limiting	Unmet need for family planning: Total	Met need for family planning (currently using): For spacing	Met need for family planning (currently using): For limiting	Met need for family planning (currently using): Total	Total demand for family planning[1]: For spacing	Total demand for family planning[1]: For limiting	Total demand for family planning[1]: Total	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]	Number of women
Age												
15-19	35.3	0.0	35.3	60.6	0.5	61.1	95.9	0.5	96.3	63.4	51.6	363
20-24	16.8	0.1	16.9	76.2	0.1	76.3	93.0	0.2	93.2	81.9	68.1	528
25-29	15.5	0.4	15.9	70.2	0.3	70.5	85.6	0.7	86.3	81.6	66.9	377
30-34	16.7	1.7	18.4	59.7	6.6	66.3	76.4	8.3	84.8	78.2	58.1	149
35-39	12.4	15.4	27.9	30.6	20.4	51.1	43.0	35.9	78.9	64.7	53.1	72
40-44	15.3	10.2	25.5	23.9	34.7	58.6	39.2	44.9	84.1	69.7	41.0	60
45-49	(1.9)	(10.1)	(12.0)	(8.7)	(37.8)	(46.4)	(10.6)	(47.9)	(58.4)	(79.5)	(52.2)	30
Residence												
Urban	14.7	0.6	15.3	72.6	2.2	74.8	87.3	2.8	90.1	83.0	69.7	877
Rural	27.1	2.8	29.9	53.9	5.8	59.7	81.0	8.6	89.5	66.6	50.3	700
Zone												
North Central	26.7	7.1	33.8	51.6	5.5	57.1	78.3	12.6	90.9	62.8	55.6	163
North East	60.6	3.3	63.9	22.4	1.5	23.9	83.0	4.8	87.8	27.2	24.0	76
North West	21.4	0.0	21.4	72.6	0.0	72.6	93.9	0.0	93.9	77.2	75.4	130
South East	17.4	0.3	17.7	73.0	3.3	76.3	90.4	3.6	94.0	81.2	60.7	264
South South	19.0	0.9	19.9	66.1	3.5	69.6	85.1	4.4	89.6	77.7	59.9	614
South West	11.6	1.3	12.9	66.6	5.9	72.4	78.2	7.2	85.4	84.9	69.4	330
Education												
No education	39.6	9.5	49.1	22.2	4.0	26.1	61.7	13.5	75.2	34.8	21.1	70
Primary	25.3	5.7	31.1	32.5	14.8	47.3	57.8	20.5	78.4	60.4	49.5	192
Secondary	21.9	0.6	22.5	66.1	2.9	69.1	88.0	3.6	91.6	75.4	60.3	977
More than secondary	8.5	0.3	8.8	85.6	0.0	85.6	94.1	0.3	94.4	90.7	75.5	339
Wealth quintile												
Lowest	(43.9)	(3.5)	(47.4)	(25.4)	(7.4)	(32.8)	(69.3)	(10.9)	(80.2)	(40.9)	(29.0)	34
Second	37.4	4.7	42.1	40.4	2.9	43.2	77.8	7.5	85.3	50.7	33.2	166
Middle	24.0	2.3	26.3	56.1	4.9	61.0	80.1	7.2	87.3	69.8	53.4	327
Fourth	18.5	1.6	20.0	65.1	5.8	70.9	83.6	7.4	90.9	78.0	62.1	483
Highest	13.0	0.1	13.1	77.7	1.5	79.1	90.7	1.6	92.3	85.8	73.7	567
Total	20.2	1.6	21.8	64.3	3.8	68.1	84.5	5.4	89.8	75.8	61.1	1,577

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al., 2012. Figures in parentheses are based on 25-49 unweighted cases. This table is based on sexually active unmarried women, which includes women who have had sexual intercourse within 30 days preceding the survey.
[1] Total demand is the sum of unmet need and met need.
[2] Percentage of demand satisfied is met need divided by total demand.
[3] Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, and lactational amenorrhoea method (LAM).

Overall, unmet need decreased from 22 percent in the 1990 NDHS to 16 percent in 2013 (Figure 7.2).

Figure 7.2 **Trends in unmet need for family planning**



Note: Estimates for all years are based on the revised definition of unmet need.

7.14 FUTURE USE OF CONTRACEPTION

An important indicator of the changing demand for family planning is the extent to which non-users plan to use contraception in the future. Currently married women who were not using contraception at the time of the survey were asked about their intention to use family planning in the future. Table 7.14 shows that 23 percent of currently married nonusers intend to use family planning methods in the future, while 63 percent report that they do not intend to use a method. The proportion of women who intend to use a method varies with the number of living children they have. The proportion is highest among women with one to two children and lowest among those with no living children (14 percent).

Table 7.14 Future use of contraception

Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Nigeria 2013

	Number of living children[1]					
Intention	0	1	2	3	4+	Total
Intends to use	13.9	27.5	27.1	26.0	21.0	23.3
Unsure	14.8	12.0	11.2	9.0	8.8	10.2
Does not intend to use	68.0	57.8	58.6	61.6	66.7	63.3
Missing	3.3	2.7	3.0	3.3	3.5	3.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,814	3,841	3,838	3,601	10,520	23,613

[1] Includes current pregnancy

7.15 EXPOSURE TO FAMILY PLANNING MESSAGES IN THE MEDIA

The mass media and interpersonal communication can be major sources of family planning messages. Information about public exposure to messages through a particular medium allows policymakers to ensure the use of the most effective means of communication for various target groups in the population. To assess the effectiveness of dissemination of family planning information through different media, interviewers asked respondents in the 2013 NDHS whether they had been exposed to any family planning messages in the past few months. Interviewers asked about family planning messages on the radio or television; in a newspaper, magazine, pamphlet, poster, or leaflet; or at a community event.

Table 7.15 shows that radio is the most frequent source of family planning messages for both women (33 percent) and men (48 percent). One in every five women and one-fourth of men reported seeing a family planning message on television in the past few months. Newspapers and magazines are the least common source of family planning messages among both women and men (7 percent and 14 percent, respectively). Sixty-two percent of women and 47 percent of men did not receive family planning information from any of the sources.

Exposure to family planning messages is more common among men than women and more common in urban areas than rural areas. Among the zones, women in the South West and men in the South East and South South have the highest exposure to family planning messages through any media. The more education a respondent has, the greater the likelihood that he or she has been exposed to family planning messages through each type of mass media. Media exposure also increases with increasing wealth quintile among both women and men.

Table 7.15 Exposure to family planning messages

Percentage of women and men age 15-49 who heard or saw a family planning message on radio, on television, or in a newspaper or magazine in the past few months, according to background characteristics, Nigeria 2013

	Women							Men						
Background characteristic	Radio	Tele-vision	News-paper/ maga-zine	Poster/ leaflet or brochure	Other	None of these media sources	Number of women	Radio	Tele-vision	News-paper/ maga-zine	Poster/ leaflet or brochure	Other	None of these media sources	Number of men
Age														
15-19	24.0	12.6	4.0	9.0	3.4	71.2	7,820	28.9	14.6	4.4	10.8	3.3	65.2	3,619
20-24	32.4	18.5	7.2	13.6	4.6	62.8	6,757	44.1	24.6	11.8	19.1	7.0	49.3	2,892
25-29	36.1	22.4	7.8	15.0	5.8	59.4	7,145	50.4	25.9	15.8	23.8	7.0	42.8	2,757
30-34	37.8	23.4	8.6	16.4	6.5	57.5	5,467	53.9	30.8	17.4	22.5	7.2	40.7	2,414
35-39	38.0	22.4	7.6	15.2	6.5	57.7	4,718	56.3	31.7	17.3	24.0	7.4	40.1	2,175
40-44	35.2	22.0	7.6	14.1	6.6	60.6	3,620	56.0	31.4	19.6	23.5	8.7	39.9	1,777
45-49	32.2	17.6	5.3	11.3	5.7	64.1	3,422	58.2	31.3	17.4	21.8	9.3	38.9	1,724
Residence														
Urban	49.6	34.7	12.6	21.2	9.0	43.5	16,414	53.4	37.5	19.5	24.1	8.9	39.6	7,611
Rural	21.0	8.3	2.5	7.7	2.7	76.1	22,534	42.8	16.7	9.2	16.6	5.0	53.2	9,748
Zone														
North Central	25.2	15.2	6.3	15.3	6.3	69.0	5,572	48.7	24.8	15.4	25.6	10.2	44.5	2,685
North East	15.3	7.1	2.3	9.3	0.8	80.7	5,766	32.6	12.6	7.3	21.8	7.1	60.4	2,515
North West	24.5	5.6	2.3	5.5	0.1	73.4	11,877	33.8	7.5	4.2	15.1	1.3	63.1	5,185
South East	38.4	23.6	12.4	15.5	2.8	56.5	4,476	49.2	30.6	19.2	13.7	5.9	45.2	1,686
South South	38.1	30.1	11.6	17.4	9.5	55.2	4,942	70.2	53.9	27.2	22.3	9.2	24.3	2,445
South West	64.6	49.1	11.9	25.6	17.3	28.9	6,314	63.7	44.9	20.1	23.3	11.1	30.3	2,843
State														
North Central														
FCT-Abuja	48.8	42.6	18.5	40.6	4.1	38.7	315	69.8	63.1	48.7	45.6	5.2	18.3	175
Benue	23.7	8.1	2.7	3.0	3.1	74.5	1,240	68.8	20.1	17.6	24.2	20.6	22.8	616
Kogi	22.3	19.0	10.8	23.8	17.7	60.6	704	42.1	25.5	7.7	31.5	1.4	49.2	333
Kwara	69.5	37.2	16.4	54.7	19.0	20.5	596	71.1	30.2	22.2	29.0	24.6	25.9	274
Nasarawa	14.2	9.5	3.8	9.4	3.1	79.0	594	39.8	23.5	15.6	14.3	13.0	53.3	282
Niger	14.1	9.1	2.7	6.4	2.9	84.4	1,462	34.5	22.4	9.1	28.4	0.8	60.3	701
Plateau	14.3	10.3	4.0	7.0	0.6	82.6	662	23.8	13.5	8.7	11.7	7.7	70.8	302
North East														
Adamawa	25.7	10.9	4.5	20.2	1.5	66.3	828	47.1	15.1	11.7	31.8	7.1	34.0	358
Bauchi	18.3	6.7	1.7	14.9	0.7	76.8	1,161	20.6	4.3	4.4	18.6	9.8	71.1	512
Borno	17.5	8.3	1.9	2.0	0.2	80.2	1,412	36.8	25.7	11.4	14.4	11.1	60.1	676
Gombe	11.8	6.9	2.1	8.8	1.9	84.4	550	39.8	12.3	8.7	28.8	4.2	52.0	255
Taraba	4.6	2.6	1.4	5.9	0.2	90.9	844	52.3	7.9	4.0	48.7	2.7	41.7	325
Yobe	10.9	7.0	2.8	7.1	0.9	87.3	971	6.9	2.5	1.8	3.0	2.3	92.0	390
North West														
Jigawa	13.1	1.1	0.2	3.8	0.3	85.9	1,353	56.4	8.5	3.5	17.4	4.2	42.0	510
Kaduna	33.0	26.1	10.5	20.5	0.1	58.9	2,136	50.2	19.2	13.5	29.1	1.0	39.6	1,033
Kano	36.0	2.1	1.1	2.5	0.0	62.7	3,189	16.6	2.0	1.0	4.1	1.3	83.4	1,592
Katsina	36.9	0.7	0.3	4.2	0.2	62.6	1,525	54.3	8.1	1.9	43.7	0.9	41.6	596
Kebbi	5.4	0.9	0.1	0.1	0.0	94.4	1,244	14.5	4.0	1.9	3.0	0.3	83.4	551
Sokoto	2.5	0.3	0.1	0.6	0.1	97.1	1,098	26.3	7.3	2.4	4.9	2.2	72.4	424
Zamfara	16.6	0.1	0.0	1.1	0.0	83.1	1,332	34.9	2.9	2.6	6.3	0.3	63.5	479
South East														
Abia	43.6	30.4	12.6	7.4	1.0	52.2	518	49.2	42.7	27.6	27.4	15.0	42.5	229
Anambra	19.7	16.6	11.2	15.7	1.3	71.6	1,052	29.0	23.9	14.9	10.4	0.6	61.8	446
Ebonyi	45.3	26.5	13.7	23.2	6.5	48.8	1,122	71.9	20.8	18.2	6.8	0.4	26.7	368
Enugu	40.1	23.6	12.4	8.7	1.2	58.1	951	33.1	21.8	6.8	8.4	0.8	62.9	320
Imo	47.5	24.4	12.1	17.9	2.8	48.7	833	67.2	51.3	32.9	21.5	18.1	28.0	323

Continued…

Table 7.15—*Continued*

Background characteristic	Women							Men						
	Radio	Tele-vision	News-paper/ maga-zine	Poster/ leaflet or brochure	Other	None of these media sources	Number of women	Radio	Tele-vision	News-paper/ maga-zine	Poster/ leaflet or brochure	Other	None of these media sources	Number of men
South South														
Akwa Ibom	49.0	33.6	10.5	17.8	5.9	45.9	864	79.9	56.3	23.7	18.0	15.0	16.1	451
Bayelsa	44.9	41.0	17.7	27.0	21.8	42.0	364	50.7	49.5	11.1	2.5	2.5	41.3	187
Cross River	46.7	29.2	6.9	36.1	12.8	41.5	703	57.0	33.0	16.0	16.4	3.9	37.1	310
Delta	29.3	24.9	13.8	11.4	10.0	67.3	993	58.0	34.9	7.9	13.8	2.0	40.3	473
Edo	49.8	45.3	20.4	23.3	16.5	42.2	742	62.6	59.0	17.6	19.9	2.9	25.4	365
Rivers	24.1	20.4	6.3	5.3	2.3	71.0	1,276	88.4	74.1	58.7	41.1	18.3	6.9	658
South West														
Ekiti	67.2	61.9	13.9	44.1	28.4	26.0	326	91.1	77.8	33.4	69.3	4.3	4.7	148
Lagos	63.2	58.3	22.7	25.0	19.3	25.3	1,964	55.7	53.9	22.6	18.3	7.4	31.6	948
Ogun	60.7	50.3	4.3	24.9	11.2	35.4	883	77.6	70.3	42.7	27.2	10.2	20.1	358
Ondo	49.5	34.2	5.2	18.4	6.5	45.4	808	51.9	39.2	20.5	23.1	11.4	43.8	404
Osun	74.5	53.5	10.5	31.8	32.4	22.7	765	91.1	26.8	8.0	10.4	1.1	7.8	356
Oyo	71.0	40.0	6.2	23.4	14.1	24.7	1,568	53.4	23.2	7.0	25.1	24.3	44.2	629
Education														
No education	14.3	2.2	0.2	3.2	0.9	84.1	14,729	25.4	2.9	0.5	7.7	1.5	72.7	3,685
Primary	32.7	15.8	2.3	10.7	5.6	62.9	6,734	45.0	17.2	4.6	12.8	5.1	51.1	2,907
Secondary	44.2	29.3	9.3	19.1	8.0	49.2	13,927	50.4	29.8	14.1	20.2	7.2	43.2	8,281
More than secondary	67.9	59.1	32.5	38.5	12.8	23.2	3,558	73.3	56.9	42.9	45.4	14.6	18.5	2,486
Wealth quintile														
Lowest	9.0	0.5	0.1	1.9	0.2	90.2	7,132	25.5	1.6	0.9	8.2	1.7	72.7	2,862
Second	16.1	2.7	0.6	5.1	1.4	81.5	7,428	37.4	6.5	4.1	13.5	4.0	58.9	2,992
Middle	28.5	10.9	3.3	10.1	4.4	67.3	7,486	46.5	19.1	9.1	17.4	5.5	48.2	3,338
Fourth	47.0	28.0	7.6	18.2	8.2	47.2	7,992	54.2	34.2	15.7	23.2	7.8	40.3	3,835
Highest	57.8	48.0	19.3	28.1	11.2	33.7	8,910	63.7	52.9	30.6	31.1	11.7	27.8	4,332
Total	33.1	19.4	6.8	13.4	5.4	62.4	38,948	47.5	25.8	13.7	19.9	6.7	47.2	17,359

7.16 EXPOSURE TO SPECIFIC FAMILY PLANNING MESSAGES

Respondents in the 2013 NDHS were asked if they had heard or seen specific family planning or health messages in the past few months. Table 7.16 shows the percent distribution of women and men age 15-49 who heard or saw specific messages, by background characteristics.

Overall, 12 percent of women and 22 percent of men heard or saw "Well-spaced children are every parent's joy," 18 percent of women and 21 percent of men heard or saw "Unspaced children makes the going tough," and 13 percent of women and 19 percent of men heard or saw "We *dey kampe* with female condom." Most of these family planning messages were heard or seen more often in the South West, South East, and South South. In general, Nigerian men have higher exposure levels to each specific message than women.

Women and men age 15-19 have the lowest levels of exposure to all of the specified messages. Urban respondents, those with more education, and those in the highest wealth quintile are more likely than their counterparts to have been exposed to specific family planning messages.

Table 7.16 Exposure to specific family planning messages

Percentage of women and men age 15-49 who heard or saw a family planning message in the past few months, according to background characteristics, Nigeria 2013

Background characteristic	Women							Men						
	As for me and my partner, we *dey kampe* with female condom	Unspaced children makes the going tough. For the love of your family, go for child spacing today	Well-spaced children are every parent's joy	It's not too late to prevent unwanted pregnancy	Why is your wife looking so good?	Other pro-gramme	Number of women	As for me and my partner, we *dey kampe* with female condom	Unspaced children makes the going tough. For the love of your family, go for child spacing today	Well-spaced children are every parent's joy	It's not too late to prevent unwanted pregnancy	Why is your wife looking so good?	Other pro-gramme	Number of men
Age														
15-19	8.7	11.2	8.4	7.6	4.4	0.5	7,820	12.5	10.3	11.6	8.6	4.6	0.5	3,619
20-24	14.3	16.8	11.3	10.1	7.1	0.3	6,757	18.0	18.0	21.0	13.5	7.5	0.4	2,892
25-29	15.0	19.0	13.5	10.6	8.2	0.6	7,145	20.7	22.0	24.2	13.2	8.0	0.6	2,757
30-34	15.3	21.7	14.2	10.2	8.8	0.6	5,467	20.9	26.0	24.0	13.7	8.9	0.4	2,414
35-39	14.5	21.2	15.6	9.4	8.1	0.7	4,718	20.6	26.6	27.0	15.7	9.4	0.6	2,175
40-44	14.8	19.5	13.4	9.6	8.9	0.4	3,620	21.9	27.4	26.4	15.8	8.8	0.4	1,777
45-49	11.1	16.8	12.1	7.6	7.4	0.3	3,422	20.3	24.4	29.8	16.6	9.7	0.3	1,724
Residence														
Urban	20.2	27.7	19.5	15.6	11.3	0.8	16,414	22.7	25.9	26.8	16.7	8.3	0.7	7,611
Rural	8.2	10.2	7.1	4.8	4.4	0.3	22,534	15.5	16.9	18.5	10.6	7.3	0.3	9,748
Zone														
North Central	9.0	13.1	11.5	8.9	5.6	0.8	5,572	23.4	20.4	20.2	11.8	4.5	0.7	2,685
North East	6.1	10.2	7.8	4.6	3.9	0.1	5,766	10.3	18.2	17.7	10.0	7.6	0.2	2,515
North West	3.4	12.1	5.8	3.9	5.0	0.4	11,877	9.6	10.5	17.1	6.4	6.1	0.3	5,185
South East	17.5	22.4	19.5	15.0	9.8	0.3	4,476	32.4	25.2	19.8	12.1	10.2	0.1	1,686
South South	26.4	16.3	14.2	12.1	9.8	0.2	4,942	26.5	33.2	31.6	26.5	12.9	0.3	2,445
South West	28.6	35.8	23.0	18.2	12.5	1.2	6,314	23.0	29.1	30.4	19.4	8.2	1.1	2,843
State														
North Central														
FCT-Abuja	5.6	30.2	28.5	25.4	21.1	0.8	315	10.3	66.9	36.1	3.1	1.7	0.2	175
Benue	18.1	11.9	6.1	4.8	1.9	0.4	1,240	66.6	14.7	21.2	9.4	4.4	0.0	616
Kogi	15.1	16.9	13.0	13.5	10.7	0.3	704	14.0	16.3	26.2	19.8	14.1	1.2	333
Kwara	5.8	25.5	33.7	25.3	9.2	5.4	596	6.5	16.0	46.5	6.8	1.3	5.0	274
Nasarawa	9.3	8.7	6.8	3.6	3.9	0.3	594	25.5	26.6	16.9	20.4	5.7	0.0	282
Niger	2.7	7.1	7.3	4.6	3.4	0.0	1,462	1.5	18.1	8.2	13.4	1.6	0.0	701
Plateau	4.2	9.3	5.2	3.7	2.8	0.2	662	17.6	13.3	9.1	5.6	4.6	0.0	302
North East														
Adamawa	16.5	16.1	8.8	10.0	5.1	0.0	828	13.0	28.2	28.3	7.3	14.6	0.3	358
Bauchi	3.2	10.6	15.5	3.9	4.7	0.2	1,161	12.6	9.2	19.8	8.6	7.5	0.0	512
Borno	6.5	12.9	6.5	3.8	2.9	0.0	1,412	9.2	16.3	23.1	5.9	5.9	0.0	676
Gombe	4.5	6.6	3.9	5.1	4.4	0.2	550	26.5	10.3	19.8	7.9	16.5	0.5	255
Taraba	3.5	6.5	2.0	1.0	0.5	0.2	844	0.9	49.3	7.2	36.3	3.0	1.2	325
Yobe	3.2	6.2	6.9	5.1	6.0	0.0	971	4.0	3.2	3.1	1.0	2.2	0.0	390
North West														
Jigawa	1.3	5.5	3.5	1.7	2.6	0.7	1,353	10.8	22.6	26.1	2.4	10.5	1.6	510
Kaduna	9.5	17.2	12.8	17.2	12.6	0.6	2,136	15.4	24.5	36.2	19.7	3.0	0.0	1,033
Kano	3.6	22.4	7.8	1.1	6.2	0.0	3,189	8.4	3.1	3.1	1.4	2.8	0.0	1,592
Katsina	1.9	8.8	1.7	0.7	2.8	1.3	1,525	10.5	4.6	7.0	3.7	27.8	1.6	596
Kebbi	2.0	2.5	1.3	1.7	0.8	0.0	1,244	3.0	1.8	12.0	4.8	2.1	0.0	551
Sokoto	0.2	2.0	0.6	0.4	0.1	0.0	1,098	2.9	15.4	23.7	8.8	0.3	0.0	424
Zamfara	1.3	7.4	5.4	0.4	3.0	0.0	1,332	12.4	4.7	25.3	1.3	1.6	0.0	479
South East														
Abia	20.6	21.7	14.3	4.1	4.8	0.0	518	31.1	36.7	35.2	32.0	31.6	0.5	229
Anambra	14.7	13.9	13.3	15.2	8.4	0.5	1,052	17.6	14.0	9.0	0.6	1.1	0.0	446
Ebonyi	16.7	31.0	27.9	23.4	20.1	0.4	1,122	45.1	34.5	33.8	17.8	14.5	0.0	368
Enugu	20.5	21.3	12.9	13.4	2.5	0.2	951	20.5	27.0	10.7	3.5	2.3	0.2	320
Imo	16.8	23.4	26.6	12.0	9.0	0.2	833	51.1	19.9	16.9	15.9	10.4	0.2	323
South South														
Akwa Ibom	27.4	25.1	13.7	12.8	12.3	0.3	864	26.2	27.2	35.8	22.2	25.7	0.7	451
Bayelsa	34.0	18.0	26.0	22.2	16.1	0.0	364	24.5	21.8	27.6	6.2	12.6	0.0	187
Cross River	46.6	21.2	17.7	9.3	19.2	0.3	703	39.9	18.5	16.5	10.6	11.5	0.0	310
Delta	22.8	14.9	13.2	8.3	6.3	0.1	993	36.4	37.1	21.4	11.0	0.7	0.2	473
Edo	33.3	18.7	8.9	18.8	6.0	0.2	742	36.8	17.9	32.2	31.3	5.3	0.3	365
Rivers	11.1	7.0	13.0	9.3	6.3	0.2	1,276	8.2	53.3	43.9	51.3	17.8	0.2	658
South West														
Ekiti	36.8	44.9	25.4	26.3	8.0	0.2	326	68.4	47.6	41.5	44.1	19.7	0.0	148
Lagos	39.4	28.2	12.4	21.5	12.1	1.6	1,964	33.3	17.4	26.2	17.3	8.0	2.0	948
Ogun	38.9	24.7	13.6	11.2	25.5	0.0	883	27.4	56.3	37.8	29.5	18.2	0.8	358
Ondo	15.1	32.0	17.4	12.9	5.2	0.8	808	4.4	25.3	24.2	21.8	0.0	0.2	404
Osun	6.6	41.7	43.6	34.0	7.1	0.4	765	13.4	46.9	44.5	7.9	3.5	1.0	356
Oyo	25.3	48.7	34.0	11.1	12.9	2.4	1,568	11.8	19.4	25.9	15.9	7.8	0.9	629

Continued…

Table 7.16—*Continued*

Background characteristic	Women							Men						
	As for me and my partner, we *dey kampe* with female condom	Unspaced children makes the going tough. For the love of your family, go for child spacing today	Well-spaced children are every parent's joy	It's not too late to prevent unwanted pregnancy	Why is your wife looking so good?	Other pro-gramme	Number of women	As for me and my partner, we *dey kampe* with female condom	Unspaced children makes the going tough. For the love of your family, go for child spacing today	Well-spaced children are every parent's joy	It's not too late to prevent unwanted pregnancy	Why is your wife looking so good?	Other pro-gramme	Number of men
Education														
No education	2.2	6.5	4.0	1.9	2.8	0.3	14,729	5.6	7.7	10.4	3.2	4.5	0.3	3,685
Primary	11.8	17.2	11.2	6.9	6.4	0.4	6,734	17.4	17.6	17.7	10.3	6.4	0.5	2,907
Secondary	20.0	23.2	16.4	14.2	9.6	0.6	13,927	20.0	22.2	23.4	15.3	7.3	0.5	8,281
More than secondary	35.2	41.7	33.1	25.8	18.3	1.2	3,558	34.8	39.5	40.4	25.0	15.9	0.7	2,486
Wealth quintile														
Lowest	1.1	3.6	2.3	1.0	1.3	0.1	7,132	6.5	7.6	9.8	3.1	5.1	0.4	2,862
Second	4.5	7.8	5.5	3.0	3.4	0.2	7,428	14.2	12.7	14.9	7.2	5.9	0.3	2,992
Middle	10.8	15.1	9.4	7.6	6.2	0.4	7,486	17.9	20.3	20.3	12.7	6.4	0.2	3,338
Fourth	18.7	25.1	18.0	13.2	9.9	0.6	7,992	21.5	25.0	27.1	17.0	9.4	0.3	3,835
Highest	27.3	32.1	23.5	19.5	13.9	1.0	8,910	27.7	31.8	32.4	21.3	10.4	1.1	4,332
Total	13.2	17.5	12.3	9.4	7.3	0.5	38,948	18.6	20.8	22.1	13.3	7.8	0.5	17,359

7.17 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

In the 2013 NDHS, women who were not using any contraceptive method were asked whether they had been visited by a fieldworker who talked with them about family planning in the 12 months preceding the survey. This information is especially useful for determining whether family planning outreach programmes reach nonusers.

Improving access to services and providing reliable information to women about their family planning options is at the heart of the mission of Marie Stopes International in Nigeria. Expanding the scope and capacity of MSI service channels is vital for programmes to have a significant impact on the uptake of sexual and reproductive health services. MSI teamed up with government and existing private health care providers to increase access to high-quality care among underserved communities in Nigeria (Marie Stopes International, 2014).

Nonusers were also asked if they had visited a health facility in the preceding 12 months for any reason and, if so, whether any staff member at the facility had spoken to them about family planning. These questions help to assess the extent of missed opportunities to inform women about contraception.

The results in Table 7.17 indicate that 6 percent of nonusers reported discussing family planning when a fieldworker visited them. Seven percent of nonusers reported that they had visited a health facility and discussed family planning, while 14 percent of nonusers had visited a health facility but did not discuss family planning.

Staff at health facilities are more likely to discuss family planning with women age 20-44 than with younger women (age 15-19) or older women (age 45-49). Similarly, women in urban areas are more than twice as likely as women in rural areas to visit a health facility and discuss family planning (9 percent versus 4 percent). The proportion of nonusers who visited a health facility and discussed family planning was highest in the South West (19 percent) and lowest in the North West (3 percent). Women with higher levels of education and those in the higher wealth quintiles were more likely than their counterparts to visit a health facility and discuss family planning with a provider.

Overall, 91 percent of nonusers did not discuss family planning with a fieldworker or a staff member at a health facility. This represents a large pool of potential users who could be targeted for family planning counselling. A more vigorous outreach programme will be needed to reach these women.

Table 7.17 Contact of nonusers with family planning providers

Among women age 15-49 who are not using contraception, the percentage who during the past 12 months were visited by a fieldworker who discussed family planning, the percentage who visited a health facility and discussed family planning, the percentage who visited a health facility but did not discuss family planning, and the percentage who did not discuss family planning either with a fieldworker or at a health facility, by background characteristics, Nigeria 2013

Background characteristic	Percentage of women who were visited by fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who did not discuss family planning either with fieldworker or at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Age					
15-19	2.2	1.6	8.2	96.9	7,340
20-24	6.3	7.4	14.7	89.9	5,601
25-29	8.6	10.7	17.8	86.1	5,830
30-34	9.0	10.7	17.5	85.8	4,356
35-39	8.3	9.2	16.8	87.2	3,744
40-44	5.9	5.7	12.9	91.0	2,853
45-49	3.3	2.4	12.6	95.4	2,997
Residence					
Urban	9.4	11.1	18.2	85.2	12,454
Rural	4.1	4.1	11.5	93.8	20,268
Zone					
North Central	5.5	5.9	13.8	91.1	4,774
North East	3.8	3.6	12.5	93.4	5,585
North West	1.5	3.2	14.8	95.9	11,324
South East	9.0	6.6	17.5	89.1	3,285
South South	5.8	9.4	11.8	88.0	3,528
South West	20.1	19.2	13.8	75.1	4,224
State					
North Central					
FCT-Abuja	3.8	5.4	36.5	91.6	246
Benue	2.5	4.8	16.9	93.4	1,031
Kogi	5.7	9.6	25.1	87.8	617
Kwara	11.9	8.6	6.8	87.3	414
Nasarawa	2.9	2.8	13.6	95.2	511
Niger	4.6	4.3	6.7	93.6	1,376
Plateau	11.3	8.8	8.4	83.8	579
North East					
Adamawa	12.6	4.5	16.6	84.7	799
Bauchi	3.1	2.7	12.1	95.0	1,138
Borno	1.4	2.4	10.2	96.8	1,388
Gombe	1.7	3.5	4.8	95.9	529
Taraba	1.6	7.5	16.6	91.5	771
Yobe	3.8	2.6	13.6	94.0	961
North West					
Jigawa	1.5	2.3	18.8	97.0	1,341
Kaduna	4.5	6.1	33.9	91.1	1,690
Kano	1.1	6.1	17.3	93.2	3,175
Katsina	0.7	0.2	9.6	99.2	1,506
Kebbi	0.3	0.0	0.3	99.7	1,230
Sokoto	1.0	1.2	6.0	98.0	1,088
Zamfara	1.0	1.4	6.9	98.2	1,295
South East					
Abia	13.5	5.4	2.7	86.2	354
Anambra	6.0	2.9	16.8	93.8	731
Ebonyi	10.5	10.1	20.0	85.8	938
Enugu	9.8	6.8	21.4	88.3	673
Imo	6.5	6.1	18.6	91.4	589
South South					
Akwa Ibom	6.3	8.3	11.3	88.8	624
Bayelsa	4.6	4.8	9.3	91.6	296
Cross River	14.7	18.7	17.9	77.4	529
Delta	5.2	10.1	3.1	86.2	696
Edo	2.0	3.9	21.0	94.8	529
Rivers	3.1	8.7	10.7	90.0	853
South West					
Ekiti	28.1	20.6	8.9	71.0	229
Lagos	18.4	17.6	15.9	77.3	1,168
Ogun	20.0	12.0	18.1	77.8	677
Ondo	10.5	11.4	15.6	85.0	569
Osun	30.6	29.8	10.8	67.5	517
Oyo	20.2	24.2	10.3	70.2	1,064
Education					
No education	2.2	2.3	11.2	96.2	14,340
Primary	7.6	8.4	17.0	88.0	5,500
Secondary	9.1	10.0	15.0	86.4	10,650
More than secondary	13.0	15.0	20.9	79.9	2,232
Wealth quintile					
Lowest	1.3	1.1	7.9	97.9	7,009
Second	3.5	3.2	12.7	94.7	6,989
Middle	6.2	6.7	15.6	90.2	6,440
Fourth	9.7	11.1	17.0	85.1	6,220
Highest	10.8	12.8	18.3	83.2	6,064
Total	6.1	6.7	14.1	90.5	32,722

INFANT AND CHILD MORTALITY 8

Key Findings

- Infant and under-5 mortality rates in the past five years are 69 and 128 deaths per 1,000 live births, respectively. At these mortality levels, one in every 15 Nigerian children die before reaching age 1, and one in every eight do not survive to their fifth birthday.
- Infant mortality has declined by 26 percent over the last 15 years, while under-5 mortality has declined by 31 percent over the same period.
- Childhood mortality rates are higher in rural areas than in urban areas. Also, childhood mortality is highest in the North West.
- The neonatal mortality rate is 37 deaths per 1,000 live births, the postneonatal mortality rate is 31 deaths per 1,000 live births, and the perinatal mortality rate is 41 per 1,000 pregnancies.

This chapter presents levels of and trends and differentials in perinatal, neonatal, postneonatal, infant, child, and under-5 mortality in Nigeria. This information can enhance understanding of population dynamics and assist in the planning and evaluation of health policies and programmes. Estimates of infant and child mortality rates can be used to prepare population projections. Information on childhood mortality also helps the health sector identify population groups that are at high risk.

One of the targets of the Millennium Development Goals (MDGs) is to reduce under-5 mortality to 64 deaths per 1,000 live births and infant mortality to 30 deaths per 1,000 live births by 2015 (Federal Republic of Nigeria, 2010a). Programmes designed to increase the proportion of births attended by skilled health personnel, to increase immunisations against vaccine-preventable diseases, to provide early care and treatment to sick children, and to upgrade the status of women through education and enhanced participation in the labour force can all help to improve the probability of survival of young children. Results from the 2013 NDHS are timely in that they allow an evaluation of the impact of major national policies such as the National Policy on Population for Sustainable Development, the National Gender Policy, and the National Health Policy on the achievement of this MDG target.

The data used to estimate infant and childhood mortality were collected in the birth history section of the Woman's Questionnaire. The birth history section begins with questions about the respondent's experience with childbearing (i.e., the number of sons and daughters living with the mother, the number who live elsewhere, and the number who have died). These questions are followed by a retrospective birth history in which each respondent is asked to list each of her births, starting with the first birth. For each birth, data were obtained on sex, month and year of birth, survivorship status, and current age or, if the child is dead, age at death. This information is used to directly estimate mortality rates. In this report, age-specific mortality rates are categorised and defined as follows:

Neonatal mortality (NN):	the probability of dying within the first month of life
Postneonatal mortality (PNN):	the probability of dying after the first month of life but before the first birthday (the difference between infant and neonatal mortality)
Infant mortality ($_1q_0$):	the probability of dying before the first birthday
Child mortality ($_4q_1$):	the probability of dying between the first and fifth birthdays
Under-5 mortality ($_5q_0$):	the probability of dying between birth and the fifth birthday

All rates are expressed per 1,000 live births with the exception of child mortality, which is expressed per 1,000 children surviving to age 12 months.

8.1 DATA QUALITY

Estimates of infant and child mortality that are based on retrospective birth histories are subject to possible reporting errors that may adversely affect the quality of the data. These estimates may be affected by the completeness with which births and deaths are reported and recorded, as well as the accuracy of information on current age and age at death for children who died. A lack of accurate information on age at death may distort the age pattern of mortality. Estimates will be biased if age at death is misreported and the net effect of this misreporting is transference from one age bracket to another. For example, a net transfer of deaths from under 1 month to a higher age will affect the estimates of neonatal and postneonatal mortality. To minimise errors in reporting age at death, interviewers were instructed to record age at death in days if the death took place in the month following the birth, in months if the child died before age 2, and in years if the child died at age 2 or above. Interviewers were also asked to probe for deaths reported at age 1 to determine a more precise age at death in terms of months. Despite the emphasis during interviewer training and fieldwork monitoring on probing for accurate age at death, Appendix Table D.6 shows that, for the five years preceding the survey, there is considerable heaping of deaths at age 12 months. This heaping at age 12 months can potentially bias the mortality rates reported in the tables in this chapter. Although age heaping at 12 months to the extent shown in Appendix Table D.6 is likely to have only a minor underestimation effect on estimates of infant mortality, it is likely to lead to some overestimation of child mortality.

Another potential data quality problem is selective omission from birth histories of births that did not survive, which can lead to underestimation of mortality rates. When selective omission of childhood deaths occurs, it is usually most severe for deaths occurring early in infancy. One way that such omissions can be detected is by examining the proportion of infant deaths that are neonatal deaths. Generally, if there is substantial underreporting of deaths, the result is an abnormally low ratio of neonatal deaths to infant deaths. The proportion of infant deaths occurring in the first month of life was 59 percent in the five-year period preceding the 2013 NDHS (Appendix Table D.6), which is within the normal range (although this proportion represents a slight decline from previous periods). Furthermore, it appears that early neonatal deaths among births that occurred in the first month of life have not been underreported, since 78 percent of neonatal deaths were early neonatal deaths (Appendix Table D.5). The proportion is slightly lower for deaths occurring 15-19 years before the survey, which is not surprising given the greater likelihood of recall errors for deaths occurring further in the past.

Appendix Table D.4 shows high rates of completeness of birth dates. These rates vary from 97 percent to 100 percent for the years under observation (2008-2013) and are higher for living children than for dead children. The sex ratios at birth in Appendix Table D.4 also show a high level of accuracy in female-male birth reporting.

8.2 LEVELS AND TRENDS IN INFANT AND CHILD MORTALITY

8.2.1 Early Childhood Mortality Rates

Table 8.1 shows neonatal, postneonatal, infant, child, and under-5 mortality rates for successive five-year periods before the survey. The infant mortality rate was 69 per 1,000 live births for the five years preceding the survey, the child mortality rate was 64 per 1,000 children surviving to age 12 months, and the under-5 mortality rate was 128 per 1,000 live births. This implies that one in 15 Nigerian children die before their first birthday and that one in eight die before their fifth birthday. During the same five-year period, the neonatal mortality rate was 37 deaths per 1,000 live births, and the postneonatal mortality rate was 31 deaths per 1,000 live births.

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for five-year periods preceding the survey, Nigeria 2013

Years preceding the survey	Approximate time period of estimated rates	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
0-4	2009-2013	37	31	69	64	128
5-9	2004-2008	43	42	86	83	162
10-14	1999-2003	46	47	93	102	185

[1] Computed as the difference between the infant and neonatal mortality rates

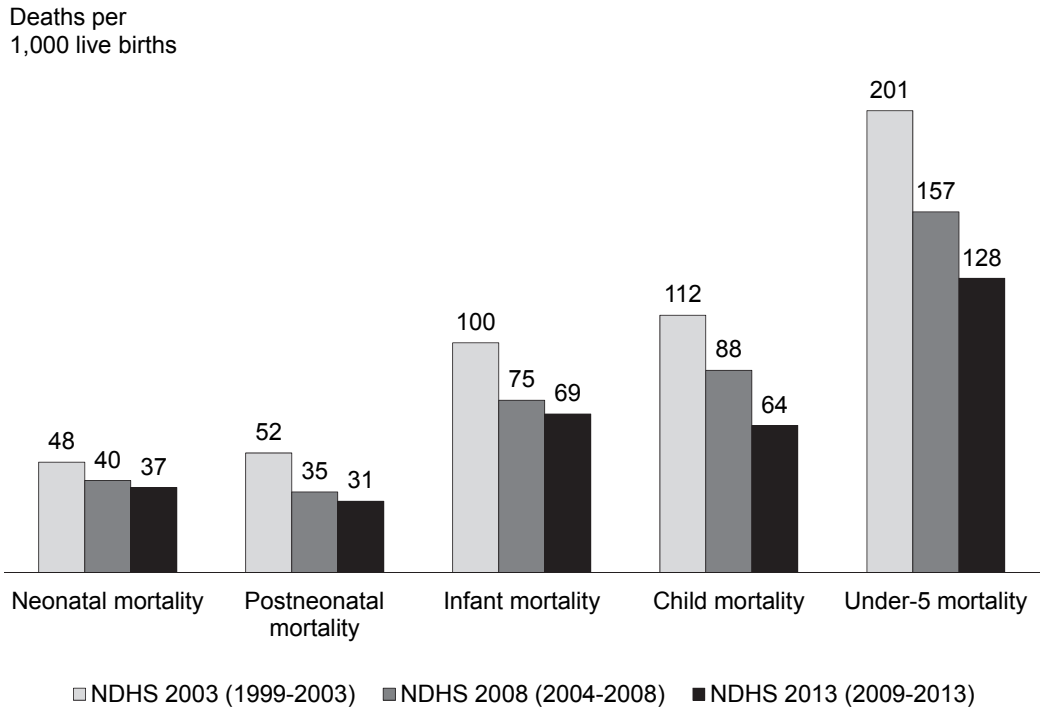
8.2.2 Trends in Early Childhood Mortality

Mortality trends can be examined in two ways: by comparing mortality rates for the three five-year periods preceding a single survey or by comparing mortality estimates obtained from several surveys over time. It should be noted that sampling errors associated with mortality estimates are large and should be taken into account when examining trends between surveys.

Results from the 2013 NDHS show a considerable decline in all levels of childhood mortality. Infant mortality declined by 26 percent over the 15-year period preceding the survey, from 93 deaths per 1,000 live births to 69 deaths per 1,000 live births. Under-5 mortality declined by 31 percent over the same period, from 185 deaths per 1,000 live births to 128 deaths per 1,000 live births. Finally, neonatal mortality decreased by 20 percent, from 46 deaths per 1,000 live births to 37 deaths per 1,000 live births.

Mortality trends can also be examined by comparing data from the NDHS surveys conducted in 2003, 2008, and 2013. The infant and under-5 mortality rates reported in these surveys show a continuous declining trend. Under-5 mortality declined from 201 deaths per 1,000 live births in the 2003 survey to 128 deaths in 2013, while infant mortality declined from 100 deaths per 1,000 live births in 2003 to 69 in 2013. Neonatal mortality also declined during the period (Figure 8.1).

Figure 8.1 **Trends in childhood mortality, 1999-2013**



8.3 EARLY CHILDHOOD MORTALITY RATES BY SOCIOECONOMIC CHARACTERISTICS

Mortality differences by place of residence, zone, mother's education, and household wealth are presented in Table 8.2. Mortality rates are presented for the 10-year period preceding the survey to ensure a sufficient number of births to study mortality differentials across population subgroups. The table shows that infant and child survival are strongly influenced by these socioeconomic characteristics. Mortality rates in urban areas are consistently lower than those in rural areas. Infant mortality is 43 percent higher in rural areas (86 deaths per 1,000 live births) than in urban areas (60 deaths per 1,000 live births). The urban-rural difference is even more pronounced in the case of under-5 mortality. There are zonal differences in infant and under-5 mortality as well. Under-5 mortality rates range from a low of 90 deaths per 1,000 live births in the South West to a high of 185 deaths per 1,000 live births in the North West. Under-5 mortality is also relatively high in the North East and South East (Table 8.2 and Figure 8.2).

Table 8.2 Early childhood mortality rates by socioeconomic characteristics

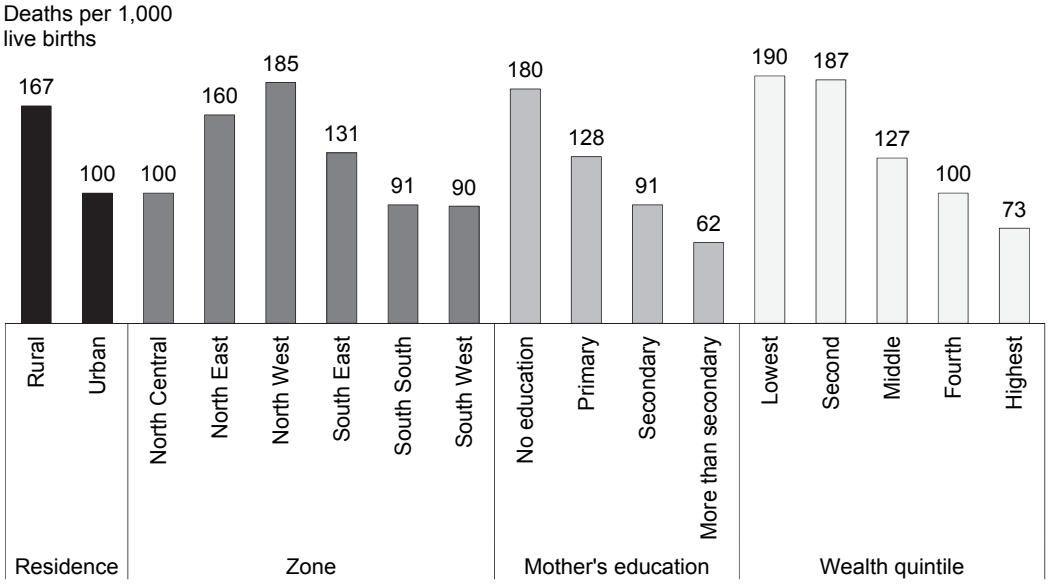
Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by background characteristics, Nigeria 2013

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Residence					
Urban	34	26	60	42	100
Rural	44	42	86	89	167
Zone					
North Central	35	31	66	36	100
North East	43	33	77	90	160
North West	44	46	89	105	185
South East	37	45	82	54	131
South South	32	26	58	35	91
South West	39	21	61	31	90
Mother's education					
No education	44	45	89	100	180
Primary	42	33	74	57	128
Secondary	34	24	58	35	91
More than secondary	30	20	50	13	62
Wealth quintile					
Lowest	45	47	92	108	190
Second	45	49	94	103	187
Middle	39	31	71	61	127
Fourth	37	28	65	38	100
Highest	30	18	48	26	73

[1] Computed as the difference between the infant and neonatal mortality rates

As expected, mother's education is inversely related to a child's risk of dying. Under-5 mortality among children born to mothers with no education (180 deaths per 1,000 live births) is almost twice as high as that among children born to mothers with a secondary education (91 deaths per 1,000 live births) and about three times as high as that among children of mothers with more than a secondary education (62 deaths per 1,000 live births). The beneficial effect of educating mothers is evident for all childhood mortality categories. Also, childhood mortality generally decreases as wealth increases, although rates are similar in the two lower quintiles.

Figure 8.2 **Under-5 mortality in the 10 years preceding the survey by socioeconomic characteristics**



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8.4 DEMOGRAPHIC DIFFERENTIALS IN EARLY CHILDHOOD MORTALITY RATES

The demographic characteristics of both mothers and children have been found to play an important role in child survival. Table 8.3 presents childhood mortality rates according to sex of the child, mother's age at birth, birth order, previous birth interval, and the infant's size at birth.

Table 8.3 Early childhood mortality rates by demographic characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by demographic characteristics, Nigeria 2013

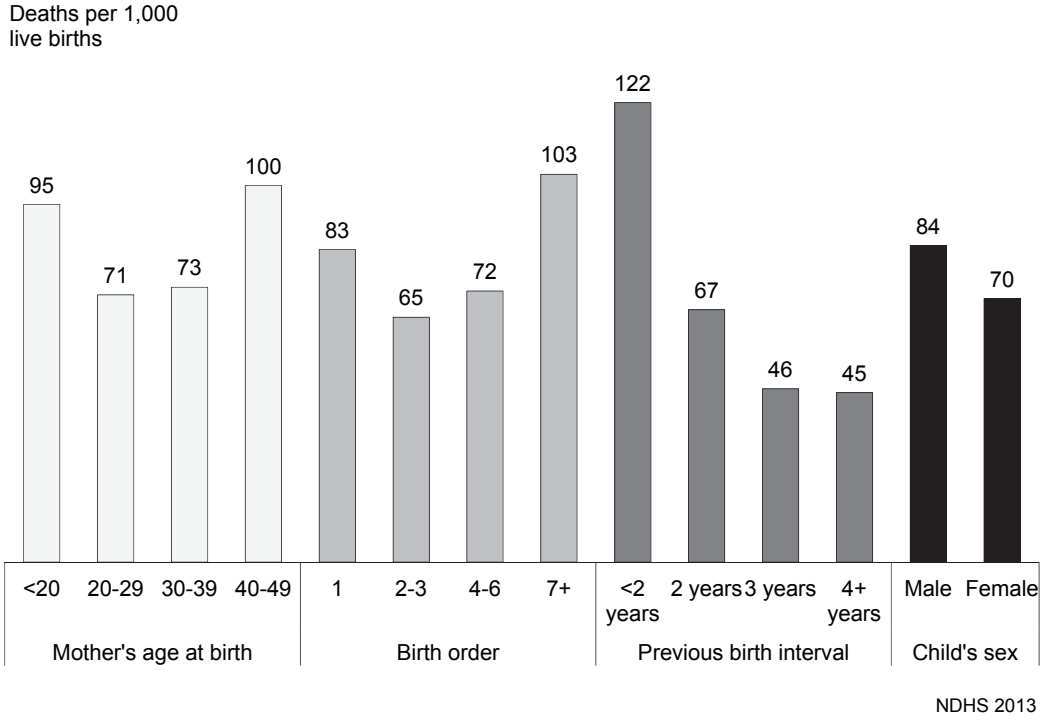
Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Child's sex					
Male	45	38	84	73	151
Female	35	35	70	72	137
Mother's age at birth					
<20	53	42	95	93	179
20-29	35	36	71	68	134
30-39	40	33	73	68	136
40-49	58	42	100	83	174
Birth order					
1	51	32	83	60	139
2-3	32	34	65	64	125
4-6	35	37	72	76	142
7+	55	48	103	104	196
Previous birth interval[2]					
<2 years	62	60	122	103	213
2 years	32	35	67	78	140
3 years	22	24	46	60	103
4+ years	27	18	45	36	79
Birth size[3]					
Small/very small	64	37	101	na	na
Average or larger	30	28	58	na	na

na = Not available
[1] Computed as the difference between the infant and neonatal mortality rates
[2] Excludes first-order births
[3] Rates for the five-year period before the survey

As noted in earlier DHS surveys, mortality rates are generally higher among male children than female children. This is true for all categories of mortality. With the exception of mothers in the 40-49 age group, infant mortality is higher for mothers under age 20 than for older mothers. Infant mortality is also higher for first births and seventh- and higher-order births than for births of orders 2-6. Short birth intervals, especially intervals of less than two years, substantially reduce children's chances of survival. For example, children born less than two years after the preceding birth are more than 2.5 times as likely to die within the first year of life and more than twice as likely to die within the first five years of life as children born three years after the preceding birth (Table 8.3 and Figure 8.3).

Since most births in Nigeria occur at home, where children often are not weighed at birth, data on birth weight are available for only a few children. However, mothers were asked whether their children born in the past five years were very large, larger than average, average, smaller than average, or very small at birth, since this has been found to be a good proxy for a child's weight. The data show that children who were small or very small at birth were more likely to die before their first birthday than those whose weights were average or above.

Figure 8.3 **Infant mortality rate in the 10 years preceding the survey by selected demographic characteristics**



8.5 PERINATAL MORTALITY

The 2013 NDHS asked women to report any pregnancy loss that occurred in the five years preceding the survey. For each pregnancy that did not end in a live birth, the duration of the pregnancy was recorded. Pregnancy losses occurring after seven completed months of gestation (stillbirths) and deaths to live births within the first seven days of life (early neonatal deaths) are defined as perinatal deaths. The distinction between a stillbirth and an early neonatal death may be a fine one, often depending on observing and sometimes remembering faint signs of life after delivery. The causes of stillbirths and early neonatal deaths are closely linked, and examining only one or the other can understate the true level of mortality around the time of delivery. The perinatal mortality rate is the sum of stillbirths and early neonatal deaths divided by the sum of stillbirths and live births, expressed per 1,000 pregnancies that lasted seven or more months.

Table 8.4 presents the number of stillbirths and early neonatal deaths and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics. The perinatal mortality rate is 41 deaths per 1,000 pregnancies of seven or more months of gestation. Since the rate is subject to a high degree of sampling variation, differences by background characteristics should be interpreted with caution.

The perinatal mortality rate is higher among young mothers (below age 20) and mothers age 40-49, as well as among births that occur less than 15 months after the previous birth. Although perinatal mortality generally decreases with increasing education and household wealth, the pattern is not always consistent.

Table 8.4 Perinatal mortality

Number of stillbirths and early neonatal deaths and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Nigeria 2013

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months' duration
Mother's age at birth				
<20	77	173	52	4,803
20-29	166	427	36	16,638
30-39	119	257	41	9,226
40-49	34	67	65	1,556
Previous pregnancy interval in months[4]				
First pregnancy	101	233	55	6,085
<15	56	210	52	5,082
15-26	79	243	36	8,950
27-38	45	119	28	5,953
39+	115	119	38	6,153
Residence				
Urban	114	265	34	11,240
Rural	281	660	45	20,983
Zone				
North Central	35	112	34	4,375
North East	92	164	45	5,670
North West	164	357	44	11,939
South East	18	84	36	2,859
South South	31	79	37	2,966
South West	55	129	42	4,415
Mother's education				
No education	199	460	42	15,856
Primary	88	201	46	6,215
Secondary	88	218	37	8,298
More than secondary	21	47	36	1,854
Wealth quintile				
Lowest	116	233	46	7,612
Second	107	234	46	7,463
Middle	58	171	38	6,059
Fourth	52	163	38	5,708
Highest	62	125	35	5,383
Total	396	925	41	32,224

[1] Stillbirths are foetal deaths in pregnancies lasting 7 or more months.
[2] Early neonatal deaths are deaths at age 0-6 days among live-born children.
[3] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of 7 or more months' duration, expressed per 1,000
[4] Categories correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months.

8.6 HIGH-RISK FERTILITY BEHAVIOUR

Findings from scientific studies have confirmed a strong relationship between a child's chance of dying and specific fertility behaviours. Typically, the probability of dying in early childhood is much greater for children born to mothers who are young or old, children born after a short birth interval, and

children born to women who have had more than three births. Very young mothers may experience difficult pregnancies and deliveries because of their physical immaturity. Older women may experience age-related problems during pregnancy and delivery. In this analysis, a mother is considered to be too young if she is less than age 18 and too old if she is more than age 34 at the time of delivery. A short birth interval characterises a birth occurring within 24 months of a previous birth.

The first column in Table 8.5 shows the percentages of births in the five years preceding the survey that fall into the various risk categories. Overall, 63 percent of births are in an avoidable risk category; 40 percent fall into a single high-risk category, and 23 percent are in a multiple high-risk category. Only 23 percent of births are not in any high-risk category.

Table 8.5 High-risk fertility behaviour

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality, the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Nigeria 2013

	Births in the 5 years preceding the survey		Percentage of currently married women[1]
Risk category	Percentage of births	Risk ratio	
Not in any high-risk category	22.6	1.00	13.7[a]
Unavoidable risk category			
First-order births between ages 18 and 34	14.0	1.30	5.9
Single high-risk category			
Mother's age <18	6.4	2.08	2.2
Mother's age >34	1.2	1.11	3.9
Birth interval <24 months	7.1	1.56	9.6
Birth order >3	25.3	1.13	16.7
Subtotal	40.0	1.36	32.4
Multiple high-risk category			
Age <18 and birth interval <24 months[2]	0.6	2.16	0.5
Age >34 and birth interval <24 months	0.1	(0.26)	0.3
Age >34 and birth order >3	11.8	1.30	28.6
Age >34 and birth interval <24 months and birth order >3	2.2	2.79	5.8
Birth interval <24 months and birth order >3	8.5	2.38	12.7
Subtotal	23.4	1.85	47.9
In any avoidable high-risk category	63.3	1.54	80.4
Total	100.0	na	100.0
Number of births/women	31,828	na	27,830

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1] Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.
[2] Includes the category age <18 and birth order >3
[a] Includes sterilised women

The risk ratios displayed in the second column of Table 8.5 denote the relationship between risk factors and mortality. In general, risk ratios are higher for children in a multiple high-risk category than for those in a single high-risk category. The combination of a short birth interval and a high birth order (above 3) results in a risk ratio that is twice as high as for births not in any high-risk category. Nine percent of births fall into this category. The combination of an older mother, a short birth interval, and a high birth order results in a risk ratio of almost three times higher; however, only 2 percent of births fall into this category. The other vulnerable births are those to women less than age 18 with a birth interval of less than 24 months. These children are more than twice as likely to die as children not in any high-risk category. Fortunately, less than 1 percent of births fall into this category.

The last column of Table 8.5 shows the distribution of currently married women by the risk category into which a birth would fall if conceived at the time of the survey. The information in this column is purely hypothetical and does not take into consideration the protection provided by postpartum insusceptibility, prolonged abstinence, or family planning methods other than sterilisation. However, it provides insight into the potential magnitude of high-risk births. Overall, 80 percent of currently married women have the potential for a high-risk birth, with 32 percent falling into a single high-risk category and 48 percent falling into a multiple high-risk category.

REPRODUCTIVE HEALTH 9

Key Findings

- Sixty-one percent of women age 15-49 who had a live birth in the five years preceding the survey received antenatal care from a skilled provider (i.e., a doctor, nurse or midwife, or auxiliary nurse or midwife).
- Fifty-one percent of women who had a live birth in the five years preceding the survey reported making at least four antenatal care visits during the pregnancy.
- Sixty-three percent of women age 15-49 who had a live birth in the five years preceding the survey took iron tablets or syrup, and 14 percent took intestinal parasite drugs.
- Fifty-three percent of women age 15-49 had their last birth protected against neonatal tetanus.
- Thirty-six percent of births in Nigeria are delivered in a health facility.
- Thirty-eight percent of deliveries are attended by a skilled birth assistant.

A health care system aiming to reduce pregnancy-related morbidity and mortality must focus on maternal and newborn health. Reproductive health care, the care a woman receives before and during pregnancy, at the time of delivery, and soon after delivery, is important for the survival and well-being of the mother and her child. It encompasses the health care dimensions of family planning and prenatal, natal, and postnatal care with the aim of reducing maternal morbidity and mortality (Franny, 2013).

Nigeria has a reproductive health policy that provides a roadmap for all stakeholders working in this area. Also, the National Reproductive Health Working Group set up by the federal government plans, coordinates, and facilitates the implementation of reproductive health interventions in the country. The group's members are drawn from government ministries and agencies, parastatal organisations, nongovernmental organisations, civil society organisations, regulatory bodies, professional bodies, and development partners. This body meets annually to review plans and strategies for improving reproductive health in the country.

The Federal Ministry of Health is also implementing an integrated maternal, newborn, and child health strategy that emphasizes the continuum of care. The biannual Maternal, Newborn and Child Health Week is held in May and November of every year to highlight important maternal and child health issues at all levels of the health care system.

To boost the proportion of skilled birth attendants, the government recruited additional midwives and community health extension workers (CHEWs) and supported training of CHEWs on modified lifesaving skills through the Subsidy Reinvestment and Empowerment Programme as well as the Midwives Service Scheme. The government is also looking toward developing a policy on task shifting as a measure to improve personnel deficits in some parts of the country and in underserved areas.

This chapter presents findings from several areas of importance to reproductive health and women's health, such as antenatal, delivery, and postnatal care and general access to health services. Information on antenatal, delivery, and postnatal care is of great value in identifying subgroups of women who do not use such services and is useful in planning ways to improve service delivery. Information on antenatal care (ANC) is shown according to the number of ANC visits made, the stage of pregnancy at the time of the first visit, the type of provider and the specific services offered during antenatal visits.

Similarly, delivery services are described according to place of delivery, the type of person assisting the delivery, and the rate of caesarean section births. The chapter includes information on postnatal care according to whether a woman delivered in a health facility or elsewhere, as well as information on timing of postnatal care after delivery and from whom care was received. This information helps identify population groups who are underserved by maternity care services. General information on access to health services and barriers to use of services by women is also presented.

9.1 ANTENATAL CARE

The major objective of antenatal care is to ensure optimal health outcomes for the mother and her baby. Antenatal care from a trained provider is important to monitor the pregnancy and reduce morbidity risks for the mother and child during pregnancy and delivery. Antenatal care provided by a skilled health worker enables (1) early detection of complications and prompt treatment (e.g., detection and treatment of sexually transmitted infections), (2) prevention of diseases through immunisation and micronutrient supplementation, (3) birth preparedness and complication readiness, and (4) health promotion and disease prevention through health messages and counselling for pregnant women.

Table 9.1 and Figure 9.1 show the percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by antenatal care provider during pregnancy for the most recent birth and the percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics. The results show that 61 percent of women had received antenatal care from a skilled provider, as compared with 58 percent in 2008.

The mother's age at birth is important for the quality of decisions she makes. Forty-six percent of mothers younger than age 20 did not receive antenatal care, which is an improvement from 2008, when 50 percent of women in this age group did not receive antenatal care. First-order births are more likely to receive ANC than births of higher orders. Urban women are more likely to receive antenatal care from a skilled provider than their rural counterparts (86 percent and 47 percent, respectively). Forty-seven percent of rural women age 15-49 did not receive antenatal care, as compared with only 11 percent of urban women. By zone, 9 in 10 women in the South East and South South received ANC from a skilled provider, compared with two in five women in the North West (41 percent). Women in Sokoto are least likely to receive ANC from a skilled provider (17 percent).

The survey findings demonstrate the great importance of female education to health outcomes. Ninety-seven percent of women with more than a secondary education received antenatal care from a skilled provider, as compared with 36 percent of mothers with no education. Similarly, 95 percent of women in the highest wealth quintile received antenatal care from a skilled provider, compared with 25 percent in the lowest quintile.

Table 9.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and the percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Nigeria 2013

Background characteristic	Antenatal care provider							No ANC	Total	Percentage receiving antenatal care from a skilled provider[1]	Number of women
	Doctor	Nurse/ midwife	Auxiliary nurse/ midwife	Community extension health worker	Traditional birth attendant	Other	Missing				
Mother's age at birth											
<20	14.0	30.8	3.0	4.5	0.7	0.3	0.7	46.1	100.0	47.8	2,813
20-34	27.0	33.1	2.9	3.2	0.9	0.4	0.9	31.5	100.0	63.0	13,877
35-49	27.2	31.6	2.2	3.2	0.9	0.4	1.0	33.3	100.0	61.0	3,777
Birth order											
1	31.0	33.0	2.6	3.1	1.0	0.5	0.5	28.4	100.0	66.6	3,721
2-3	28.6	32.4	3.1	3.2	1.0	0.4	0.7	30.6	100.0	64.2	6,423
4-5	26.2	32.5	2.6	3.8	1.0	0.5	0.7	32.7	100.0	61.3	4,899
6+	16.5	32.3	2.7	3.6	0.6	0.2	1.5	42.5	100.0	51.4	5,424

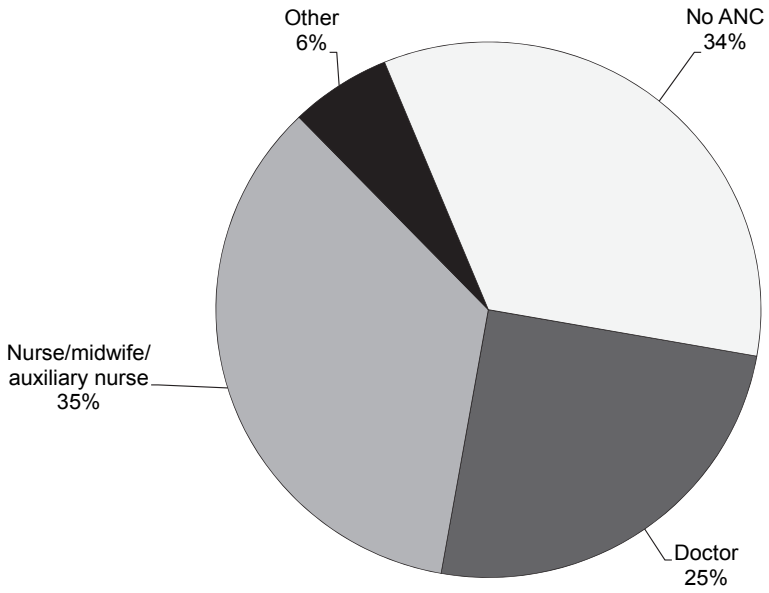
Continued…

Table 9.1—*Continued*

Background characteristic	Antenatal care provider							No ANC	Total	Percentage receiving antenatal care from a skilled provider[1]	Number of women
	Doctor	Nurse/ midwife	Auxiliary nurse/ midwife	Community extension health worker	Traditional birth attendant	Other	Missing				
Residence											
Urban	44.4	38.8	2.8	1.0	1.3	0.3	0.7	10.6	100.0	86.0	7,278
Rural	14.7	29.0	2.8	4.7	0.7	0.4	1.0	46.7	100.0	46.5	13,189
Zone											
North Central	32.0	33.5	1.5	5.1	0.2	0.7	1.0	26.0	100.0	67.0	2,890
North East	9.7	32.9	6.7	8.5	0.0	0.3	1.1	40.8	100.0	49.3	3,434
North West	9.5	30.2	1.3	2.5	0.0	0.1	1.0	55.4	100.0	41.0	7,445
South East	39.7	46.6	4.3	1.3	1.8	1.2	0.9	4.2	100.0	90.6	1,719
South South	35.5	36.0	1.5	1.7	3.1	0.7	1.0	20.6	100.0	73.0	2,002
South West	60.8	26.5	3.1	0.7	2.7	0.4	0.1	5.7	100.0	90.4	2,977
State											
North Central											
FCT-Abuja	48.7	37.8	1.9	2.9	0.9	1.9	0.0	5.9	100.0	88.5	143
Benue	27.4	29.6	0.3	0.0	0.0	1.0	2.0	39.6	100.0	57.4	615
Kogi	59.1	28.5	0.0	3.1	0.0	1.0	2.9	5.4	100.0	87.5	283
Kwara	54.6	33.1	1.5	2.9	1.0	1.7	0.3	4.9	100.0	89.2	278
Nasarawa	44.9	15.3	3.0	5.6	0.0	0.2	0.5	30.5	100.0	63.2	309
Niger	15.8	41.6	2.6	11.2	0.3	0.2	0.3	28.2	100.0	59.9	916
Plateau	24.7	37.8	0.6	1.7	0.0	0.4	0.9	33.9	100.0	63.1	346
North East											
Adamawa	16.0	68.3	0.8	1.2	0.0	0.0	0.2	13.4	100.0	85.1	459
Bauchi	2.8	40.6	12.5	9.1	0.0	0.3	1.7	33.2	100.0	55.8	833
Borno	8.2	28.7	2.2	0.2	0.0	0.0	2.0	58.7	100.0	39.2	716
Gombe	24.2	6.6	27.5	17.7	0.5	0.6	0.6	22.5	100.0	58.2	361
Taraba	7.3	22.8	1.7	29.6	0.0	1.0	0.4	37.3	100.0	31.8	476
Yobe	9.2	24.0	0.0	0.5	0.0	0.0	0.7	65.6	100.0	33.2	588
North West											
Jigawa	9.1	38.7	1.9	2.0	0.0	0.2	0.9	47.2	100.0	49.7	973
Kaduna	27.1	27.5	0.0	0.1	0.1	0.0	1.0	44.2	100.0	54.6	1,051
Kano	10.4	52.3	1.6	0.0	0.0	0.1	0.3	35.4	100.0	64.3	1,907
Katsina	2.9	17.5	2.3	9.7	0.0	0.1	1.7	65.8	100.0	22.7	1,066
Kebbi	1.6	22.6	0.1	3.4	0.0	0.1	1.2	71.2	100.0	24.3	790
Sokoto	5.6	10.8	1.0	1.1	0.0	0.0	1.8	79.7	100.0	17.4	693
Zamfara	5.8	14.9	1.6	2.9	0.0	0.0	1.1	73.6	100.0	22.4	966
South East											
Abia	34.4	54.5	1.3	0.0	3.8	1.0	0.4	4.7	100.0	90.1	199
Anambra	38.9	48.0	1.5	1.4	2.0	2.1	1.8	4.3	100.0	88.4	379
Ebonyi	38.8	42.9	3.3	2.9	3.4	1.5	0.0	7.1	100.0	85.1	467
Enugu	41.1	46.1	8.4	0.5	0.0	0.7	0.0	3.2	100.0	95.6	355
Imo	43.6	45.7	6.5	0.3	0.3	0.1	2.6	0.9	100.0	95.9	319
South South											
Akwa Ibom	30.6	41.7	1.0	0.9	1.8	0.6	1.0	22.5	100.0	73.3	334
Bayelsa	25.0	22.4	0.3	0.1	0.0	0.0	0.5	51.7	100.0	47.7	153
Cross River	26.8	42.9	2.9	7.0	3.9	1.4	1.3	13.8	100.0	72.6	368
Delta	26.2	45.8	0.4	0.0	7.5	0.5	1.6	17.9	100.0	72.5	376
Edo	48.0	35.4	0.5	0.2	0.3	0.9	0.3	14.4	100.0	83.9	264
Rivers	48.7	24.3	2.5	0.7	2.4	0.6	0.7	20.0	100.0	75.5	508
South West											
Ekiti	53.3	29.8	3.7	9.7	0.0	1.3	0.0	2.3	100.0	86.8	139
Lagos	71.7	17.6	4.6	0.3	4.3	0.0	0.3	1.2	100.0	93.9	867
Ogun	68.8	25.6	0.4	0.2	2.2	0.4	0.0	2.3	100.0	94.8	495
Ondo	52.5	18.4	7.7	0.6	4.5	1.4	0.2	14.6	100.0	78.6	385
Osun	66.7	29.1	2.4	0.2	0.0	0.1	0.0	1.5	100.0	98.2	307
Oyo	46.8	39.2	1.2	0.1	1.9	0.1	0.0	10.6	100.0	87.2	783
Mother's education											
No education	8.1	25.5	2.7	4.5	0.3	0.2	1.0	57.7	100.0	36.2	9,794
Primary	27.2	41.0	3.4	4.3	2.0	0.7	0.9	20.5	100.0	71.5	3,915
Secondary	43.8	40.8	2.9	1.4	1.4	0.5	0.7	8.4	100.0	87.6	5,475
More than secondary	71.4	25.0	0.9	0.7	0.2	0.1	0.5	1.1	100.0	97.3	1,283
Wealth quintile											
Lowest	4.4	18.1	2.1	4.6	0.2	0.3	0.9	69.4	100.0	24.6	4,699
Second	10.9	30.1	3.8	5.4	0.7	0.4	0.9	47.8	100.0	44.8	4,588
Middle	23.7	40.8	3.3	3.9	1.2	0.7	1.1	25.3	100.0	67.8	3,902
Fourth	36.0	46.5	2.7	1.8	1.5	0.6	0.7	10.3	100.0	85.2	3,674
Highest	61.5	31.1	1.9	0.5	1.1	0.1	0.7	3.1	100.0	94.5	3,604
Total	25.3	32.5	2.8	3.4	0.9	0.4	0.9	33.9	100.0	60.6	20,467

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.
[1] Skilled provider includes doctor, nurse, midwife, and auxiliary nurse/midwife.

Figure 9.1 **Source of antenatal care**



NDHS 2013

9.1.1 Number and Timing of Antenatal Visits

The antenatal care policy in Nigeria follows the WHO approach to promoting safe pregnancies, recommending at least four ANC visits for women without complications. This approach, called focused antenatal care, emphasises quality of care during each visit instead of focusing on the number of visits. The recommended schedule of visits is as follows: the first visit should occur by the end of 16 weeks of pregnancy, the second visit should be between 24 and 28 weeks of pregnancy, the third visit should occur at 32 weeks, and the fourth visit should occur at 36 weeks. However, women with complications, special needs, or conditions beyond the scope of basic care may require additional visits. Early detection of problems during pregnancy leads to more timely treatment and referrals in the case of complications. This is particularly important in Nigeria, a large country where physical barriers are a challenge to accessing care within the health system.

Table 9.2 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Nigeria 2013

Number and timing of ANC visits	Residence		Total
	Urban	Rural	
Number of ANC visits			
None	10.9	47.0	34.2
1	1.1	2.1	1.8
2-3	9.5	10.8	10.3
4+	74.5	38.2	51.1
Don't know/missing	4.0	1.9	2.7
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	10.9	47.0	34.2
<4	23.1	14.6	17.6
4-5	42.7	22.9	29.9
6-7	21.7	13.2	16.3
8+	1.2	1.5	1.4
Don't know/missing	0.3	0.7	0.6
Total	100.0	100.0	100.0
Number of women	7,278	13,189	20,467
Median months pregnant at first visit (for those with ANC)	5.0	5.0	5.0
Number of women with ANC	6,484	6,994	13,477

Table 9.2 shows the percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by number of antenatal care visits and timing of the first visit for the most recent live birth. Fifty-one percent of women who had a live birth in the five years preceding the survey reported visiting antenatal clinics at least four times during their pregnancy, an improvement over the figure in the 2008 NDHS (45 percent). Ten percent reported two or three antenatal visits during their last pregnancy. Thirty-four percent of women did not receive any antenatal care. The results show that only 18 percent of women had their first antenatal visit in the first trimester of pregnancy, which is not in compliance with the recommendation. Women in urban areas were more likely than those in rural areas to have their first ANC visit in the first trimester of pregnancy (23 percent versus 15 percent). The median duration of pregnancy at the first ANC visit is five months, the same figure observed in the 2008 NDHS.

9.1.2 Components of Antenatal Care

The content of antenatal care is an essential component of the quality of services. Focused antenatal care hinges on the principle that every pregnancy is at risk of complications. Therefore, apart from receiving basic care, every pregnant woman should be monitored for complications. For that reason, ensuring that pregnant women receive information on the symptoms of complications or the danger signs of pregnancy, along with screening for complications, should be a routine part of all antenatal care visits. To assess the quality of ANC services, respondents were asked a number of questions about the care they received during pregnancy for their most recent live birth.

Table 9.3 presents information on the percentage of women who took iron tablets or syrup and intestinal parasite drugs during their most recent pregnancy in the five years preceding the survey. The table also shows the percentage of women who were informed about signs of pregnancy complications and who received selected routine services.

Table 9.3 Components of antenatal care

Among women age 15-49 with a live birth in the five years preceding the survey, the percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Nigeria 2013

Background characteristic	Among women with a live birth in the past five years, the percentage who during the pregnancy of their last birth:		Number of women with a live birth in the past five years	Among women who received antenatal care for their most recent birth in the past five years, the percentage with selected services				Number of women with ANC for their most recent birth
	Took iron tablets or syrup	Took intestinal parasite drugs		Informed of signs of pregnancy complications	Blood pressure measured	Urine sample taken	Blood sample taken	
Mother's age at birth								
<20	53.3	11.7	2,813	56.1	83.7	75.1	72.9	1,512
20-34	65.3	14.9	13,877	68.4	91.4	82.4	82.8	9,464
35-49	64.0	14.6	3,777	68.4	91.2	81.8	82.5	2,501
Birth order								
1	68.2	14.9	3,721	68.1	90.2	83.2	82.7	2,660
2-3	66.0	15.0	6,423	70.1	91.0	83.2	83.1	4,441
4-5	64.9	14.1	4,899	68.3	91.3	81.8	82.5	3,287
6+	55.6	13.5	5,424	60.3	89.0	77.1	77.7	3,089
Residence								
Urban	84.1	19.3	7,278	75.5	95.5	89.3	90.1	6,484
Rural	52.0	11.7	13,189	59.2	85.7	74.2	73.9	6,994
Zone								
North Central	71.4	15.7	2,890	68.2	94.2	90.9	89.3	2,130
North East	61.7	12.0	3,434	49.2	85.1	70.0	70.8	2,022
North West	43.9	13.0	7,445	57.4	85.3	76.0	75.8	3,302
South East	88.2	18.9	1,719	69.3	91.7	77.9	83.0	1,635
South South	69.4	18.8	2,002	70.0	91.0	84.5	84.4	1,583
South West	88.0	13.7	2,977	87.3	96.5	89.4	88.4	2,806
State								
North Central								
FCT-Abuja	89.4	12.8	143	86.1	95.7	87.7	83.1	135
Benue	54.5	16.9	615	69.1	92.5	87.9	85.6	368
Kogi	84.6	21.9	283	93.4	98.6	92.8	92.4	263
Kwara	96.1	22.9	278	89.8	98.0	96.8	96.3	264
Nasarawa	67.7	18.6	309	67.1	94.3	88.3	86.1	214
Niger	76.8	10.2	916	42.3	96.9	95.1	93.6	658
Plateau	52.6	15.7	346	77.8	78.9	78.6	77.6	228
North East								
Adamawa	84.9	17.0	459	55.0	76.7	64.4	70.5	397
Bauchi	66.6	15.2	833	53.5	92.7	71.7	72.7	555
Borno	39.4	1.8	716	19.0	94.3	74.9	63.7	293
Gombe	75.5	31.8	361	60.1	75.6	62.5	68.2	279
Taraba	62.7	7.1	476	46.7	79.6	72.8	70.1	299
Yobe	54.5	7.7	588	58.0	88.5	75.8	81.2	200
North West								
Jigawa	49.9	10.9	973	56.9	80.7	73.6	70.7	513
Kaduna	66.0	18.6	1,051	52.1	91.0	81.9	88.7	582
Kano	60.2	22.6	1,907	58.4	81.9	79.3	77.7	1,232
Katsina	32.8	15.6	1,066	91.1	86.4	78.1	74.7	364
Kebbi	21.4	3.8	790	15.8	90.4	55.0	58.8	222
Sokoto	19.6	2.5	693	61.3	94.0	84.1	83.8	141
Zamfara	29.5	2.5	966	50.8	87.1	62.0	58.6	249

Continued…

Table 9.3—*Continued*

Background characteristic	Among women with a live birth in the past five years, the percentage who during the pregnancy of their last birth: Took iron tablets or syrup	Took intestinal parasite drugs	Number of women with a live birth in the past five years	Among women who received antenatal care for their most recent birth in the past five years, the percentage with selected services: Informed of signs of pregnancy complications	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women with ANC for their most recent birth
South East								
Abia	84.7	26.0	199	79.7	94.0	90.0	91.8	189
Anambra	80.6	14.1	379	59.6	93.1	90.7	90.1	356
Ebonyi	88.1	27.5	467	64.1	89.5	60.6	67.6	434
Enugu	93.6	14.1	355	76.7	88.0	69.8	82.0	344
Imo	93.3	12.9	319	73.2	96.1	89.1	91.8	311
South South								
Akwa Ibom	62.2	26.1	334	86.3	91.6	88.4	87.5	257
Bayelsa	58.5	28.0	153	24.0	94.0	92.3	91.1	73
Cross River	81.9	23.0	368	90.2	90.1	72.4	76.3	317
Delta	60.8	13.9	376	53.7	86.3	81.4	81.5	303
Edo	75.2	7.5	264	85.6	95.1	88.7	86.1	226
Rivers	71.9	17.8	508	55.8	92.1	90.1	88.6	406
South West								
Ekiti	96.4	8.6	139	94.4	97.4	92.8	88.0	136
Lagos	91.1	18.1	867	93.5	97.7	87.8	87.3	855
Ogun	91.8	12.0	495	89.4	95.4	90.9	90.1	484
Ondo	81.4	6.3	385	74.2	88.6	79.0	73.9	328
Osun	98.5	23.6	307	99.3	99.4	96.8	97.2	302
Oyo	79.9	10.7	783	77.9	98.0	91.4	91.5	700
Education								
No education	42.9	9.0	9,794	51.1	83.6	71.9	70.4	4,118
Primary	74.0	16.8	3,915	66.7	89.7	77.8	79.0	3,094
Secondary	85.7	20.9	5,475	75.3	94.6	87.8	88.6	5,000
More than secondary	92.4	20.4	1,283	86.9	98.4	96.9	97.4	1,265
Wealth quintile								
Lowest	31.7	7.3	4,699	44.8	75.4	56.6	57.5	1,429
Second	50.5	11.7	4,588	55.0	82.0	67.3	67.0	2,379
Middle	71.3	15.5	3,902	61.9	90.4	81.3	80.1	2,901
Fourth	85.2	19.8	3,674	73.6	95.0	89.0	90.2	3,283
Highest	90.2	20.3	3,604	82.4	98.2	94.4	94.9	3,485
Total	63.4	14.4	20,467	67.0	90.5	81.5	81.7	13,477

Among women with a live birth in the past five years, 63 percent took iron tablets or syrup and 14 percent took intestinal parasite drugs. There were substantial variations in iron supplementation by background characteristics. Women age 20-34, women pregnant with their first child, urban women, women in the South West and South East zones, better educated women, and wealthier women were more likely than other women to have taken iron supplements during pregnancy. For example, 65 percent of women age 20-34 and 64 percent of women age 35-49 took iron supplements during their pregnancy, as compared with 53 percent of women less than age 20. Also, 84 percent of women in urban areas took iron supplements, compared with 52 percent in rural areas.

Sixty-seven percent of women were informed of signs of pregnancy complications. In addition, 91 percent had their blood pressure measured, 82 percent gave a urine sample, and 82 percent provided a blood sample.

The findings indicate that women at higher educational levels were more likely than their counterparts to use iron tablets or syrup and intestinal parasite drugs; they were also more likely to have their blood pressure measured and to provide urine and blood samples. Table 9.3 shows that 43 percent of women with no education used iron tablets or syrup, compared with 74 percent of women with a primary education, 86 percent of women with a secondary education, and 92 percent of women with more than a secondary education. The pattern is similar for use of intestinal parasite drugs and receipt of information on signs of pregnancy complications.

9.1.3 Tetanus Toxoid Injections

Neonatal tetanus is a leading cause of neonatal death in developing countries where a high proportion of deliveries take place at home or in places where hygienic conditions may be poor. Tetanus toxoid (TT) injections are given to women during pregnancy to prevent infant deaths due to neonatal tetanus; neonatal tetanus can result when sterile procedures are not followed in cutting the umbilical cord after delivery. In the 2013 NDHS, information was collected on the number of tetanus toxoid doses the mother received during the pregnancy for her most recent birth in the five years preceding the survey. If the mother did not receive at least two tetanus injections during the pregnancy, additional questions were asked about the number and timing of the injections that she may have received prior to that pregnancy. If a pregnant woman has not received any previous tetanus injections, she needs two doses of tetanus toxoid during pregnancy to be fully protected. However, if a woman was immunised before she became pregnant, she may require one or no tetanus toxoid injections during her pregnancy, depending on the number of injections she has received in the past and the timing of the last injection. Five tetanus toxoid doses are required to provide lifetime protection from neonatal tetanus.

Table 9.4 shows tetanus toxoid injections among mothers age 15-49 with a live birth in the five years preceding the survey, the percentage of women receiving two or more tetanus toxoid injections during the pregnancy for their last live birth, and the percentage whose last live birth was protected against neonatal tetanus.

Table 9.4 Tetanus toxoid injections

Among mothers age 15-49 with a live birth in the five years preceding the survey, the percentage receiving two or more tetanus toxoid injections during the pregnancy for the last live birth and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Nigeria 2013

Background characteristic	Percentage receiving two or more injections during last pregnancy	Percentage whose last birth was protected against neonatal tetanus[1]	Number of mothers
Mother's age at birth			
<20	34.2	36.5	2,813
20-34	51.2	55.7	13,877
35-49	48.4	54.6	3,777
Birth order			
1	53.3	54.6	3,721
2-3	52.0	56.8	6,423
4-5	49.4	54.2	4,899
6+	39.7	45.7	5,424
Residence			
Urban	70.3	76.9	7,278
Rural	36.3	39.5	13,189
Zone			
North Central	53.8	56.8	2,890
North East	36.8	40.7	3,434
North West	27.1	32.9	7,445
South East	82.0	84.7	1,719
South South	68.6	73.0	2,002
South West	76.6	80.7	2,977
State			
North Central			
FCT-Abuja	59.7	72.8	143
Benue	40.3	43.4	615
Kogi	79.0	81.3	283
Kwara	80.4	83.4	278
Nasarawa	49.4	51.4	309
Niger	51.4	51.9	916
Plateau	44.0	50.6	346
North East			
Adamawa	58.8	66.5	459
Bauchi	32.1	32.7	833
Borno	28.6	32.4	716
Gombe	50.7	58.0	361
Taraba	41.1	47.9	476
Yobe	24.1	25.6	588

Continued…

Table 9.4—*Continued*

Background characteristic	Percentage receiving two or more injections during last pregnancy	Percentage whose last birth was protected against neonatal tetanus[1]	Number of mothers
North West			
Jigawa	30.1	34.3	973
Kaduna	44.9	52.8	1,051
Kano	34.1	47.9	1,907
Katsina	23.8	25.3	1,066
Kebbi	14.4	14.4	790
Sokoto	12.6	13.9	693
Zamfara	15.5	17.5	966
South East			
Abia	88.7	91.7	199
Anambra	83.9	87.2	379
Ebonyi	70.3	72.1	467
Enugu	88.6	91.8	355
Imo	85.3	87.8	319
South South			
Akwa Ibom	62.4	67.5	334
Bayelsa	59.3	63.4	153
Cross River	67.2	73.2	368
Delta	67.7	70.8	376
Edo	69.8	74.4	264
Rivers	76.5	80.3	508
South West			
Ekiti	85.4	89.4	139
Lagos	81.7	85.5	867
Ogun	76.0	78.5	495
Ondo	60.9	70.4	385
Osun	92.5	94.1	307
Oyo	71.1	75.0	783
Education			
No education	25.4	28.8	9,794
Primary	57.6	63.9	3,915
Secondary	74.0	78.9	5,475
More than secondary	85.9	91.5	1,283
Wealth quintile			
Lowest	15.9	17.3	4,699
Second	33.0	36.9	4,588
Middle	54.5	59.6	3,902
Fourth	69.7	76.4	3,674
Highest	82.0	88.0	3,604
Total	48.4	52.8	20,467

[1] Includes mothers with two injections during the pregnancy of their last birth or two or more injections (the last within 3 years of the last live birth), three or more injections (the last within 5 years of the last birth), four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last birth.

Nationally, 48 percent of women received two or more tetanus injections during their last pregnancy, and 53 percent had their last birth protected against neonatal tetanus. Women in urban areas (70 percent) were almost twice as likely as women in rural areas (36 percent) to have received two or more tetanus toxoid injections during their last pregnancy. Similarly, 77 percent of women in urban areas had their last births protected against neonatal tetanus, as compared with 40 percent of their rural counterparts.

The proportion of women who received two or more tetanus toxoid injections during the pregnancy for their last live birth varies considerably across zones, ranging from a high of 82 percent in the South East to a low of 27 percent in the North West.

Women with more than a secondary education (86 percent) and women who are in the fourth and highest wealth quintiles (70 percent and 82 percent, respectively) are more likely than other women to have received two or more injections during the pregnancy for their last live birth and to have had their last birth protected against neonatal tetanus.

9.2 DELIVERY

9.2.1 Place of Delivery

Increasing the percentage of births delivered in health facilities is an important factor in reducing deaths arising from complications of pregnancy. The expectation is that if a complication arises during delivery, a skilled health worker can manage the complication or refer the mother to the next level of care.

Table 9.5 shows the percent distribution of live births in the five years preceding the survey by place of delivery and the percentage of births delivered in a health facility, according to background characteristics. Thirty-six percent of births in Nigeria are delivered in a health facility (as compared with 35 percent in 2008) (Figure 9.2). Twenty-three percent of deliveries occur in public sector facilities, and 13 percent occur in private sector facilities. Sixty-three percent of births are delivered at home. Women less than age 20 are more likely than women in other age groups to deliver at home (74 percent). The proportion of births occurring in health facilities decreases with increasing birth order, from a high of 48 percent for first births to a low of 22 percent for births of order six or above.

Table 9.5 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Nigeria 2013

Background characteristic	Health facility: Public sector	Health facility: Private sector	Home	Other	Missing	Total	Percentage delivered in a health facility	Number of births
Mother's age at birth								
<20	18.8	5.7	74.2	0.0	1.3	100.0	24.5	4,726
20-34	23.3	15.0	60.6	0.1	1.0	100.0	38.3	22,220
35-49	22.7	12.4	63.8	0.1	1.0	100.0	35.1	4,882
Birth order								
1	30.0	17.8	51.0	0.1	1.2	100.0	47.8	6,285
2-3	23.3	16.7	58.9	0.1	1.0	100.0	40.0	10,311
4-5	22.1	11.7	65.1	0.2	0.9	100.0	33.8	7,441
6+	16.0	6.4	76.4	0.1	1.1	100.0	22.4	7,791
Antenatal care visits[1]								
None	2.8	1.5	95.1	0.1	0.5	100.0	4.3	6,990
1-3	21.3	6.9	71.7	0.2	0.0	100.0	28.2	2,474
4+	37.7	22.9	39.3	0.1	0.0	100.0	60.6	10,457
Don't know/missing	36.6	21.7	41.6	0.1	0.0	100.0	58.3	546
Residence								
Urban	35.1	26.5	37.4	0.1	0.8	100.0	61.7	11,126
Rural	15.8	6.1	76.9	0.1	1.1	100.0	21.9	20,702
Zone								
North Central	30.0	15.7	52.9	0.2	1.2	100.0	45.7	4,340
North East	18.4	1.2	79.3	0.1	1.0	100.0	19.5	5,578
North West	11.0	0.5	87.5	0.0	1.0	100.0	11.5	11,775
South East	33.9	44.2	19.9	0.3	1.6	100.0	78.1	2,840
South South	35.7	14.3	48.7	0.1	1.1	100.0	50.1	2,935
South West	35.4	39.6	24.2	0.2	0.5	100.0	75.0	4,360
State								
North Central								
FCT-Abuja	48.9	20.2	30.9	0.0	0.0	100.0	69.1	209
Benue	25.7	25.2	48.3	0.3	0.4	100.0	50.9	967
Kogi	51.7	27.2	18.8	0.2	2.0	100.0	78.9	401
Kwara	42.8	33.9	23.0	0.0	0.3	100.0	76.7	405
Nasarawa	29.2	10.9	59.0	0.6	0.3	100.0	40.1	460
Niger	23.3	2.0	72.3	0.0	2.4	100.0	25.3	1,394
Plateau	22.2	13.6	63.0	0.3	1.0	100.0	35.8	505
North East								
Adamawa	31.8	1.6	65.3	0.5	0.8	100.0	33.4	732
Bauchi	16.0	0.9	82.0	0.1	0.9	100.0	16.9	1,431
Borno	16.8	0.2	82.6	0.0	0.4	100.0	17.0	1,118
Gombe	26.4	1.2	71.4	0.1	0.9	100.0	27.6	595
Taraba	19.5	3.9	76.0	0.2	0.4	100.0	23.4	764
Yobe	7.5	0.1	90.0	0.0	2.4	100.0	7.6	938

Continued…

Table 9.5—*Continued*

Background characteristic	Health facility: Public sector	Health facility: Private sector	Home	Other	Missing	Total	Percentage delivered in a health facility	Number of births
North West								
Jigawa	6.6	0.2	91.4	0.0	1.9	100.0	6.7	1,594
Kaduna	29.1	3.3	67.5	0.0	0.1	100.0	32.4	1,439
Kano	12.6	0.3	86.5	0.0	0.6	100.0	12.9	3,024
Katsina	8.9	0.1	89.0	0.0	2.0	100.0	9.0	1,703
Kebbi	8.4	0.1	91.0	0.0	0.5	100.0	8.5	1,247
Sokoto	4.7	0.0	94.2	0.0	1.1	100.0	4.7	1,151
Zamfara	5.0	0.0	94.2	0.0	0.8	100.0	5.0	1,618
South East								
Abia	32.7	40.1	24.3	0.0	2.8	100.0	72.8	326
Anambra	24.9	59.8	11.3	0.1	3.9	100.0	84.6	657
Ebonyi	29.5	30.1	39.9	0.4	0.1	100.0	59.6	748
Enugu	36.5	49.0	13.1	0.7	0.7	100.0	85.5	558
Imo	48.8	42.1	7.5	0.4	1.2	100.0	90.9	552
South South								
Akwa Ibom	35.5	7.7	55.9	0.2	0.8	100.0	43.2	473
Bayelsa	25.3	3.1	70.9	0.0	0.7	100.0	28.4	233
Cross River	34.0	6.4	59.1	0.2	0.2	100.0	40.4	532
Delta	46.7	11.0	39.6	0.0	2.7	100.0	57.6	561
Edo	40.1	34.7	24.6	0.3	0.3	100.0	74.7	405
Rivers	29.7	19.2	49.6	0.0	1.4	100.0	49.0	730
South West								
Ekiti	60.7	25.6	12.9	0.4	0.4	100.0	86.3	200
Lagos	21.1	56.1	21.7	0.1	1.1	100.0	77.2	1,303
Ogun	30.7	44.0	24.8	0.0	0.5	100.0	74.7	736
Ondo	37.4	18.9	43.2	0.0	0.6	100.0	56.2	568
Osun	60.5	28.7	10.6	0.0	0.2	100.0	89.1	445
Oyo	39.9	34.8	24.7	0.6	0.0	100.0	74.7	1,108
Mother's education								
No education	9.5	1.7	87.7	0.0	1.1	100.0	11.2	15,657
Primary	26.4	15.1	57.3	0.1	1.0	100.0	41.5	6,127
Secondary	38.2	27.7	32.9	0.2	1.0	100.0	65.9	8,211
More than secondary	50.7	40.6	7.8	0.2	0.7	100.0	91.3	1,834
Wealth quintile								
Lowest	4.6	1.2	93.1	0.1	1.0	100.0	5.8	7,496
Second	12.6	4.5	81.5	0.1	1.3	100.0	17.1	7,355
Middle	25.6	11.5	61.7	0.2	0.9	100.0	37.1	6,001
Fourth	38.5	18.2	42.1	0.1	1.0	100.0	56.8	5,656
Highest	41.1	38.8	19.1	0.0	0.9	100.0	79.9	5,320
Total	22.6	13.2	63.1	0.1	1.0	100.0	35.8	31,828

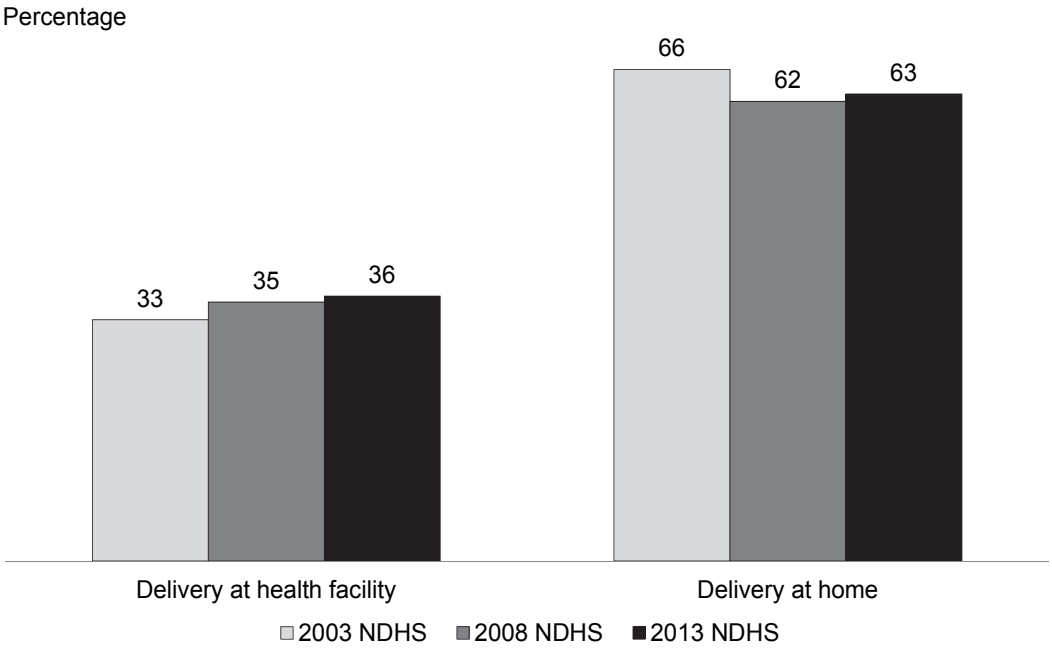
[1] Includes only the most recent birth in the five years preceding the survey

Women in rural areas are more likely to deliver at home (77 percent) than their urban counterparts (37 percent). The North West has the highest proportion of deliveries at home (88 percent), followed by the North East (79 percent); the South East has the lowest proportion of such deliveries (20 percent), followed closely by the South West (24 percent).

Women with higher levels of educational attainment are more likely to deliver in a health facility than women with less or no education. For example, women with more than a secondary education (91 percent) are eight times as likely to deliver in a health facility as women with no education (11 percent). The proportion of births occurring in a health facility increases steadily with increasing wealth quintile, from 6 percent of births in the lowest quintile to 80 percent in the highest quintile.

Figure 9.2 presents trends in the percentages of deliveries occurring at a health facility and at home over the past 10 years. The percentages have remained similar over the period.

Figure 9.2 **Trends in place of delivery**



9.2.2 Reasons for Not Delivering in a Health Facility

Table 9.6 presents information on most recent live births not delivered in a health facility according to specific reasons cited for not delivering in such a facility. Overall, 33 percent of mothers reported that they did not give birth at a health facility because the child was born suddenly and there was no time to reach the facility. Twenty-nine percent of women reported that they did not deliver in a health facility because they felt it was not necessary, while others reported distance from the facility (13 percent) or cost (8 percent) as the main hindering factor. In the case of sixth- and higher-order births, the reason most often cited was that it was not necessary to deliver at a health facility (31 percent).

Reasons varied across zones. Cost was cited as the greatest impediment to delivery at a health facility in the South South zone (27 percent). Seven percent of mothers in the South West cited lack of trust for the provider or poor quality of service as their reason for not delivering in a health facility. The South West also had the greatest proportion of women whose husbands or family did not allow them to deliver in a health facility (12 percent). The North West had the highest proportion of mothers who said that delivery in a health facility was not necessary (37 percent). Twelve percent of mothers in the North West said that it is not customary to deliver in a health facility.

One of the most cited reasons for not delivering in a health facility in all of the zones other than the North West and South South was that the child was born suddenly and there was no time to reach the facility. Forty-four percent of mothers in the North East cited this as a reason for delivering at home, along with 41 percent in the North Central zone, 37 percent in the South East, and 26 percent in the South West. This is particularly important because it may reflect the need for improvements in the quality of antenatal care received. It is during ANC visits that the expected date of delivery is typically determined. The mother is usually expected to deliver any moment from 38-42 weeks of gestation. Errors in estimating the expected date of delivery could lead to the baby being delivered supposedly unexpectedly.

Table 9.6 Reasons for not delivering in a health facility

Among last live births not delivered in a health facility, percentage whose mothers cite specific reasons for not delivering in a health facility, according to background characteristics, Nigeria 2013

Background characteristic	Cost too much	Facility not open	Too far/no transporta-tion	Don't trust facility/ poor-quality service	No female provider at facility	Husband/ family did not allow	Not necessary	Not customary	Child born suddenly before going to facility	Other	Number of births
Birth order											
1	8.5	2.5	14.1	1.0	0.6	7.4	25.8	6.0	33.9	0.2	2,205
2-3	7.9	1.7	12.3	1.4	0.4	7.8	27.4	7.1	33.8	0.2	4,338
4-5	7.8	2.3	12.7	1.6	0.3	6.4	28.1	8.0	32.7	0.1	3,724
6+	7.3	1.6	13.1	0.8	0.6	5.5	31.4	8.8	30.6	0.2	4,723
Residence											
Urban	8.1	1.0	7.3	2.8	0.4	5.2	26.1	5.9	42.9	0.4	2,923
Rural	7.7	2.1	14.3	0.8	0.5	7.1	29.2	8.2	30.0	0.1	12,067
Zone											
North Central	10.7	0.9	14.1	0.3	0.1	2.4	28.2	1.8	41.4	0.1	1,712
North East	8.3	3.9	17.5	0.7	0.3	5.2	16.5	3.8	43.5	0.2	3,391
North West	3.5	0.5	9.6	0.4	0.4	8.5	37.4	12.0	27.5	0.0	7,490
South East	15.4	2.6	18.0	3.6	1.1	4.2	14.7	2.5	36.8	1.1	397
South South	26.9	4.2	14.3	3.7	0.9	1.5	21.9	2.4	23.2	0.8	1,057
South West	9.7	5.0	16.5	6.8	0.7	11.9	16.3	6.4	26.2	0.4	942
State											
North Central											
FCT-Abuja	5.9	0.6	11.0	0.0	0.0	5.5	29.5	14.3	33.2	0.0	56
Benue	20.5	0.6	6.6	0.9	0.0	3.6	30.2	0.9	36.6	0.0	323
Kogi	12.2	0.8	6.7	0.0	0.0	0.4	15.8	0.0	63.1	1.1	56
Kwara	10.8	2.2	13.4	1.4	1.6	2.2	21.2	5.5	41.7	0.0	71
Nasarawa	7.8	0.6	5.9	0.0	0.0	6.5	24.9	2.9	51.4	0.0	192
Niger	2.4	0.1	21.7	0.0	0.0	0.7	28.8	0.3	45.9	0.1	734
Plateau	23.6	3.3	10.5	0.4	0.4	2.5	30.5	3.1	25.7	0.0	279
North East											
Adamawa	0.6	3.0	7.9	0.0	0.2	3.8	43.8	0.3	40.4	0.0	311
Bauchi	0.1	0.9	4.7	0.5	0.3	1.3	24.0	5.1	62.5	0.6	776
Borno	9.4	3.1	20.8	1.5	0.3	10.9	1.0	5.6	47.3	0.0	754
Gombe	3.0	1.3	6.0	0.4	1.0	0.5	11.9	1.0	74.5	0.3	280
Taraba	14.5	0.4	26.6	1.5	0.2	3.4	31.3	2.0	20.2	0.0	415
Yobe	16.3	10.1	29.1	0.3	0.4	6.8	7.9	4.0	25.1	0.0	856
North West											
Jigawa	6.2	0.4	16.3	0.2	0.1	4.0	38.3	7.3	27.1	0.3	986
Kaduna	0.9	1.1	15.6	0.3	0.0	6.2	28.4	2.1	45.4	0.0	860
Kano	4.5	0.0	10.0	0.2	0.0	3.0	63.4	1.7	17.2	0.0	1,710
Katsina	1.7	0.8	14.6	0.5	1.0	1.2	32.6	5.5	41.9	0.1	1,089
Kebbi	0.5	0.0	2.5	0.2	1.6	18.8	36.6	5.9	33.8	0.0	748
Sokoto	2.0	1.2	1.3	0.1	0.3	7.7	19.4	48.0	20.2	0.0	982
Zamfara	7.0	0.4	5.8	1.5	0.6	23.7	25.0	18.4	17.7	0.0	1,115
South East											
Abia	12.6	5.2	17.0	4.4	2.2	13.0	13.2	0.0	32.3	0.0	46
Anambra	29.8	3.2	26.8	4.3	0.0	5.3	8.5	0.0	13.2	8.9	49
Ebonyi	11.5	2.3	14.2	1.3	1.2	3.5	20.8	3.6	41.7	0.0	232
Enugu	18.6	3.6	24.8	4.1	2.0	0.0	0.0	5.1	41.8	0.0	35
Imo	20.8	0.0	25.1	15.6	0.0	0.0	0.0	0.0	38.4	0.0	36
South South											
Akwa Ibom	31.5	5.3	10.1	5.3	0.6	2.9	17.7	0.9	24.5	1.1	186
Bayelsa	17.5	9.4	18.1	3.0	1.3	1.2	37.3	1.1	10.5	0.6	153
Cross River	32.5	1.4	13.4	3.0	1.2	1.8	14.1	4.4	27.9	0.3	220
Delta	17.2	7.5	13.8	1.0	0.3	0.9	36.3	0.8	21.6	0.6	143
Edo	26.6	3.2	25.4	2.9	0.0	1.3	8.1	1.2	30.9	0.3	82
Rivers	29.9	1.5	12.7	5.2	1.4	1.0	19.0	4.0	24.0	1.5	274
South West											
Ekiti	18.7	23.8	2.4	2.0	0.0	5.5	16.8	0.0	30.7	0.0	18
Lagos	18.0	1.4	13.2	15.3	0.5	9.7	9.0	11.7	20.6	0.6	291
Ogun	10.8	1.3	20.4	1.4	0.0	16.1	12.2	1.2	36.6	0.0	169
Ondo	5.2	16.0	23.7	6.0	0.2	1.6	19.0	8.6	18.5	1.1	196
Osun	0.0	6.3	1.3	0.0	0.0	12.7	35.9	6.3	37.5	0.0	42
Oyo	3.3	1.2	15.5	2.4	2.1	20.6	22.8	2.3	29.9	0.0	227
Mother's education											
No education	6.0	1.6	14.0	0.5	0.4	7.8	30.1	9.4	30.1	0.1	10,356
Primary	12.0	2.3	11.6	2.0	0.4	4.5	26.5	4.3	36.2	0.2	2,509
Secondary	12.0	2.8	9.3	3.5	0.6	3.9	24.4	3.6	39.4	0.6	2,015
More than secondary	2.8	3.8	7.8	2.4	0.0	4.1	20.0	4.4	53.9	0.8	111
Wealth quintile											
Lowest	6.7	2.0	18.3	0.7	0.6	7.8	28.2	9.7	25.9	0.0	5,471
Second	7.5	1.9	11.6	0.4	0.3	7.2	30.6	8.3	32.1	0.2	4,417
Middle	9.2	1.6	9.5	1.2	0.3	5.2	27.8	5.2	39.8	0.1	2,671
Fourth	9.1	2.2	6.6	2.6	0.3	4.7	28.7	4.5	40.7	0.5	1,682
Highest	9.2	1.8	7.3	6.4	0.5	5.2	23.0	6.6	39.3	0.7	750
Total	7.8	1.9	12.9	1.2	0.5	6.7	28.6	7.7	32.5	0.2	14,990

9.2.3 Assistance during Delivery

In addition to place of birth, assistance during childbirth is an important variable influencing the birth outcome and the mother's and infant's health. The skills and performance of the person providing assistance during delivery determine whether complications are properly managed and hygienic practices are observed.

Table 9.7 shows the percent distribution of live births in the five years preceding the survey by the person providing assistance during delivery. Overall, 38 percent of all deliveries are assisted by a skilled provider, namely a doctor, nurse, or midwife. Traditional birth attendants assist 22 percent of all deliveries. Twenty-three percent of births are assisted by a relative or other person, and 13 percent are unassisted.

About a quarter of mothers less than age 20 at the time of delivery, compared with 41 percent of those age 20-34, are assisted during delivery by a skilled provider. Birth order is inversely associated with the likelihood of a birth being assisted by a skilled provider. Half of first-order births are assisted by a skilled provider, as compared with a quarter of births of order six or higher.

Table 9.7 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider, and percentage delivered via caesarean section, according to background characteristics, Nigeria 2013

	Person providing assistance during delivery											
Background characteristic	Doctor	Nurse/ midwife	Auxiliary nurse/ midwife	Community extension health worker	Traditional birth attendant	Relative/ other	No one	Don't know/ missing	Total	Percentage delivered by a skilled provider[1]	Percentage delivered by C-section	Number of births
Mother's age at birth												
<20	5.1	17.8	2.3	3.4	29.3	30.7	9.8	1.7	100.0	25.2	1.0	4,726
20-34	11.2	26.8	3.1	2.1	20.7	21.7	13.0	1.4	100.0	41.1	2.1	22,220
35-49	10.9	24.0	2.4	2.3	21.2	19.5	18.4	1.2	100.0	37.3	2.7	4,882
Birth order												
1	14.7	31.8	3.3	2.5	20.3	20.7	5.1	1.5	100.0	49.8	3.6	6,285
2-3	11.5	27.6	3.5	2.1	20.5	23.1	10.4	1.3	100.0	42.6	2.2	10,311
4-5	9.4	24.7	2.5	2.8	21.7	23.3	14.2	1.2	100.0	36.7	1.6	7,441
6+	5.7	16.5	2.1	2.1	25.7	23.3	23.2	1.5	100.0	24.2	1.0	7,791
Antenatal care visits[2]												
None	1.4	3.1	0.7	1.0	38.6	32.0	22.4	0.9	100.0	5.2	0.4	6,990
1-3	5.6	21.4	2.1	4.7	20.1	29.1	16.5	0.4	100.0	29.2	1.2	2,474
4+	18.4	41.5	4.5	3.0	11.2	14.7	6.6	0.2	100.0	64.3	3.8	10,457
Don't know/missing	18.3	43.7	5.9	3.0	11.1	10.6	7.4	0.0	100.0	67.8	4.9	546
Place of delivery												
Health facility	27.4	63.3	5.1	3.2	0.4	0.3	0.1	0.3	100.0	95.8	5.7	11,387
Elsewhere	0.7	3.7	1.7	1.9	34.6	35.8	21.1	0.6	100.0	6.1	0.0	20,115
Missing	0.1	2.8	0.0	0.3	1.0	2.1	1.4	92.3	100.0	2.9	0.0	326
Residence												
Urban	19.0	43.4	4.6	1.2	11.8	12.5	6.5	0.9	100.0	67.0	3.9	11,126
Rural	5.5	15.2	2.0	2.9	27.5	28.2	17.0	1.7	100.0	22.7	1.0	20,702
Zone												
North Central	12.4	32.2	1.9	6.0	3.6	35.4	6.5	2.0	100.0	46.5	2.3	4,340
North East	3.3	14.3	2.3	3.9	26.0	39.0	9.7	1.5	100.0	19.9	0.9	5,578
North West	3.5	8.5	0.3	0.8	34.0	23.6	27.8	1.4	100.0	12.3	0.6	11,775
South East	13.7	60.0	8.5	2.1	7.4	5.1	1.5	1.6	100.0	82.2	3.9	2,840
South South	13.7	37.6	4.0	2.0	29.7	9.6	1.8	1.5	100.0	55.4	4.1	2,935
South West	30.4	44.9	7.2	1.2	7.4	7.1	1.3	0.5	100.0	82.5	4.5	4,360
State												
North Central												
FCT-Abuja	29.3	39.7	1.2	6.0	4.6	15.2	4.0	0.0	100.0	70.2	6.3	209
Benue	14.7	36.0	0.9	0.9	4.5	36.4	6.0	0.6	100.0	51.6	2.1	967
Kogi	33.0	36.8	1.1	7.3	3.8	15.4	0.4	2.3	100.0	70.9	6.1	401
Kwara	10.0	66.8	2.8	2.3	3.6	13.1	1.0	0.4	100.0	79.6	4.3	405
Nasarawa	15.4	20.9	4.4	6.7	9.1	30.1	12.9	0.4	100.0	40.7	1.5	460
Niger	4.9	21.3	2.3	11.6	1.4	48.0	5.8	4.7	100.0	28.6	0.6	1,394
Plateau	4.7	30.5	0.6	1.5	2.3	45.9	13.5	1.0	100.0	35.8	1.7	505

Continued…

Table 9.7—*Continued*

Background characteristic	Person providing assistance during delivery									Percentage delivered by a skilled provider[1]	Percentage delivered by C-section	Number of births
	Doctor	Nurse/ midwife	Auxiliary nurse/ midwife	Community extension health worker	Traditional birth attendant	Relative/ other	No one	Don't know/ missing	Total			
North East												
Adamawa	4.3	31.5	0.5	2.0	2.1	52.0	6.7	0.9	100.0	36.3	2.3	732
Bauchi	1.4	11.1	3.8	3.1	19.6	37.5	21.2	2.4	100.0	16.3	0.6	1,431
Borno	3.6	18.5	0.2	0.7	44.7	29.6	2.4	0.4	100.0	22.3	0.4	1,118
Gombe	10.9	5.4	10.3	3.6	12.4	41.3	15.2	0.9	100.0	26.6	1.2	595
Taraba	1.9	11.6	0.7	16.4	5.5	53.7	9.1	1.1	100.0	14.3	1.6	764
Yobe	1.3	8.7	0.2	0.2	57.4	29.2	0.2	2.9	100.0	10.2	0.3	938
North West												
Jigawa	1.7	5.6	0.3	0.8	31.2	35.0	23.1	2.3	100.0	7.6	0.9	1,594
Kaduna	14.9	20.5	0.1	0.2	24.9	23.6	15.6	0.2	100.0	35.5	1.4	1,439
Kano	3.4	10.0	0.3	0.2	23.7	22.5	39.0	1.0	100.0	13.7	0.5	3,024
Katsina	0.7	6.9	0.1	2.5	51.5	10.7	25.0	2.6	100.0	7.7	0.3	1,703
Kebbi	0.6	8.7	0.0	0.7	22.8	38.9	27.9	0.4	100.0	9.3	0.8	1,247
Sokoto	2.0	3.3	0.1	0.0	84.7	7.9	0.1	1.9	100.0	5.4	0.2	1,151
Zamfara	1.8	3.4	0.9	1.6	18.2	27.7	45.1	1.4	100.0	6.1	0.3	1,618
South East												
Abia	9.2	65.2	2.8	0.5	15.5	3.9	0.3	2.5	100.0	77.2	4.2	326
Anambra	17.9	65.2	4.4	3.4	3.6	1.7	0.0	3.7	100.0	87.6	5.1	657
Ebonyi	9.0	44.1	9.0	3.8	16.2	12.7	5.0	0.1	100.0	62.1	2.0	748
Enugu	13.9	62.1	15.6	1.3	2.0	3.8	0.5	0.8	100.0	91.5	3.4	558
Imo	17.6	70.0	8.9	0.1	0.7	0.9	0.5	1.3	100.0	96.5	5.1	552
South South												
Akwa Ibom	10.7	33.6	1.3	0.7	46.9	4.8	0.6	1.5	100.0	45.6	2.6	473
Bayelsa	10.2	19.8	2.1	0.0	65.6	1.6	0.1	0.7	100.0	32.1	1.0	233
Cross River	5.5	31.1	4.7	8.0	20.3	27.9	2.2	0.2	100.0	41.3	2.8	532
Delta	9.7	46.5	3.6	1.2	27.2	3.4	5.4	3.0	100.0	59.8	2.3	561
Edo	26.4	49.1	2.8	1.1	12.6	6.2	1.6	0.3	100.0	78.3	6.4	405
Rivers	19.0	37.6	6.8	0.3	25.6	8.4	0.3	2.1	100.0	63.4	7.1	730
South West												
Ekiti	21.2	55.9	7.7	6.8	4.0	3.6	0.5	0.4	100.0	84.7	6.5	200
Lagos	41.0	40.1	6.1	2.2	7.4	1.5	0.8	0.9	100.0	87.2	6.5	1,303
Ogun	46.4	35.8	2.5	0.3	5.6	8.6	0.2	0.5	100.0	84.7	1.9	736
Ondo	17.8	31.7	17.7	0.6	21.1	7.2	3.3	0.6	100.0	67.2	5.0	568
Osun	24.4	63.5	6.3	0.0	1.8	3.5	0.2	0.2	100.0	94.2	3.2	445
Oyo	18.0	54.0	6.3	0.3	4.3	14.7	2.3	0.0	100.0	78.3	3.8	1,108
Mother's education												
No education	2.5	8.3	0.9	2.3	31.7	30.9	21.7	1.7	100.0	11.7	0.5	15,657
Primary	9.6	30.0	4.7	3.2	18.4	23.1	9.6	1.3	100.0	44.3	1.6	6,127
Secondary	18.9	47.2	5.6	2.0	10.8	11.3	3.1	1.1	100.0	71.7	3.3	8,211
More than secondary	39.7	51.7	1.8	0.8	2.2	2.8	0.4	0.6	100.0	93.2	11.1	1,834
Wealth quintile												
Lowest	1.4	3.8	0.5	1.7	33.4	32.3	25.5	1.4	100.0	5.7	0.5	7,496
Second	3.7	11.6	2.0	3.2	29.5	30.7	17.8	1.5	100.0	17.3	0.7	7,355
Middle	8.3	28.1	3.5	3.5	20.0	24.3	10.8	1.6	100.0	39.9	1.3	6,001
Fourth	12.5	44.3	5.2	2.2	14.6	14.5	5.1	1.5	100.0	62.1	2.2	5,656
Highest	31.4	49.6	4.3	0.9	5.7	5.4	1.8	0.9	100.0	85.3	6.7	5,320
Total	10.2	25.0	2.9	2.3	22.0	22.7	13.4	1.4	100.0	38.1	2.0	31,828

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.
[1] Skilled provider includes doctor, nurse, midwife, and auxiliary nurse/midwife.
[2] Includes only the most recent birth in the five years preceding the survey

Births in urban areas are much more likely to be assisted by a skilled health provider (67 percent) than births in rural areas (23 percent). Four in five births in the South West and South East are attended by a skilled health provider, as compared with 12 percent in the North West. Only 5 percent of births in Sokoto are attended by a skilled provider, and that state has the highest proportion of births attended by traditional birth attendants (85 percent).

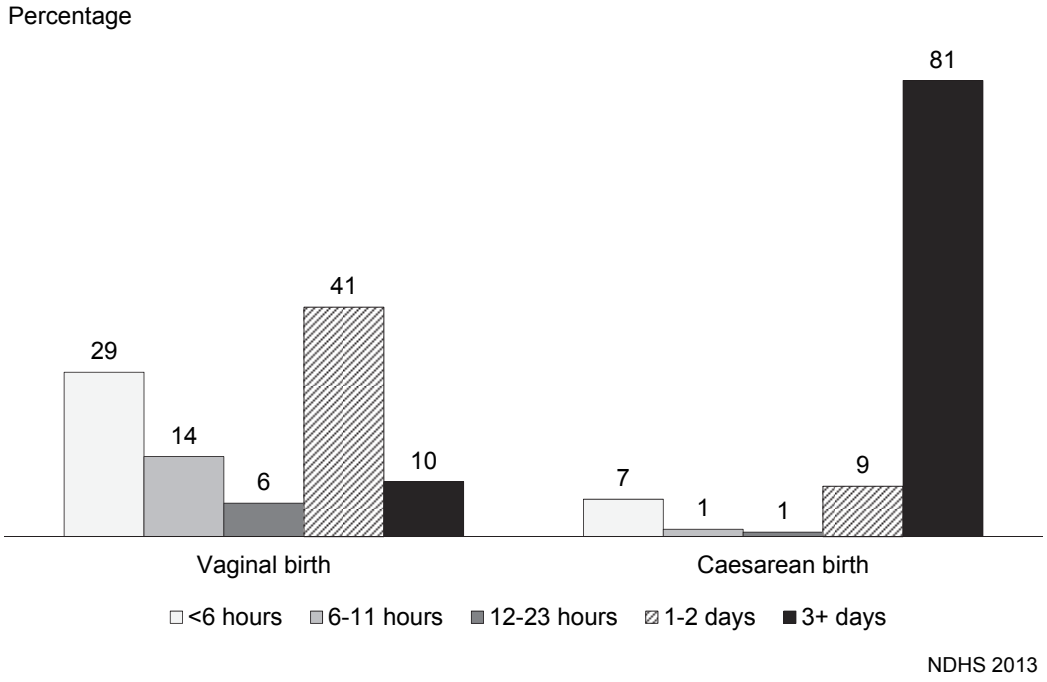
A mother's level of education and wealth status affect the likelihood of her seeking assistance during delivery from a skilled provider. Twelve percent of women with no education were attended by a skilled provider, as compared with 93 percent of women with more than a secondary education. Similarly, births to women in the highest wealth quintile were almost 15 times as likely to be assisted by a skilled health provider as births to women in the lowest quintile (85 percent and 6 percent, respectively).

The proportion of births assisted by a skilled provider has remained relatively stagnant over the last 10 years (35 percent in 2003, 39 percent in 2008, and 38 percent in 2013).

Table 9.7 shows that 2 percent of births are delivered via caesarean section. Delivery via caesarean section is highest among births to first-time mothers (4 percent), births to women with four or more antenatal visits (4 percent), births occurring in a health facility (6 percent), births to highly educated mothers (11 percent), and births to mothers in the highest wealth quintile (7 percent).

Figure 9.3 presents the percent distribution of women who gave birth in a health facility in the five years preceding the survey by duration of stay in the facility and type of delivery. Among women who gave birth via caesarean section, 81 percent stayed at the hospital for more than three days, as compared with 10 percent of women who had a vaginal birth. The majority (41 percent) of women who had a vaginal birth in a health facility stayed for one or two days.

Figure 9.3 **Mother's duration of stay in the health facility after giving birth**



NDHS 2013

9.3 POSTNATAL CARE

The postpartum period is particularly important for women, because during this period they may develop serious, life-threatening complications, especially in the interval immediately after delivery. There is evidence that a large proportion of maternal and neonatal deaths occur during the first 48 hours after delivery. Postnatal care visits provide an ideal opportunity to educate a new mother on how to care for herself and her newborn baby.

9.3.1 Timing of First Postnatal Checkup for Mother

It is recommended that all women receive a health check within three days of giving birth. To assess the extent of postnatal care, women with a live birth during the five years prior to the survey were asked questions about any postnatal care they may have received related to their last birth. If they reported receiving care, they were asked about the timing of the first postnatal checkup and the type of health provider performing the checkup. This information is presented according to background characteristics.

Table 9.8 shows that in the two years preceding the survey, 40 percent of women received postnatal care for their last birth within the first two days following delivery. Thirty-one percent of women

received postnatal care within 4 hours of delivery, 5 percent received care within the first 4-23 hours, and 4 percent received care 1-2 days after delivery. Two percent of women received postnatal care on the third day after delivery or later. Overall, 58 percent of women had no postnatal checkup.

Place of delivery also influenced the likelihood of receiving a postnatal checkup in the first two days. While 79 percent of those who delivered in a health facility had a checkup within the first two days, only 16 percent of those who delivered elsewhere had a checkup within that period. Those in rural areas were half as likely as their urban counterparts to have had a postnatal checkup within the first two days. Eighty-two percent of women in the North West had no postnatal checkup, as compared with 24 percent in the South West.

Educational attainment is also a notable factor influencing the likelihood of seeking postnatal care. Women with no education (80 percent) are five times as likely as those with more than a secondary education (14 percent) to have received no postnatal checkup.

Table 9.8 Timing of first postnatal checkup

Among women age 15-49 giving birth in the two years preceding the survey, the percent distribution of the mother's first postnatal checkup for the last live birth by time after delivery, and the percentage of women with a live birth in the two years preceding the survey who received a postnatal checkup in the first two days after giving birth, according to background characteristics, Nigeria 2013

Background characteristic	Time after delivery of mother's first postnatal checkup						No postnatal checkup[1]	Total	Percentage of women with a postnatal checkup in the first two days after birth	Number of women
	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/ missing				
Mother's age at birth										
<20	25.9	2.7	3.0	0.5	1.1	0.7	66.1	100.0	31.7	1,825
20-34	33.1	4.8	3.9	0.6	1.2	0.5	55.8	100.0	41.8	8,705
35-49	28.7	4.7	4.1	0.4	1.1	0.3	60.7	100.0	37.6	1,942
Birth order										
1	39.2	5.8	5.2	0.8	1.6	1.1	46.4	100.0	50.3	2,537
2-3	35.0	4.8	4.0	0.6	1.5	0.4	53.6	100.0	43.9	4,032
4-5	29.5	4.2	3.4	0.7	1.2	0.5	60.6	100.0	37.1	2,812
6+	21.9	3.2	2.6	0.3	0.5	0.2	71.3	100.0	27.7	3,092
Place of delivery[2]										
Health facility	63.2	9.2	6.6	0.7	1.5	0.9	17.8	100.0	79.0	4,655
Elsewhere	12.5	1.7	2.1	0.5	1.0	0.3	82.0	100.0	16.2	7,796
Residence										
Urban	46.2	7.5	5.3	0.8	1.7	0.7	37.8	100.0	59.1	4,404
Rural	23.2	2.8	3.0	0.5	0.9	0.4	69.2	100.0	29.0	8,069
Zone										
North Central	41.9	3.7	2.1	0.6	1.7	0.6	49.6	100.0	47.6	1,692
North East	26.6	2.3	2.8	0.5	1.1	0.9	65.7	100.0	31.8	2,152
North West	14.7	1.2	1.1	0.2	0.9	0.2	81.7	100.0	17.0	4,554
South East	41.6	9.6	9.7	0.8	0.5	0.3	37.4	100.0	60.9	1,150
South South	43.5	7.4	9.3	1.0	1.5	1.2	36.0	100.0	60.3	1,191
South West	55.7	11.2	5.8	1.1	1.9	0.4	23.9	100.0	72.7	1,733
State										
North Central										
FCT-Abuja	69.2	8.7	1.7	0.2	2.5	1.8	15.8	100.0	79.6	75
Benue	31.1	5.8	2.6	0.6	0.0	0.6	59.3	100.0	39.4	374
Kogi	66.8	1.1	3.3	3.0	2.6	1.8	21.4	100.0	71.2	168
Kwara	55.8	3.6	4.3	0.1	10.6	0.3	25.2	100.0	63.7	161
Nasarawa	47.0	1.6	0.8	1.1	0.8	1.2	47.6	100.0	49.4	197
Niger	35.5	2.6	1.6	0.0	0.3	0.0	59.9	100.0	39.8	514
Plateau	31.0	4.7	0.6	0.3	0.8	0.0	62.5	100.0	36.3	204
North East										
Adamawa	30.8	1.7	1.5	0.2	2.4	0.7	62.7	100.0	34.0	289
Bauchi	36.0	1.0	1.6	0.4	0.5	2.5	58.0	100.0	38.6	573
Borno	15.6	1.8	2.7	0.3	0.6	0.9	78.1	100.0	20.1	408
Gombe	30.8	1.2	0.8	0.3	1.1	0.3	65.6	100.0	32.8	231
Taraba	23.5	7.2	3.8	1.0	1.0	0.0	63.6	100.0	34.5	300
Yobe	20.6	2.1	6.7	0.8	1.5	0.0	68.2	100.0	29.4	350

Continued…

Table 9.8—*Continued*

Background characteristic	Time after delivery of mother's first postnatal checkup: Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/ missing	No postnatal checkup[1]	Total	Percentage of women with a postnatal checkup in the first two days after birth	Number of women
North West										
Jigawa	11.7	1.0	1.7	0.7	2.5	0.5	82.0	100.0	14.4	608
Kaduna	45.3	2.6	1.7	0.5	0.8	0.7	48.3	100.0	50.4	496
Kano	12.4	0.5	1.1	0.0	1.0	0.0	85.0	100.0	14.0	1,188
Katsina	11.6	0.1	0.7	0.1	0.7	0.0	86.8	100.0	12.4	688
Kebbi	5.5	0.9	1.2	0.0	0.4	0.0	92.0	100.0	7.6	479
Sokoto	5.7	0.4	0.3	0.0	0.5	0.6	92.4	100.0	6.5	444
Zamfara	14.3	3.2	1.2	0.2	0.4	0.2	80.4	100.0	18.7	652
South East										
Abia	47.9	8.2	12.5	1.2	0.7	0.4	29.1	100.0	68.5	135
Anambra	34.8	8.2	13.1	1.0	0.3	0.6	42.0	100.0	56.1	245
Ebonyi	43.7	7.6	4.0	0.4	0.0	0.6	43.7	100.0	55.3	313
Enugu	45.3	11.4	12.0	1.5	0.5	0.0	29.4	100.0	68.6	230
Imo	38.6	12.8	9.9	0.4	1.5	0.0	36.8	100.0	61.3	228
South South										
Akwa Ibom	30.0	7.4	27.4	2.0	3.9	0.9	28.5	100.0	64.7	202
Bayelsa	42.1	6.8	6.8	0.7	0.0	2.2	41.4	100.0	55.8	95
Cross River	54.6	6.3	7.4	0.5	0.2	0.3	30.7	100.0	68.3	221
Delta	45.8	7.0	2.0	0.0	0.0	0.0	45.2	100.0	54.8	220
Edo	62.9	9.1	4.4	0.6	1.1	2.1	19.7	100.0	76.5	168
Rivers	31.8	7.9	7.4	1.8	2.6	2.3	46.2	100.0	47.1	285
South West										
Ekiti	37.2	9.3	8.5	1.8	0.6	1.2	41.4	100.0	55.0	78
Lagos	65.5	15.5	2.9	2.0	3.0	0.3	10.8	100.0	83.9	519
Ogun	47.7	13.6	11.4	0.5	0.0	0.4	26.4	100.0	72.7	294
Ondo	36.6	9.5	11.0	0.2	1.1	0.4	41.1	100.0	57.2	225
Osun	64.0	19.8	3.6	2.5	4.9	0.0	5.1	100.0	87.4	189
Oyo	58.9	1.9	3.4	0.3	1.0	0.3	34.2	100.0	64.1	428
Education										
No education	15.7	1.4	1.5	0.2	0.7	0.4	80.1	100.0	18.7	5,940
Primary	35.2	5.0	4.7	0.5	1.4	0.3	52.9	100.0	44.9	2,253
Secondary	48.0	8.2	6.0	1.1	1.8	0.8	34.1	100.0	62.3	3,466
More than secondary	63.7	9.7	8.4	1.2	2.1	1.0	13.9	100.0	81.8	815
Wealth quintile										
Lowest	10.4	1.0	1.6	0.3	0.7	0.4	85.6	100.0	13.0	2,888
Second	19.5	1.8	1.9	0.2	0.8	0.3	75.4	100.0	23.3	2,842
Middle	33.7	5.2	3.9	0.4	1.1	0.5	55.3	100.0	42.7	2,360
Fourth	45.5	6.5	5.6	0.7	1.8	0.8	39.0	100.0	57.7	2,247
Highest	58.0	9.9	7.2	1.4	1.9	0.7	21.1	100.0	75.0	2,135
Total	31.4	4.5	3.8	0.6	1.2	0.5	58.1	100.0	39.6	12,473

[1] Includes women who received a checkup after 41 days
[2] Excludes 22 cases with missing information on place of delivery

9.3.2 Provider of First Postnatal Checkup for Mother

The type of provider for the mother's first postnatal checkup is a crucial determinant of the quality of the checkup. The ability to detect early warning signs in the mother and newborn and take appropriate actions (e.g., referral to a higher level of care) depends on the knowledge and skills of the provider. The federal government of Nigeria, through the Federal Ministry of Health, is providing training for skilled birth attendants on emergency obstetric and neonatal care and lifesaving skills to improve results for mothers and their babies during and after delivery.

Table 9.9 shows the percent distribution of women age 15-49 who gave birth in the two years preceding the survey by the type of provider of the first postnatal health checkup in the two days after the most recent live birth, according to background characteristics. Sixty percent of women received no postnatal checkup in the first two days after birth. Thirty percent received a postnatal checkup from a doctor, nurse, or midwife, and 2 percent received a checkup from an auxiliary nurse or midwife. Mothers from urban areas, those who delivered in a health facility, and those in the South West and South East were more likely to have received a postnatal checkup from a skilled provider. The data also show that mothers at higher levels of educational attainment were more likely to have received a postnatal health checkup

from a skilled provider than mothers with no education. Wealth had an influence on whether women received postnatal checkups. Mothers in the highest wealth quintile were more likely than those in the lowest quintile to have received a postnatal checkup from a skilled provider (72 percent versus 5 percent).

Table 9.9 Type of provider of first postnatal checkup for the mother

Among women age 15-49 giving birth in the two years preceding the survey, the percent distribution by type of provider of the mother's first postnatal health check in the two days after the last live birth, according to background characteristics, Nigeria 2013

Background characteristic	Type of health provider of mother's first postnatal checkup					No postnatal checkup in the first two days after birth	Total	Number of women
	Doctor/ nurse/ midwife	Auxiliary nurse/ midwife	Community extension health worker	Traditional birth attendant	Other			
Mother's age at birth								
<20	19.2	2.3	3.5	5.6	1.2	68.3	100.0	1,825
20-34	32.3	2.2	2.3	4.0	1.0	58.2	100.0	8,705
35-49	29.2	1.5	2.3	3.5	1.0	62.4	100.0	1,942
Birth order								
1	39.4	2.8	2.2	5.0	0.9	49.7	100.0	2,537
2-3	34.2	2.4	2.2	3.9	1.0	56.1	100.0	4,032
4-5	27.6	1.7	2.5	4.4	0.9	62.9	100.0	2,812
6+	18.6	1.4	2.8	3.5	1.3	72.3	100.0	3,092
Place of delivery[1]								
Health facility	72.7	3.5	2.4	0.1	0.3	21.0	100.0	4,655
Elsewhere	4.5	1.2	2.5	6.5	1.5	83.8	100.0	7,796
Residence								
Urban	52.3	3.3	1.1	2.2	0.2	40.9	100.0	4,404
Rural	17.7	1.4	3.2	5.2	1.5	71.0	100.0	8,069
Zone								
North Central	37.8	1.6	4.7	1.5	2.0	52.4	100.0	1,692
North East	16.0	2.8	3.7	6.9	2.5	68.2	100.0	2,152
North West	11.8	0.3	2.4	2.5	0.1	83.0	100.0	4,554
South East	53.8	4.5	0.9	1.3	0.4	39.1	100.0	1,150
South South	38.9	4.2	1.7	12.8	2.8	39.7	100.0	1,191
South West	65.2	3.3	0.6	3.5	0.1	27.3	100.0	1,733
State								
North Central								
FCT-Abuja	62.2	3.8	5.3	4.2	4.1	20.4	100.0	75
Benue	31.9	0.6	0.6	0.0	6.5	60.6	100.0	374
Kogi	61.1	0.0	5.1	3.3	1.7	28.8	100.0	168
Kwara	57.3	1.9	1.0	2.3	1.1	36.3	100.0	161
Nasarawa	35.6	4.7	5.6	3.5	0.0	50.6	100.0	197
Niger	28.7	1.7	9.0	0.4	0.0	60.2	100.0	514
Plateau	30.3	0.5	2.6	1.8	1.2	63.7	100.0	204
North East								
Adamawa	31.7	0.6	0.6	0.0	1.1	66.0	100.0	289
Bauchi	12.7	4.4	2.8	11.7	7.0	61.4	100.0	573
Borno	17.7	0.6	0.4	1.4	0.0	79.9	100.0	408
Gombe	15.9	12.3	2.3	1.4	0.9	67.2	100.0	231
Taraba	14.9	0.5	17.2	1.0	0.8	65.5	100.0	300
Yobe	7.3	0.0	0.7	19.8	1.7	70.6	100.0	350
North West								
Jigawa	9.7	0.2	1.7	2.5	0.3	85.6	100.0	608
Kaduna	35.6	0.3	0.0	13.9	0.6	49.6	100.0	496
Kano	13.0	0.6	0.0	0.4	0.0	86.0	100.0	1,188
Katsina	6.9	0.0	2.0	3.4	0.1	87.6	100.0	688
Kebbi	6.6	0.0	1.0	0.0	0.0	92.4	100.0	479
Sokoto	5.8	0.0	0.5	0.3	0.0	93.5	100.0	444
Zamfara	6.2	0.6	11.8	0.1	0.0	81.3	100.0	652
South East								
Abia	63.1	0.4	0.3	3.6	1.1	31.5	100.0	135
Anambra	55.1	0.0	0.7	0.3	0.0	43.9	100.0	245
Ebonyi	44.3	5.9	1.9	2.8	0.4	44.7	100.0	313
Enugu	55.5	11.6	0.9	0.0	0.6	31.4	100.0	230
Imo	58.1	2.9	0.0	0.4	0.0	38.7	100.0	228
South South								
Akwa Ibom	38.7	1.6	0.3	24.2	0.0	35.3	100.0	202
Bayelsa	24.7	3.2	0.0	27.9	0.0	44.2	100.0	95
Cross River	27.7	7.9	8.6	10.2	13.8	31.7	100.0	221
Delta	42.9	2.0	0.0	9.5	0.4	45.2	100.0	220
Edo	68.2	1.8	0.0	5.5	0.9	23.5	100.0	168
Rivers	32.0	6.8	0.0	8.3	0.0	52.9	100.0	285

Continued…

Table 9.9—*Continued*

Background characteristic	Type of health provider of mother's first postnatal checkup					No postnatal checkup in the first two days after birth	Total	Number of women
	Doctor/ nurse/ midwife	Auxiliary nurse/ midwife	Community extension health worker	Traditional birth attendant	Other			
South West								
Ekiti	51.0	2.1	1.9	0.0	0.0	45.0	100.0	78
Lagos	73.7	4.0	1.5	4.7	0.0	16.1	100.0	519
Ogun	68.5	0.6	0.0	3.5	0.0	27.3	100.0	294
Ondo	44.6	4.4	0.8	7.4	0.0	42.8	100.0	225
Osun	77.2	8.8	0.0	1.4	0.0	12.6	100.0	189
Oyo	60.5	1.5	0.0	1.7	0.4	35.9	100.0	428
Education								
No education	9.8	0.8	3.1	4.1	0.9	81.3	100.0	5,940
Primary	31.3	3.1	2.9	5.6	2.1	55.1	100.0	2,253
Secondary	52.1	3.8	1.5	4.1	0.8	37.7	100.0	3,466
More than secondary	78.6	1.5	0.8	0.6	0.2	18.2	100.0	815
Wealth quintile								
Lowest	4.4	0.5	2.7	4.1	1.3	87.0	100.0	2,888
Second	12.7	1.3	3.4	4.2	1.6	76.7	100.0	2,842
Middle	29.9	2.7	3.1	5.5	1.4	57.3	100.0	2,360
Fourth	46.7	3.6	1.8	4.9	0.7	42.3	100.0	2,247
Highest	69.5	2.9	0.7	1.8	0.0	25.0	100.0	2,135
Total	29.9	2.1	2.4	4.1	1.1	60.4	100.0	12,473

[1] Excludes 22 cases with missing information on place of delivery

9.4 NEWBORN CARE

Newborn care is essential to reduce neonatal health challenges and death. To identify, manage, and prevent complications, it is recommended that the mother and the newborn have at least three checkups within seven days after delivery (WHO and UNICEF, 2009), which is considered a critical period for neonates and mothers. As is the case for mothers, the timing of the first postnatal checkup for the newborn is crucial for early detection of complications after delivery. The earlier problems are discovered and managed, the better the outcomes.

9.4.1 Timing of First Postnatal Checkup for Newborn

Table 9.10 shows the percent distribution of most recent births in the two years preceding the survey by time after birth of the first postnatal checkup, along with the percentage of newborns with a postnatal checkup in the first two days after birth, according to background characteristics.

Overall, 14 percent of newborns received their first postnatal checkup within two days after birth. Among these newborns, 3 percent had a postnatal checkup less than one hour after birth, and 8 percent had a checkup between one and three hours after birth. In all, 11 percent of newborns had a postnatal checkup within 24 hours after birth.

Eighty-four percent of newborns did not receive a postnatal checkup. Newborns delivered outside of a health facility were less likely to receive a postnatal checkup within the first two days after birth (6 percent) than newborns delivered in a health facility (28 percent). Similarly, postnatal checkups were less likely among births to mothers less than age 20, births of order six and above, births to rural women, and births in the North West zone than among births in the other categories.

Ninety-four percent of newborns whose mothers had no education did not receive a postnatal checkup, as compared with 57 percent of newborns whose mothers had more than a secondary education. Newborns whose mothers were in the highest wealth quintile were more likely to receive a postnatal checkup than those whose mothers were in the lowest quintile.

Table 9.10 Timing of first postnatal checkup for the newborn

Percent distribution of last births in the two years preceding the survey by time after birth of first postnatal checkup, and the percentage of births with a postnatal checkup in the first two days after birth, according to background characteristics, Nigeria 2013

Background characteristic	Time after birth of newborn's first postnatal checkup						No postnatal checkup[1]	Total	Percentage of births with a postnatal checkup in the first two days after birth	Number of births
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know/ missing				
Mother's age at birth										
<20	1.6	4.2	1.1	2.6	1.4	0.1	89.1	100.0	9.4	1,825
20-34	2.9	8.3	1.3	2.6	1.8	0.5	82.6	100.0	15.2	8,705
35-49	2.7	7.3	1.2	2.1	1.6	0.3	84.9	100.0	13.2	1,942
Birth order										
1	2.9	10.0	1.6	2.9	2.5	0.3	79.8	100.0	17.4	2,537
2-3	3.8	8.9	1.6	2.8	1.5	0.4	81.1	100.0	17.1	4,032
4-5	2.5	6.5	1.1	2.8	2.1	0.3	84.8	100.0	12.9	2,812
6+	1.2	4.6	0.6	1.7	1.1	0.6	90.2	100.0	8.3	3,092
Place of delivery[2]										
Health facility	5.9	16.5	2.4	3.2	2.9	0.6	68.4	100.0	28.2	4,655
Elsewhere	0.7	2.2	0.5	2.1	1.0	0.2	93.1	100.0	5.6	7,796
Residence										
Urban	4.5	14.5	2.5	3.9	2.7	0.3	71.6	100.0	25.4	4,404
Rural	1.7	3.7	0.5	1.8	1.2	0.5	90.6	100.0	7.8	8,069
Zone										
North Central	2.0	6.2	0.6	2.1	3.2	0.6	85.4	100.0	10.9	1,692
North East	1.0	5.1	0.8	2.7	1.2	0.7	88.4	100.0	9.6	2,152
North West	1.4	3.4	0.1	1.4	1.0	0.1	92.5	100.0	6.4	4,554
South East	0.1	11.2	2.1	2.3	0.6	0.3	83.4	100.0	15.7	1,150
South South	4.1	8.0	1.1	5.2	2.2	0.5	78.8	100.0	18.4	1,191
South West	9.6	19.9	4.7	4.2	3.2	0.4	58.1	100.0	38.4	1,733
State										
North Central										
FCT-Abuja	10.1	25.5	6.5	1.7	3.7	4.7	47.8	100.0	45.3	75
Benue	0.0	4.1	0.0	0.9	0.9	0.5	93.6	100.0	5.0	374
Kogi	5.0	12.5	0.5	3.4	6.9	0.5	71.1	100.0	21.5	168
Kwara	1.0	3.2	0.9	6.8	13.2	0.0	74.9	100.0	11.9	161
Nasarawa	3.4	10.5	1.4	3.5	2.8	0.0	78.3	100.0	18.9	197
Niger	1.3	1.9	0.0	0.9	1.4	0.0	94.4	100.0	4.2	514
Plateau	0.9	6.4	0.5	1.0	1.2	1.8	88.2	100.0	8.9	204
North East										
Adamawa	0.3	9.2	0.3	0.6	2.0	0.0	87.6	100.0	10.5	289
Bauchi	0.9	5.7	1.9	5.0	0.4	2.2	84.0	100.0	13.5	573
Borno	1.6	1.4	0.6	2.7	1.9	0.0	91.8	100.0	6.3	408
Gombe	1.5	15.1	1.1	2.4	2.2	1.3	76.4	100.0	20.1	231
Taraba	0.3	1.4	0.5	1.6	1.4	0.2	94.8	100.0	3.7	300
Yobe	1.1	1.9	0.0	1.8	0.2	0.0	95.0	100.0	4.8	350
North West										
Jigawa	0.2	3.6	0.5	1.3	0.4	0.3	93.8	100.0	5.6	608
Kaduna	6.5	18.5	0.0	6.6	2.9	0.4	65.1	100.0	32.0	496
Kano	2.2	1.4	0.0	0.4	0.6	0.1	95.3	100.0	4.0	1,188
Katsina	0.2	0.8	0.0	1.4	0.7	0.1	96.8	100.0	2.4	688
Kebbi	0.0	0.7	0.0	0.7	0.1	0.0	98.4	100.0	1.5	479
Sokoto	0.8	0.4	0.0	0.0	0.2	0.0	98.6	100.0	1.2	444
Zamfara	0.0	2.0	0.4	0.9	2.6	0.2	93.9	100.0	3.3	652
South East										
Abia	0.0	10.0	1.0	2.5	1.2	0.3	85.0	100.0	13.4	135
Anambra	0.0	17.2	0.6	2.6	0.4	0.7	78.5	100.0	20.4	245
Ebonyi	0.0	11.6	1.1	1.3	1.2	0.3	84.6	100.0	13.9	313
Enugu	0.0	10.9	5.1	4.5	0.0	0.3	79.2	100.0	20.5	230
Imo	0.4	5.4	2.8	0.8	0.3	0.0	90.2	100.0	9.5	228
South South										
Akwa Ibom	1.0	9.4	2.3	11.2	3.6	1.3	71.2	100.0	24.0	202
Bayelsa	0.0	8.6	1.0	3.6	1.8	0.0	84.9	100.0	13.2	95
Cross River	7.0	12.1	0.6	4.6	4.7	0.4	70.6	100.0	24.3	221
Delta	13.9	4.3	1.4	1.1	0.6	0.0	78.7	100.0	20.6	220
Edo	0.6	7.1	1.0	1.9	0.8	1.2	87.4	100.0	10.6	168
Rivers	0.0	6.9	0.7	7.1	1.4	0.3	83.6	100.0	14.7	285
South West										
Ekiti	1.4	7.9	0.0	2.9	2.6	0.0	85.3	100.0	12.1	78
Lagos	7.5	39.2	6.6	4.3	4.6	0.4	37.5	100.0	57.9	519
Ogun	14.0	4.4	2.4	2.8	2.2	0.0	74.1	100.0	23.7	294
Ondo	0.4	6.2	2.6	6.6	4.2	0.3	79.7	100.0	15.8	225
Osun	0.8	35.4	12.5	7.2	2.6	0.0	41.5	100.0	56.0	189
Oyo	19.2	9.5	2.6	2.5	1.9	1.0	63.3	100.0	33.8	428

Continued…

Table 9.10—*Continued*

Background characteristic	Time after birth of newborn's first postnatal checkup: Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know/ missing	No postnatal checkup[1]	Total	Percentage of births with a postnatal checkup in the first two days after birth	Number of births
Mother's education										
No education	1.0	2.3	0.4	1.7	0.7	0.3	93.6	100.0	5.4	5,940
Primary	2.5	7.7	1.2	2.9	2.0	0.3	83.4	100.0	14.3	2,253
Secondary	4.7	13.0	2.1	3.0	2.7	0.5	74.0	100.0	22.9	3,466
More than secondary	7.0	21.5	3.7	5.7	4.5	0.8	56.7	100.0	38.2	815
Wealth quintile										
Lowest	0.1	1.5	0.4	1.1	0.4	0.4	96.1	100.0	3.0	2,888
Second	1.0	2.8	0.5	2.3	0.9	0.4	92.0	100.0	6.7	2,842
Middle	2.5	6.3	0.9	2.1	1.9	0.3	86.0	100.0	11.9	2,360
Fourth	4.2	11.6	1.5	3.5	2.7	0.3	76.3	100.0	20.7	2,247
Highest	6.9	19.0	3.6	4.3	3.3	0.5	62.4	100.0	33.9	2,135
Total	2.7	7.5	1.2	2.5	1.7	0.4	83.9	100.0	14.0	12,473

[1] Includes newborns who received a checkup after the first week
[2] Excludes 22 cases with missing information on place of delivery

9.4.2 Provider of First Postnatal Checkup for Newborn

The type of provider of the first postnatal checkup for the newborn is crucial given that failure to detect complications could be potentially fatal in this important period. Again, the ability to detect such complications depends on the knowledge and skills of the provider undertaking the checkup.

Table 9.11 shows the percent distribution of most recent births in the two years preceding the survey by type of provider of the newborn's first postnatal health check during the two days after delivery, according to background characteristics.

The findings show that 12 percent of newborns received postnatal care from a doctor, nurse, or midwife within the two days following birth. The distribution of newborns who received care from a skilled birth attendant by background characteristics is more or less similar to the pattern described for providers of mothers' postnatal checkups.

Table 9.11 Type of provider of first postnatal checkup for the newborn

Percent distribution of last births in the two years preceding the survey by type of provider of the newborn's first postnatal health check during the two days after the last live birth, according to background characteristics, Nigeria 2013

Background characteristic	Type of health provider of newborn's first postnatal checkup: Doctor/nurse/ midwife	Auxiliary nurse/midwife	Community extension health worker	Traditional birth attendant	Other	No postnatal checkup in the first two days after birth	Total	Number of births
Mother's age at birth								
<20	6.1	0.5	0.4	2.2	0.2	90.6	100.0	1,825
20-34	12.4	0.8	0.3	1.6	0.1	84.8	100.0	8,705
35-49	11.1	0.4	0.3	1.4	0.0	86.8	100.0	1,942
Birth order								
1	14.7	0.9	0.2	1.5	0.1	82.6	100.0	2,537
2-3	14.5	0.8	0.3	1.5	0.0	82.9	100.0	4,032
4-5	9.3	0.7	0.5	2.4	0.1	87.1	100.0	2,812
6+	5.9	0.5	0.3	1.5	0.1	91.7	100.0	3,092
Place of delivery[1]								
Health facility	26.6	1.3	0.2	0.0	0.0	71.8	100.0	4,655
Elsewhere	2.1	0.3	0.4	2.7	0.1	94.4	100.0	7,796
Residence								
Urban	22.8	1.3	0.3	0.9	0.1	74.6	100.0	4,404
Rural	4.9	0.4	0.3	2.1	0.1	92.2	100.0	8,069

Continued…

Table 9.11—*Continued*

Background characteristic	Type of health provider of newborn's first postnatal checkup					No postnatal checkup in the first two days after birth	Total	Number of births
	Doctor/nurse/ midwife	Auxiliary nurse/midwife	Community extension health worker	Traditional birth attendant	Other			
Zone								
North Central	9.6	0.3	0.4	0.5	0.1	89.1	100.0	1,692
North East	5.2	1.3	0.4	2.6	0.2	90.4	100.0	2,152
North West	4.3	0.1	0.1	1.8	0.0	93.6	100.0	4,554
South East	14.5	0.8	0.1	0.2	0.0	84.3	100.0	1,150
South South	11.8	1.9	0.8	3.9	0.1	81.6	100.0	1,191
South West	36.0	1.2	0.5	0.8	0.0	61.6	100.0	1,733
State								
North Central								
FCT-Abuja	37.9	2.1	2.0	3.4	0.0	54.7	100.0	75
Benue	5.0	0.0	0.0	0.0	0.0	95.0	100.0	374
Kogi	20.5	0.2	0.8	0.0	0.0	78.5	100.0	168
Kwara	11.5	0.5	0.0	0.0	0.0	88.1	100.0	161
Nasarawa	15.9	0.6	0.3	1.9	0.3	81.1	100.0	197
Niger	3.6	0.0	0.0	0.4	0.2	95.8	100.0	514
Plateau	6.4	0.4	1.4	0.2	0.4	91.1	100.0	204
North East								
Adamawa	10.0	0.0	0.0	0.0	0.5	89.5	100.0	289
Bauchi	4.9	1.0	0.4	7.2	0.0	86.5	100.0	573
Borno	3.7	0.8	0.0	1.3	0.6	93.7	100.0	408
Gombe	9.2	8.2	1.1	1.6	0.0	79.9	100.0	231
Taraba	2.1	0.1	1.2	0.1	0.1	96.3	100.0	300
Yobe	3.4	0.0	0.0	1.3	0.0	95.2	100.0	350
North West								
Jigawa	2.5	0.0	0.7	2.4	0.0	94.4	100.0	608
Kaduna	21.1	0.6	0.0	10.1	0.2	68.0	100.0	496
Kano	3.5	0.0	0.0	0.5	0.0	96.0	100.0	1,188
Katsina	1.4	0.0	0.1	0.9	0.0	97.6	100.0	688
Kebbi	1.0	0.0	0.0	0.4	0.0	98.5	100.0	479
Sokoto	1.2	0.0	0.0	0.0	0.0	98.8	100.0	444
Zamfara	2.5	0.0	0.0	0.8	0.0	96.7	100.0	652
South East								
Abia	12.7	0.4	0.0	0.3	0.0	86.6	100.0	135
Anambra	20.4	0.0	0.0	0.0	0.0	79.6	100.0	245
Ebonyi	11.3	1.6	0.4	0.6	0.0	86.1	100.0	313
Enugu	19.3	1.2	0.0	0.0	0.0	79.5	100.0	230
Imo	9.0	0.5	0.0	0.0	0.0	90.5	100.0	228
South South								
Akwa Ibom	15.3	0.5	0.0	8.2	0.0	76.0	100.0	202
Bayelsa	9.2	0.8	0.0	3.2	0.0	86.8	100.0	95
Cross River	9.0	5.6	4.2	5.0	0.5	75.7	100.0	221
Delta	17.1	0.5	0.0	3.1	0.0	79.4	100.0	220
Edo	8.0	0.0	0.0	2.6	0.0	89.4	100.0	168
Rivers	10.3	2.8	0.0	1.5	0.0	85.3	100.0	285
South West								
Ekiti	11.3	0.4	0.5	0.0	0.0	87.9	100.0	78
Lagos	53.1	1.7	1.7	1.5	0.0	42.1	100.0	519
Ogun	22.5	0.0	0.0	1.2	0.0	76.3	100.0	294
Ondo	15.1	0.5	0.0	0.2	0.0	84.2	100.0	225
Osun	52.0	3.9	0.0	0.0	0.0	44.0	100.0	189
Oyo	32.9	0.6	0.0	0.4	0.0	66.2	100.0	428
Mother's education								
No education	2.9	0.2	0.2	2.1	0.1	94.6	100.0	5,940
Primary	11.0	1.3	0.4	1.5	0.2	85.7	100.0	2,253
Secondary	19.7	1.2	0.6	1.4	0.0	77.1	100.0	3,466
More than secondary	37.1	0.7	0.1	0.3	0.0	61.8	100.0	815
Wealth quintile								
Lowest	0.9	0.1	0.1	1.9	0.0	97.0	100.0	2,888
Second	3.7	0.3	0.3	2.2	0.1	93.3	100.0	2,842
Middle	9.0	0.6	0.3	1.9	0.1	88.1	100.0	2,360
Fourth	16.9	1.6	0.6	1.5	0.1	79.3	100.0	2,247
Highest	31.8	1.2	0.3	0.6	0.0	66.1	100.0	2,135
Total	11.2	0.7	0.3	1.7	0.1	86.0	100.0	12,473

[1] Excludes 22 cases with missing information on place of delivery

9.4.3 Use of Clean Home Delivery Kits

Infection prevention is a very important strategy in ensuring desirable outcomes during the delivery and postnatal periods. Neonatal tetanus is a common life-threatening complication after delivery, especially in rural areas where health facilities may be inaccessible. This condition can be caused by using contaminated instruments or applying contaminated substances to the umbilical stump after cutting. To combat infections, the federal government of Nigeria, through the Federal Ministry of Health, includes a clean home delivery kit known as the "Mama Kit" in the distribution of reproductive health supplies.

Table 9.12 shows the percent distribution of most recent non-institutional live births in the two years preceding the survey by type of instrument used to cut the umbilical cord and the percentage of births where a newborn had something placed on the stump after the umbilical cord was cut, according to background characteristics. An instrument from a clean kit was used to cut the umbilical cord in 49 percent of non-institutional births, while in 43 percent of cases a new or boiled blade was used. The likelihood of use of an instrument from a clean delivery kit is about three times higher in the South West (73 percent) than in the North East (25 percent).

Table 9.12 Use of clean home delivery kits and other instruments to cut the umbilical cord

Percent distribution of non-institutional last live births in the two years preceding the survey, by type of instrument used to cut the umbilical cord and percentage who had something placed on stump after the umbilical cord was cut, according to background characteristics, Nigeria 2013

Background characteristic	Non-institutional births with a clean delivery kit used							Total	Placed something on stump after cutting umbilical cord	Number of non-institutional last live births
	Instruments from a clean delivery kit	New/boiled blade	Used blade	Knife	Scissors	Other	Don't know/ missing			
Residence										
Urban	61.0	29.5	1.3	0.2	1.5	0.0	6.5	100.0	45.4	2,678
Rural	45.7	47.1	2.8	0.5	0.6	0.4	2.8	100.0	33.9	10,140
Zone										
North Central	63.8	29.0	0.9	0.1	0.9	1.4	3.8	100.0	78.8	1,531
North East	24.8	69.0	1.1	1.2	0.6	0.3	3.0	100.0	33.5	2,729
North West	52.0	42.2	3.7	0.2	0.1	0.1	1.6	100.0	16.4	6,494
South East	65.2	14.0	2.5	1.0	3.1	0.0	14.1	100.0	67.1	369
South South	48.0	34.7	2.5	0.2	3.1	0.3	11.3	100.0	62.9	985
South West	73.2	14.3	0.2	0.8	3.5	0.3	7.8	100.0	84.2	709
State										
North Central										
FCT-Abuja	40.7	50.1	0.0	0.0	7.9	0.0	1.3	100.0	72.0	45
Benue	5.6	81.3	0.0	0.0	1.7	6.4	4.9	100.0	88.4	300
Kogi	48.4	34.2	6.0	0.0	1.1	0.0	10.4	100.0	85.7	59
Kwara	41.5	43.2	0.0	0.0	2.1	0.0	13.2	100.0	72.8	66
Nasarawa	62.6	31.8	0.9	0.3	1.3	0.0	3.2	100.0	83.6	177
Niger	97.1	0.5	0.0	0.0	0.0	0.0	2.4	100.0	83.0	665
Plateau	58.7	31.9	4.1	0.4	0.7	1.1	3.2	100.0	50.7	220
North East										
Adamawa	30.1	67.9	0.0	0.0	0.5	0.2	1.3	100.0	11.7	305
Bauchi	35.5	59.4	0.3	1.1	0.4	0.1	3.2	100.0	27.0	672
Borno	12.0	73.7	2.2	3.8	1.5	0.3	6.5	100.0	31.7	604
Gombe	61.6	33.7	2.1	0.0	0.8	0.0	1.8	100.0	41.2	259
Taraba	18.5	75.7	2.7	0.5	0.0	1.2	1.4	100.0	56.2	350
Yobe	9.2	88.8	0.2	0.0	0.0	0.3	1.4	100.0	37.6	538
North West										
Jigawa	44.5	49.6	1.7	0.9	0.3	0.1	2.9	100.0	32.5	891
Kaduna	67.8	30.5	0.8	0.0	0.0	0.0	0.8	100.0	59.4	708
Kano	65.4	33.6	0.2	0.4	0.0	0.0	0.5	100.0	10.2	1,648
Katsina	50.0	31.7	15.9	0.0	0.0	0.0	2.5	100.0	4.3	964
Kebbi	36.7	57.7	1.4	0.0	0.1	1.0	3.0	100.0	10.2	712
Sokoto	17.3	80.8	0.7	0.0	0.2	0.0	1.0	100.0	8.1	656
Zamfara	62.1	31.2	5.4	0.0	0.0	0.0	1.2	100.0	2.3	915
South East										
Abia	76.5	1.0	0.0	0.0	0.0	0.0	22.4	100.0	66.0	51
Anambra	(51.9)	(3.6)	(10.5)	(0.0)	(11.4)	(0.0)	(22.5)	100.0	(83.9)	42
Ebonyi	69.2	23.5	1.0	1.9	1.3	0.0	3.2	100.0	64.9	190
Enugu	43.0	5.6	5.6	0.0	4.4	0.0	41.4	100.0	56.2	55
Imo	*	*	*	*	*	*	*	*	*	32

Continued…

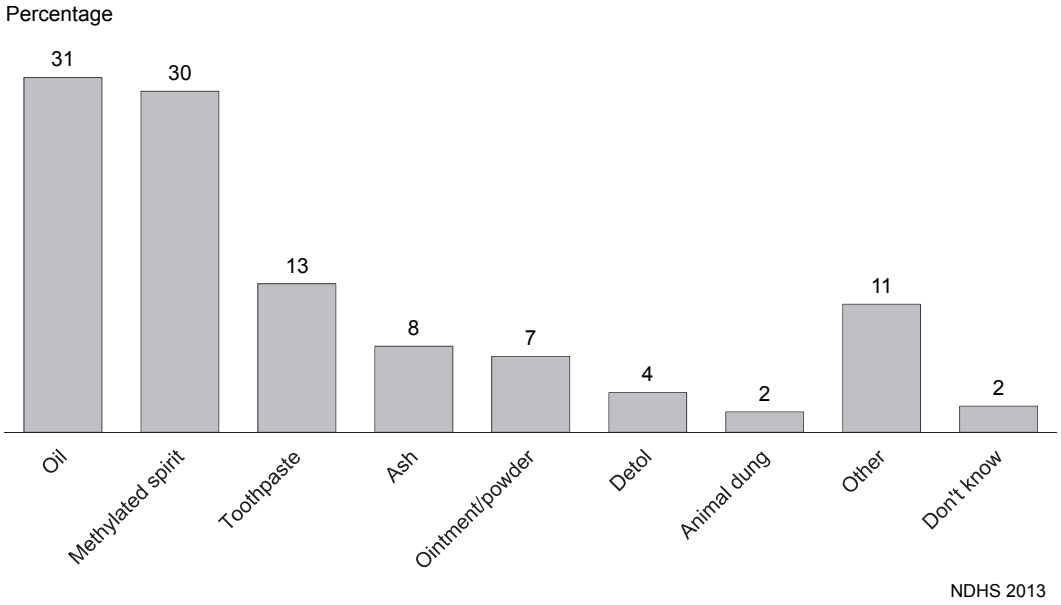
Table 9.12—*Continued*

Background characteristic	Non-institutional births with a clean delivery kit used							Total	Placed something on stump after cutting umbilical cord	Number of non-institutional last live births
	Instruments from a clean delivery kit	New/boiled blade	Used blade	Knife	Scissors	Other	Don't know/ missing			
South South										
Akwa Ibom	65.9	16.4	0.0	0.0	0.8	0.0	16.9	100.0	75.9	188
Bayelsa	20.8	73.0	0.5	0.1	3.5	0.5	1.5	100.0	86.0	110
Cross River	24.2	58.8	5.3	0.3	1.5	0.0	10.0	100.0	65.0	219
Delta	35.5	37.2	5.0	0.6	7.3	1.4	12.9	100.0	42.7	148
Edo	83.2	7.3	0.0	0.0	1.5	0.0	8.0	100.0	58.9	69
Rivers	64.9	16.7	2.1	0.0	3.8	0.0	12.5	100.0	54.1	252
South West										
Ekiti	(74.6)	(5.5)	(0.0)	(0.0)	(9.9)	(0.0)	(10.0)	100.0	(70.2)	19
Lagos	76.4	1.9	0.7	0.0	6.7	0.7	13.6	100.0	83.9	191
Ogun	69.5	18.4	0.0	0.0	3.2	0.0	8.9	100.0	87.5	117
Ondo	75.8	18.5	0.0	1.5	2.1	0.7	1.5	100.0	88.2	155
Osun	(58.2)	(31.3)	(0.0)	(0.0)	(8.9)	(0.0)	(1.6)	100.0	(98.4)	36
Oyo	72.8	18.2	0.0	1.7	0.0	0.0	7.4	100.0	77.8	192
Mother's education										
No education	46.2	47.6	2.9	0.5	0.4	0.3	2.0	100.0	27.7	8,624
Primary	48.6	40.9	2.1	0.3	1.5	0.5	6.0	100.0	49.9	2,237
Secondary	61.1	28.0	1.0	0.2	1.6	0.3	7.8	100.0	58.3	1,851
More than secondary	62.4	22.9	1.6	0.0	2.8	0.0	10.3	100.0	61.8	107
Wealth quintile										
Lowest	42.0	51.3	3.7	0.6	0.2	0.6	1.6	100.0	23.1	4,409
Second	45.8	47.0	2.8	0.6	0.6	0.2	2.9	100.0	31.6	3,752
Middle	52.0	40.0	1.5	0.3	1.1	0.2	5.0	100.0	49.1	2,426
Fourth	62.0	28.6	1.0	0.1	1.7	0.0	6.6	100.0	54.3	1,560
Highest	69.7	18.8	0.3	0.0	2.4	0.2	8.6	100.0	61.3	671
Total	48.9	43.4	2.5	0.5	0.8	0.3	3.6	100.0	36.3	12,818

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

In 36 percent of cases, something was placed on the stump of the umbilical cord after cutting. One-third of rural women (34 percent) reported placing a substance on the umbilical stump, as compared with 45 percent of their urban counterparts. The South West had the highest proportion of cases in which something was placed on the umbilical stump (84 percent). Interestingly, 62 percent of women with more than a secondary education reported placing something on the umbilical stump, compared with 28 percent of those with no education. The most common substances placed on the umbilical stump were oil and methylated spirit (Figure 9.4).

Figure 9.4 **Type of substance applied on the umbilical stump**



9.4.4 Newborn Care Practices

The vulnerability of newborns requires specific evidence-based interventions to improve their chances of survival as well as normal growth and development. These interventions are in line with Millennium Development Goal 4. The federal government of Nigeria, through the Federal Ministry of Health, has developed newborn care programmes that focus on the areas outlined below (Federal Ministry of Health, 2007).

a) Essential newborn care: This is an integrated package of newborn care at the primary health care level mainly focusing on skilled health workers. In addition to the essential care component, the intervention consists of the following programmes: Emergency Newborn Care, Helping Babies Breathe (for birth asphyxia), and Kangaroo Mothers' Care (for low birth weight babies; to be initiated at the health facility and then continued at home).

b) Community-based newborn care: In this programme, community health extension workers are trained in providing home-based newborn care and equipped with a kit for this assignment.

c) Use of chlorhexidine for cord care: There is a new focus by the government of Nigeria on using chlorhexidine for cord care to prevent neonatal sepsis.

Table 9.13 shows the percentage of most recent non-institutional live births in the two years preceding the survey in which the newborn was wiped before the placenta was delivered, along with the percentage of newborns placed on the mother's belly or breast before the placenta was delivered, the percentage wrapped in cloth before the placenta was delivered, and the percent distribution by timing of first bath, according to background characteristics.

Overall, 28 percent of newborns were wiped, 10 percent were placed on their mothers' belly or breast, and 34 percent were wrapped in cloth before the placenta was delivered. In the South West, 9 percent of newborns were wiped before the placenta was delivered, as compared with 32 percent in the North East. Similarly, 3 percent of newborns in the South West were placed on the mothers' belly or breast before the placenta was delivered, compared with 15 percent in the North East.

Table 9.13 Newborn care practices

Percentage of non-institutional last live-born infants in the two years preceding the survey who were wiped before the placenta was delivered, the percentage placed on the mother's belly/breast before the placenta was delivered, the percentage wrapped in cloth before the placenta was delivered, and the percent distribution by timing of first bath, according to background characteristics, Nigeria 2013

Background characteristic	Wiped before the placenta was delivered	Placed on belly/breast before placenta was delivered	Wrapped in cloth before placenta was delivered	Timing of first bath					Number of births
				Within 1 hour	2-24 hours	After 24 hours	Don't know/ missing	Total	
Residence									
Urban	30.0	8.5	38.1	90.1	3.0	0.1	6.8	100.0	2,678
Rural	27.4	9.8	33.1	92.4	3.1	0.0	4.5	100.0	10,140
Zone									
North Central	27.2	12.9	29.4	92.8	1.3	0.0	5.8	100.0	1,531
North East	31.8	15.1	37.6	93.3	1.8	0.0	4.9	100.0	2,729
North West	30.6	8.1	37.9	95.4	1.6	0.0	3.0	100.0	6,494
South East	25.3	3.9	24.4	77.2	8.2	0.5	14.1	100.0	369
South South	16.3	5.1	19.2	69.1	17.7	0.2	13.0	100.0	985
South West	8.8	2.9	22.4	91.9	1.4	0.0	6.6	100.0	709
State									
North Central									
FCT-Abuja	33.8	13.2	36.0	96.8	1.2	0.0	2.0	100.0	45
Benue	15.7	3.9	25.7	92.8	3.0	0.0	4.2	100.0	300
Kogi	20.9	2.5	21.6	89.6	0.0	0.0	10.4	100.0	59
Kwara	11.2	8.7	9.5	88.0	0.0	0.0	12.0	100.0	66
Nasarawa	15.0	8.1	18.8	95.0	1.5	0.0	3.5	100.0	177
Niger	42.6	22.9	44.2	94.5	0.3	0.0	5.2	100.0	665
Plateau	11.2	3.0	4.8	87.6	2.8	0.0	9.7	100.0	220
North East									
Adamawa	20.1	6.5	18.2	96.8	1.2	0.0	1.9	100.0	305
Bauchi	42.8	28.7	45.7	90.9	0.6	0.0	8.5	100.0	672
Borno	19.7	2.0	26.9	92.3	0.8	0.0	6.9	100.0	604
Gombe	65.2	31.7	92.7	95.0	1.8	0.0	3.2	100.0	259
Taraba	24.3	9.7	30.0	96.0	1.4	0.0	2.6	100.0	350
Yobe	26.9	13.1	29.0	92.7	5.2	0.1	2.0	100.0	538
North West									
Jigawa	41.5	18.0	46.2	93.5	2.7	0.0	3.8	100.0	891
Kaduna	42.2	9.8	38.9	97.7	0.9	0.0	1.4	100.0	708
Kano	40.9	10.1	54.0	95.6	2.9	0.0	1.5	100.0	1,648
Katsina	53.5	7.0	60.0	94.9	0.2	0.0	5.0	100.0	964
Kebbi	12.0	4.5	32.5	94.2	3.3	0.0	2.4	100.0	712
Sokoto	5.0	3.7	8.1	95.1	0.0	0.0	4.9	100.0	656
Zamfara	1.1	0.2	2.3	96.9	0.4	0.0	2.8	100.0	915
South East									
Abia	41.0	10.0	45.3	46.0	31.6	0.0	22.4	100.0	51
Anambra	45.6	0.0	30.3	81.0	4.6	0.0	14.4	100.0	42
Ebonyi	12.9	3.3	12.0	92.0	3.2	0.0	4.8	100.0	190
Enugu	29.9	4.0	42.7	54.9	3.7	0.0	41.4	100.0	55
Imo	40.7	2.8	26.4	72.4	12.8	6.0	8.7	100.0	32
South South									
Akwa Ibom	18.5	5.7	21.4	50.2	30.4	0.7	18.6	100.0	188
Bayelsa	13.3	2.2	16.7	85.4	11.4	0.0	3.3	100.0	110
Cross River	20.7	1.9	18.8	71.3	19.5	0.0	9.2	100.0	219
Delta	7.6	6.2	26.6	79.8	5.3	0.0	14.8	100.0	148
Edo	7.7	11.6	8.3	82.1	2.5	0.0	15.4	100.0	69
Rivers	19.6	6.2	17.7	64.5	20.7	0.3	14.6	100.0	252
South West									
Ekiti	15.1	0.0	27.1	63.6	19.6	0.0	16.8	100.0	19
Lagos	11.4	1.5	19.1	91.0	2.1	0.0	6.9	100.0	191
Ogun	0.0	0.0	11.3	88.4	0.0	0.0	11.6	100.0	117
Ondo	8.0	9.1	27.1	95.5	1.3	0.0	3.2	100.0	155
Osun	10.1	0.0	19.7	96.9	1.5	0.0	1.6	100.0	36
Oyo	11.2	1.9	28.9	94.0	0.0	0.0	6.0	100.0	192
Mother's education									
No education	29.3	9.9	35.8	94.4	1.8	0.0	3.7	100.0	8,624
Primary	25.7	9.7	31.0	89.4	3.8	0.0	6.7	100.0	2,237
Secondary	24.7	7.2	30.4	83.7	7.6	0.2	8.6	100.0	1,851
More than secondary	21.3	10.5	34.3	81.9	6.1	0.0	11.9	100.0	107
Wealth quintile									
Lowest	28.2	10.7	34.2	94.0	2.1	0.0	3.9	100.0	4,409
Second	27.2	8.8	34.0	93.6	2.5	0.1	3.9	100.0	3,752
Middle	28.5	9.1	33.3	89.6	3.8	0.0	6.5	100.0	2,426
Fourth	28.0	8.9	34.7	88.4	4.7	0.0	6.9	100.0	1,560
Highest	28.6	8.4	36.9	85.4	5.8	0.1	8.7	100.0	671
Total	28.0	9.5	34.1	91.9	3.0	0.0	5.0	100.0	12,818

One of the important newborn care practices is related to thermal care, with the recommendation that bathing of a newborn be delayed. In Nigeria, 92 percent of babies are bathed within one hour of birth and 3 percent between 2 and 24 hours of birth. Five percent of mothers did not know the time interval between birth and when their baby was first bathed. Newborns in the South South are more likely to have delayed bathing than newborns in other zones. For instance, 69 percent of newborns in the South South are bathed within one hour of birth, while 77 percent of newborns in the South East and more than 90 percent of those in the other zones are bathed within an hour of birth.

9.5 PROBLEMS IN ACCESSING HEALTH CARE

Common impediments to accessing health care in Nigeria include inadequate information, financial barriers, and lack of access to transport. These are important determinants of health interventions. Other possible challenges include the need to obtain permission before going to the health facility and the attitudes of health workers. Interventions targeted at eliminating barriers to accessing health care include health promotion activities, the Midwives Service Scheme, provision of free contraceptives, and distribution of "Mama Kits" to pregnant women.

In the 2013 NDHS, women were asked whether or not each of the following factors would be a serious problem for them in seeking medical care: getting permission to go for treatment, getting money for advice or treatment, distance to a health facility, not wanting to go alone, and health workers' attitudes.

The majority of women (53 percent) reported that at least one of these problems would pose a barrier in seeking health care for themselves when they are sick (Table 9.14). Eleven percent reported that they had to seek permission before going for treatment, 42 percent had problems getting money to access health care, 29 percent complained of the distance to the facility, and 15 percent did not want to go alone. Another 17 percent reported that health workers' attitudes impeded them from accessing health care.

Women in rural areas were twice as likely as their urban counterparts to cite the need to get permission as a barrier to going to the health facility for treatment. Twenty percent of women in the North West cited the need to seek permission as a barrier, as compared with 4 percent in the North Central zone. Twenty-three percent of women in the North West and 11 percent each in the North Central and South West zones cited health workers' attitudes as their reason for not going to the health facility for treatment.

Twenty-one percent of women with no education cited health workers' attitudes as a barrier, as compared with 12 percent of women with more than a secondary education.

Table 9.14 Problems in accessing health care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Nigeria 2013

Background characteristic	Problems in accessing health care						
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	Attitude of health worker	At least one problem accessing health care	Number of women
Age							
15-19	13.6	41.8	28.9	20.4	16.9	54.4	7,820
20-34	10.9	41.3	27.8	13.1	16.4	52.4	19,369
35-49	10.2	43.4	30.5	13.1	16.6	54.2	11,760
Number of living children							
0	10.4	38.9	24.3	16.5	16.5	49.8	11,750
1-2	10.7	41.4	28.8	13.3	15.5	52.7	9,737
3-4	11.2	42.7	29.6	13.4	16.7	54.0	8,876
5+	13.0	46.4	34.2	14.7	17.6	58.1	8,585
Marital status							
Never married	9.1	40.3	22.3	16.1	15.8	50.0	9,326
Married or living together	12.3	42.0	31.3	14.3	17.0	54.1	27,830
Divorced/separated/widowed	5.9	52.4	24.9	10.3	13.1	58.8	1,793

Continued…

Table 9.14—*Continued*

Background characteristic	Problems in accessing health care						
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	Attitude of health worker	At least one problem accessing health care	Number of women
Employed in last 12 months							
Not employed	15.0	44.5	30.5	17.2	17.5	55.3	14,260
Employed for cash	9.0	39.6	27.2	12.5	15.9	50.9	22,333
Employed not for cash	9.7	51.6	34.5	19.3	16.1	64.6	2,255
Missing	11.1	33.8	32.1	12.3	16.3	54.5	100
Residence							
Urban	7.2	31.9	15.6	9.1	15.0	41.7	16,414
Rural	14.2	49.4	38.5	18.6	17.7	61.7	22,534
Zone							
North Central	4.3	46.6	27.3	13.3	11.3	56.0	5,572
North East	12.3	44.8	35.3	16.2	14.9	58.1	5,766
North West	19.9	40.1	35.0	19.8	23.0	55.4	11,877
South East	9.2	56.4	33.5	17.7	19.3	64.0	4,476
South South	5.6	46.6	25.6	9.9	13.6	54.0	4,942
South West	5.9	25.6	11.9	5.9	10.8	34.5	6,314
State							
North Central							
FCT-Abuja	3.9	24.6	12.4	5.9	6.1	31.5	315
Benue	7.2	49.4	25.0	20.7	9.9	64.4	1,240
Kogi	1.8	36.2	14.3	2.0	12.6	41.6	704
Kwara	0.7	27.2	11.5	0.4	7.6	37.1	596
Nasarawa	4.4	40.4	23.3	8.1	7.0	47.6	594
Niger	3.7	56.7	41.8	18.7	15.9	65.4	1,462
Plateau	6.3	63.5	37.9	19.0	11.7	70.8	662
North East							
Adamawa	12.4	52.8	17.4	14.3	10.9	64.6	828
Bauchi	11.0	46.3	34.9	17.8	26.4	59.7	1,161
Borno	10.8	28.3	32.7	10.3	6.4	43.1	1,412
Gombe	2.4	37.4	18.7	5.3	6.3	43.2	550
Taraba	9.5	64.0	38.5	10.8	3.5	70.0	844
Yobe	23.8	47.3	61.3	35.7	32.0	70.6	971
North West							
Jigawa	16.2	41.1	30.6	19.2	21.4	54.9	1,353
Kaduna	14.1	31.4	24.6	14.5	13.5	44.3	2,136
Kano	18.1	37.4	38.7	22.3	35.7	64.8	3,189
Katsina	16.6	62.1	46.8	15.8	8.6	70.4	1,525
Kebbi	34.5	56.3	43.6	29.8	36.1	66.0	1,244
Sokoto	30.8	33.7	42.2	23.2	20.5	49.8	1,098
Zamfara	18.2	24.4	20.0	15.6	15.9	29.1	1,332
South East							
Abia	16.1	73.5	63.3	28.2	36.3	78.5	518
Anambra	6.4	42.5	22.6	14.4	19.1	48.5	1,052
Ebonyi	8.9	51.4	36.8	22.9	15.7	63.1	1,122
Enugu	8.5	67.9	37.2	17.6	18.5	71.2	951
Imo	9.8	56.9	19.9	8.5	14.7	67.4	833
South South							
Akwa Ibom	7.6	49.5	22.5	8.6	13.9	54.7	864
Bayelsa	8.5	53.1	47.9	29.7	19.5	65.3	364
Cross River	2.8	55.0	25.0	8.3	17.7	64.9	703
Delta	3.0	33.4	17.1	4.0	6.7	37.4	993
Edo	12.5	56.6	26.0	12.5	19.1	63.2	742
Rivers	3.1	42.6	27.8	9.0	11.6	51.9	1,276
South West							
Ekiti	8.0	27.5	10.7	6.4	5.6	31.3	326
Lagos	3.5	25.7	5.6	3.3	5.9	30.9	1,964
Ogun	0.5	7.9	2.5	0.2	0.6	9.5	883
Ondo	5.4	48.5	25.7	11.1	4.4	62.2	808
Osun	0.7	17.2	4.6	0.2	9.0	24.0	765
Oyo	14.3	27.2	22.0	12.5	28.0	44.6	1,568
Education							
No education	18.3	48.4	42.5	21.0	20.9	63.2	14,729
Primary	8.9	48.3	28.8	13.2	15.4	57.7	6,734
Secondary	7.0	37.5	18.8	10.8	13.6	46.7	13,927
More than secondary	2.7	21.9	11.7	5.3	11.9	30.1	3,558
Wealth quintile							
Lowest	20.1	52.4	53.1	28.4	24.8	69.2	7,132
Second	16.1	52.0	40.0	19.3	18.0	64.6	7,428
Middle	10.5	48.1	27.5	12.5	14.5	58.3	7,486
Fourth	7.3	37.4	18.0	8.7	13.9	45.9	7,992
Highest	4.2	24.6	10.9	6.6	12.8	33.6	8,910
Total	11.2	42.0	28.8	14.6	16.5	53.3	38,948

CHILD HEALTH 10

Key Findings

- One in every four children age 12-23 months (25 percent) were fully vaccinated at the time of the survey, a 9 percent increase from the figure reported in the 2008 NDHS and nearly twice the figure reported in 2003.
- Thirty-eight percent of children age 12-23 months received the third dose of DPT at any time before the survey, a 9 percent increase from the figure reported in 2008 and an 81 percent increase from 2003.
- Fifty-four percent of children age 12-23 months received the third dose of polio vaccine. That proportion was 39 percent in 2008 and 29 percent in 2003.
- Two percent of children under age 5 showed symptoms of acute respiratory infection in the two weeks before the survey; for 35 percent of these children, advice or treatment was sought from a health care facility or provider.
- Thirteen percent of children under age 5 had a fever in the two weeks before the survey; for 32 percent of these children, advice or treatment was sought from a health care facility or provider.
- Ten percent of children under age 5 had diarrhoea, and 2 percent had diarrhoea with blood, in the two weeks before the survey.
- Knowledge of oral rehydration salt packets or pre-packaged liquids is high (80 percent) among Nigerian mothers age 15-49 with a live birth in the five years preceding the survey.

This chapter presents findings on several areas of importance relating to child health, including neonatal birth weight, childhood vaccination coverage, and prevalence and treatment of acute respiratory infections (ARIs) and fever. Information is also presented on the prevalence and treatment of diarrhoea, feeding practices during diarrhoea, knowledge of oral rehydration salt (ORS) packets, and disposal of children's stools.

Interventions such as immunisation and early treatment of common childhood illnesses have been shown to be the most cost-effective ways of preventing many under-5 deaths and reducing the duration and severity of childhood illnesses. Nigeria is currently implementing many such interventions, including the Expanded Programme on Immunisation, the Polio Eradication Initiative and National Emergency Action Plan, Integrated Community Case Management of Childhood Illnesses in Nigeria, and the Integrated Maternal Newborn and Child Health Strategy (National Primary Health Care Development Agency [NPHCDA], 2012).

The information on child health presented in this chapter pertains only to children born during the five years preceding the survey unless otherwise specified. Information on birth weight or size at birth is important for the design and implementation of programmes aimed at reducing neonatal and infant mortality. Vaccination coverage information focuses on the 12- to 23-month age group (i.e., the typical age by which children should have received all basic vaccinations). Data on differences in vaccination coverage between subgroups of the population aid in programme planning. Data on treatment practices and contact with health services among children ill with the three most important childhood illnesses help in the assessment of national programmes aimed at reducing the mortality impact of these illnesses. Information is provided on the prevalence and treatment of ARIs, including treatment with antibiotics, and

the prevalence of fever and its treatment with antimalarial drugs and antibiotics. Data on the treatment of diarrhoeal disease with oral rehydration therapy and increased fluids aid in assessing programmes that recommend such treatments. Because sanitary practices can help prevent diarrhoeal disease, information is also provided on disposal of children's faecal matter.

10.1 CHILD'S SIZE AND WEIGHT AT BIRTH

A child's birth weight or size at birth is an important indicator of the child's vulnerability to the risk of childhood illnesses and the child's chances of survival. Children who weigh less than 2.5 kilograms at birth, or children reported to be "very small" or "smaller than average," have a higher than average risk of early childhood death. The 2013 NDHS Woman's Questionnaire recorded birth weight, if available from written records or the mother's recall, for all births in the five years preceding the survey. Because birth weight may not be known for many babies, particularly babies delivered at home and not weighed at birth, the mother's estimate of the baby's size at birth was also obtained. Although subjective, mothers' estimates can be a useful proxy for the weight of the child.

Table 10.1 presents information on children's size and weight at birth according to background characteristics. The table shows that birth weight was reported for only 16 percent of children born in the five years preceding the survey. This is not surprising because the majority of births (63 percent, as reported in Chapter 9) did not take place in a health facility, and children are less likely to be weighed at birth in a non-institutional setting. Of the children whose birth weights are known, 8 percent weighed less than 2.5 kilograms. Low birth weight is most common among children of the youngest mothers (less than age 20) (15 percent) and children of birth order six and above (11 percent). The birth weight of a child varies by geopolitical zone. The North West zone has the highest proportion (27 percent) of children reported as weighing less than 2.5 kg at birth, while the South West zone has the lowest (3 percent). More than a third (36 percent) of children whose birth weights are known in Kaduna weighed less than 2.5 kg at birth.

As noted, a mother's subjective assessment of the size of the baby at birth—in the absence of birth weight—may be useful. Mothers reported 4 percent of all live births in the five years preceding the survey to be very small and 11 percent as smaller than average. Children of mothers with no education and children born to mothers in the lowest wealth quintile were the most likely to be reported as very small.

Table 10.1 Child's size and weight at birth

Percent distribution of live births in the five years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the five years preceding the survey that have a reported birth weight, and among live births in the five years preceding the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Nigeria 2013

Background characteristic	Percent distribution of all live births by size of child at birth					Percentage of all births that have a reported birth weight[1]	Number of births	Births with a reported birth weight[1]	
	Very small	Smaller than average	Average or larger	Don't know/ missing	Total			Percentage less than 2.5 kg	Number of births
Mother's age at birth									
<20	5.9	12.2	79.5	2.4	100.0	6.1	4,726	14.8	290
20-34	4.1	10.1	84.0	1.8	100.0	19.0	22,220	7.7	4,212
35-49	4.6	10.5	83.2	1.7	100.0	14.7	4,882	8.0	719
Birth order									
1	4.9	10.8	82.2	2.1	100.0	23.4	6,285	8.9	1,470
2-3	4.1	10.2	84.0	1.8	100.0	20.0	10,311	6.3	2,063
4-5	4.0	10.4	83.8	1.8	100.0	15.2	7,441	8.9	1,135
6+	5.0	10.7	82.4	1.8	100.0	7.1	7,791	11.4	552
Mother's smoking status									
Smokes cigarettes/tobacco	1.0	10.6	84.4	4.0	100.0	24.1	57	*	14
Does not smoke	4.5	10.5	83.2	1.9	100.0	16.4	31,665	8.1	5,184
Missing	0.0	5.4	92.1	2.4	100.0	20.5	107	*	22
Residence									
Urban	3.4	8.8	86.2	1.6	100.0	34.3	11,126	7.6	3,818
Rural	5.0	11.4	81.6	2.0	100.0	6.8	20,702	9.6	1,402

Continued…

Table 10.1—*Continued*

Background characteristic	Percent distribution of all live births by size of child at birth					Percentage of all births that have a reported birth weight[1]	Number of births	Births with a reported birth weight[1]	
	Very small	Smaller than average	Average or larger	Don't know/ missing	Total			Percentage less than 2.5 kg	Number of births
Zone									
North Central	2.6	6.7	88.9	1.8	100.0	12.3	4,340	7.5	534
North East	8.0	13.2	76.9	1.8	100.0	5.4	5,578	13.6	302
North West	5.3	11.9	80.7	2.1	100.0	4.2	11,775	27.2	489
South East	2.8	8.9	85.7	2.5	100.0	46.4	2,840	4.3	1,317
South South	2.5	9.4	86.2	1.9	100.0	27.2	2,935	11.6	798
South West	1.7	8.6	88.6	1.1	100.0	40.8	4,360	3.4	1,780
State									
North Central									
FCT-Abuja	4.7	14.5	74.9	5.9	100.0	43.2	209	5.1	90
Benue	2.5	7.1	90.3	0.1	100.0	5.5	967	3.6	53
Kogi	1.5	5.1	90.8	2.6	100.0	30.1	401	7.2	121
Kwara	0.3	8.7	90.1	0.9	100.0	25.6	405	2.0	104
Nasarawa	5.1	9.9	84.7	0.3	100.0	5.3	460	(21.0)	24
Niger	0.5	1.9	94.8	2.8	100.0	6.8	1,394	14.2	94
Plateau	8.6	12.8	76.7	1.8	100.0	9.3	505	9.0	47
North East									
Adamawa	3.8	8.3	86.1	1.8	100.0	14.5	732	20.0	106
Bauchi	4.0	17.6	76.3	2.1	100.0	1.9	1,431	(9.0)	27
Borno	16.6	13.8	68.0	1.5	100.0	5.4	1,118	(10.9)	61
Gombe	3.1	10.6	85.1	1.2	100.0	3.6	595	(12.9)	22
Taraba	3.9	17.1	77.7	1.3	100.0	9.8	764	9.6	75
Yobe	13.8	8.3	75.2	2.6	100.0	1.3	938	*	12
North West									
Jigawa	5.0	13.2	78.3	3.5	100.0	0.8	1,594	*	13
Kaduna	2.5	15.0	81.3	1.2	100.0	22.4	1,439	36.1	322
Kano	9.6	10.0	78.4	2.0	100.0	3.4	3,024	3.2	103
Katsina	1.6	9.1	86.8	2.5	100.0	1.2	1,703	*	21
Kebbi	10.7	24.9	63.1	1.3	100.0	0.5	1,247	*	6
Sokoto	0.3	2.2	94.7	2.9	100.0	1.8	1,151	(0.0)	20
Zamfara	3.4	11.4	84.0	1.2	100.0	0.3	1,618	*	5
South East									
Abia	1.4	7.2	85.2	6.3	100.0	56.5	326	2.1	184
Anambra	5.8	3.2	85.5	5.4	100.0	67.3	657	2.1	442
Ebonyi	1.7	12.4	85.8	0.0	100.0	16.9	748	7.7	127
Enugu	2.9	11.7	84.1	1.3	100.0	46.6	558	7.2	260
Imo	1.4	9.3	87.8	1.5	100.0	55.1	552	4.9	304
South South									
Akwa Ibom	4.1	5.7	87.3	2.9	100.0	18.4	473	9.5	87
Bayelsa	5.4	10.5	83.2	0.9	100.0	11.6	233	11.5	27
Cross River	1.0	11.3	87.4	0.2	100.0	13.4	532	12.7	71
Delta	1.2	4.9	90.8	3.1	100.0	33.9	561	7.7	190
Edo	2.7	11.6	84.9	0.9	100.0	46.6	405	8.6	189
Rivers	2.7	12.1	82.9	2.3	100.0	31.9	730	17.5	233
South West									
Ekiti	1.3	5.2	90.9	2.6	100.0	41.2	200	6.8	82
Lagos	1.3	6.2	90.9	1.5	100.0	54.4	1,303	3.8	709
Ogun	1.8	6.4	90.5	1.3	100.0	34.4	736	4.1	253
Ondo	2.3	7.0	90.1	0.6	100.0	11.7	568	7.9	66
Osun	0.5	3.2	95.6	0.6	100.0	75.2	445	0.7	334
Oyo	2.4	16.3	80.8	0.6	100.0	30.1	1,108	3.1	333
Mother's education									
No education	5.9	12.3	79.6	2.1	100.0	1.9	15,657	15.2	292
Primary	3.6	9.8	84.9	1.7	100.0	12.7	6,127	8.0	779
Secondary	2.8	8.5	87.1	1.6	100.0	34.6	8,211	8.4	2,840
More than secondary	2.0	6.0	90.2	1.7	100.0	71.4	1,834	6.1	1,310
Wealth quintile									
Lowest	6.5	14.1	77.5	2.0	100.0	0.5	7,496	(13.5)	39
Second	5.5	11.4	81.2	1.9	100.0	3.1	7,355	17.3	229
Middle	4.2	9.3	84.7	1.8	100.0	10.3	6,001	9.1	619
Fourth	3.2	8.7	86.2	1.9	100.0	25.7	5,656	8.7	1,452
Highest	1.8	7.4	89.1	1.7	100.0	54.1	5,320	6.8	2,881
Total	4.4	10.5	83.2	1.9	100.0	16.4	31,828	8.1	5,220

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Based on either a written record or the mother's recall

10.2 VACCINATION COVERAGE

Immunisation coverage is one of the indicators used to monitor progress toward the achievement of Millennium Development Goal (MDG) 4 and the reduction of child morbidity and mortality, as it is one of the most cost-effective public health interventions for reaching these goals. In the five years preceding the survey, Nigeria introduced several child survival initiatives and expanded existing ones, with a particular focus on polio eradication and strengthening routine immunisation. Several supplemental vaccination campaigns were also conducted to rapidly increase the coverage of specific vaccines and to pre-empt or respond to disease outbreaks. These included campaigns targeting maternal and newborn tetanus, measles, yellow fever, and cerebrospinal meningitis (NPHCDA, 2012). In May 2006, Nigeria began to implement polio vaccination campaigns (Immunisation Plus Days). In 2012 alone, for example, Nigeria conducted two national and five subnational polio immunisation campaigns (NPHCDA, 2012). In May 2012, Nigeria began the phased replacement of the diphtheria, pertussis, and tetanus (DPT) vaccine with the pentavalent vaccine, which contains more antigens (DPT, *Haemophilus influenzae* type B, and hepatitis B).[1]

The Nigeria Expanded Programme on Immunisation mirrors the international recommendations of the World Health Organization. A child is considered fully vaccinated if she or he has received BCG vaccination against tuberculosis; three doses of vaccine to prevent diphtheria, pertussis, and tetanus; at least three doses of polio vaccine; and one dose of measles vaccine. These vaccines should be received during the first year of life.

The 2013 NDHS collected information on vaccination coverage in two ways: from vaccination cards shown to the interviewer and from mothers' verbal reports. If the cards were available, the interviewer copied the vaccination dates directly onto the questionnaire. When there was no vaccination card for the child or if a vaccine had not been recorded on the card as being given, the respondent was asked to recall the vaccines given to her child.

Table 10.2 and Figure 10.1 show the percentage of children age 12-23 months who have received the various vaccinations by source of information (vaccination card or mother's report). This is the youngest cohort of children who have reached the age by which they should be fully vaccinated. The table shows the proportion of children age 12-23 months who were immunised at any age up to the time of the survey, as well as the proportion who were vaccinated by age 12 months, the age at which vaccination coverage should be complete.

Overall, 25 percent of children age 12-23 months were fully vaccinated at the time of the survey. This represents a 9 percent increase from the figure reported in the 2008 NDHS and is nearly double the figure reported in 2003. Twenty-one percent of eligible children received no vaccination at all. While this figure represents a 28 percent improvement over that recorded in the 2008 NDHS, it still represents a significant risk for not achieving MDG 4.

As for coverage of specific vaccines among children age 12-23 months, 51 percent had received the BCG vaccine, and 42 percent had received the measles vaccine. While 51 percent received the first dose of the DPT vaccine, only 38 percent went on to receive the third dose, reflecting a dropout rate of 25 percent. Although only 47 percent of children received the recommended polio 0 dose at birth, 77 percent received the first dose, 70 percent received the second dose, and 54 percent received the third dose. The wide difference in DPT and OPV coverage is accounted for by the national and subnational immunisation day campaigns during which the polio vaccine is administered. Overall, only 21 percent of children age 12-23 months had received all of the recommended vaccinations before their first birthday.

[1] Phase I (May 2012) covered 13 states (Adamawa, Akwa Ibom, Anambra, Bauchi, Edo, Ekiti, Enugu, Jigawa, Kaduna, Kwara, Lagos, Plateau, and Rivers) and the Federal Capital Territory-Abuja. Phase II (May 2013) covered an additional 12 states, and Phase III (May 2014) will cover 11 states. Because the 2013 NDHS fieldwork spanned from February to June 2013, only some states were covered by pentavalent vaccinations.

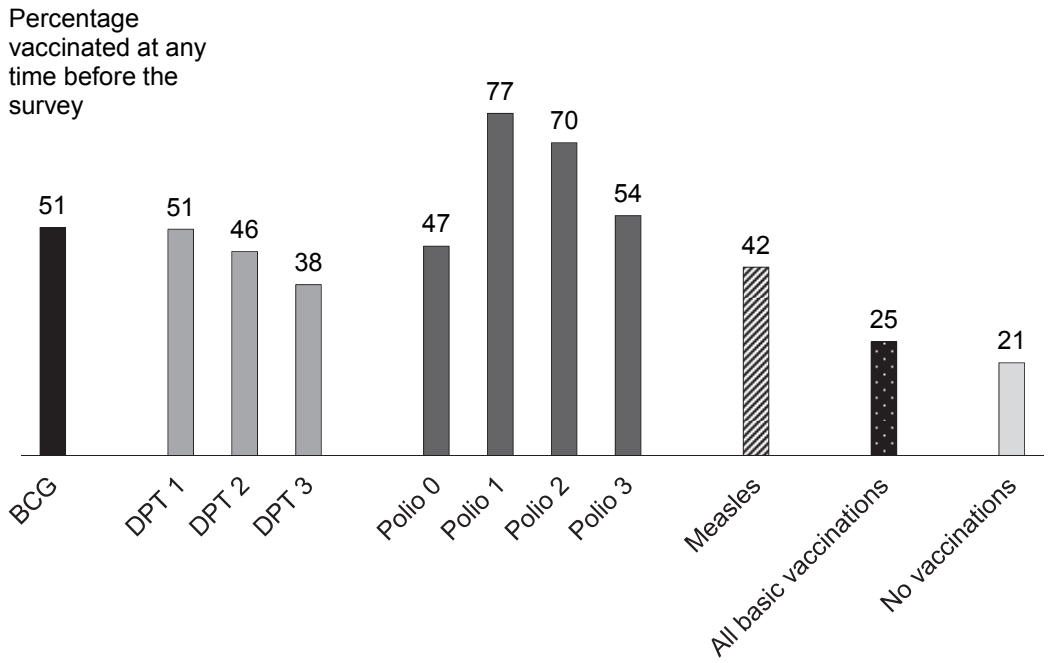
Table 10.2 Vaccinations by source of information

Percentage of children age 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by 12 months of age, Nigeria 2013

Source of information	BCG	DPT[1] 1	DPT[1] 2	DPT[1] 3	Polio[2] 0	Polio[2] 1	Polio[2] 2	Polio[2] 3	Measles	All basic vaccinations[3]	No vaccinations	Number of children
Vaccinated at any time before survey												
Vaccination card	27.0	26.7	24.8	22.2	26.2	26.8	25.1	22.7	21.1	19.0	0.0	1,650
Mother's report	24.1	23.9	20.7	16.0	20.7	49.7	44.9	30.8	21.0	6.3	20.7	4,250
Either source	51.2	50.6	45.6	38.2	46.8	76.5	69.9	53.6	42.1	25.3	20.7	5,900
Vaccinated by 12 months of age[4]	50.3	49.6	44.2	36.2	46.5	75.0	67.8	51.2	35.1	21.4	22.1	5,900

[1] Includes pentavalent
[2] Polio 0 is the polio vaccination given at birth.
[3] BCG, measles, and 3 doses each of DPT and polio vaccine (excluding polio vaccine given at birth)
[4] For children whose information is based on the mother's report, the proportion of vaccinations given during the first year of life is assumed to be the same as for children with a written record of vaccination.

Figure 10.1 **Percentage of children age 12-23 months with specific vaccinations**



Note: Based on vaccination cards and mother's reports NDHS 2013

10.2.1 Vaccination Coverage by Background Characteristics

Table 10.3 presents vaccination coverage among children age 12-23 months by background characteristics. Children of birth order six and higher are less likely to receive all basic vaccinations (16 percent) than first-born children (34 percent). Urban children are nearly three times more likely than rural children to receive all basic vaccinations (43 percent versus 16 percent). Children whose mothers have more than a secondary education are more likely to be fully immunised than those born to mothers with no education (64 percent and 7 percent, respectively). Similarly, 58 percent of children in the highest wealth quintile are fully immunised, as compared with 4 percent of children in the lowest wealth quintile. There is wide variation among the geopolitical zones and states in full vaccination coverage. Fifty-two percent of children in the South East and South South zones are fully immunised, compared with 10 percent in the North West. Among the states, full vaccination is highest in Imo (62 percent) and lowest in Sokoto (1 percent).

Table 10.3 Vaccinations by background characteristics

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, Nigeria 2013

Background characteristic	BCG	DPT[1] 1	DPT[1] 2	DPT[1] 3	Polio[2] 0	Polio[2] 1	Polio[2] 2	Polio[2] 3	Measles	All basic vaccinations[3]	No vaccinations	Percentage with a vaccination card seen	Number of children
Sex													
Male	52.9	52.4	47.0	39.4	48.2	76.8	70.7	53.4	43.1	25.7	20.0	29.0	3,066
Female	49.3	48.6	44.1	37.0	45.3	76.2	69.1	53.8	41.0	24.9	21.4	26.9	2,834
Birth order													
1	61.6	61.4	56.8	49.5	55.4	79.1	73.1	55.4	53.0	34.2	18.8	35.2	1,188
2-3	55.4	54.6	49.5	41.8	49.5	77.5	70.5	53.2	43.7	27.4	19.8	30.3	1,848
4-5	50.8	50.4	45.7	36.7	46.8	75.7	69.3	54.0	41.6	25.0	21.0	28.9	1,445
6+	37.3	36.5	30.9	25.8	36.1	73.8	67.2	52.1	31.3	15.5	23.1	17.9	1,419
Residence													
Urban	76.3	73.8	69.8	62.2	70.0	83.3	77.9	58.2	61.9	42.5	13.5	44.0	2,113
Rural	37.1	37.6	32.0	24.9	33.9	72.7	65.5	51.0	31.0	15.8	24.7	19.0	3,787
Zone													
North Central	62.7	62.0	55.0	43.9	57.0	79.1	68.9	45.5	48.1	26.9	17.3	33.3	812
North East	35.1	34.7	28.4	20.6	27.7	51.5	44.4	34.8	26.8	14.2	45.3	20.3	1,023
North West	21.7	22.2	18.1	13.9	26.4	77.2	71.8	61.1	22.3	9.6	20.8	8.5	2,100
South East	90.4	88.9	86.7	80.7	82.9	90.6	87.2	62.3	72.2	51.7	7.2	57.1	550
South South	84.7	84.5	79.1	69.8	65.8	88.6	82.3	64.5	74.0	52.0	9.4	49.0	591
South West	84.5	81.5	76.3	65.5	74.9	85.1	77.4	52.1	62.5	40.9	10.3	47.3	823
State													
North Central													
FCT-Abuja	81.6	83.9	75.3	69.1	77.0	91.8	86.0	77.5	69.6	60.9	7.3	65.5	38
Benue	54.8	55.6	45.0	29.0	45.5	76.1	60.6	41.8	42.7	20.0	19.2	23.5	187
Kogi	85.4	87.1	82.7	75.9	85.0	83.1	78.0	40.0	75.2	35.6	12.9	43.6	83
Kwara	79.0	73.5	69.0	65.1	72.9	77.6	70.9	52.0	56.9	42.9	19.1	47.4	69
Nasarawa	62.3	60.1	42.6	34.1	45.9	65.2	42.2	25.8	45.4	20.1	29.8	23.1	90
Niger	51.8	52.7	48.8	37.3	51.5	87.1	81.0	53.3	38.9	23.0	10.9	29.9	253
Plateau	68.4	62.4	60.5	46.3	60.8	68.6	61.6	37.1	46.6	23.6	25.7	39.4	91
North East													
Adamawa	79.0	80.3	67.5	49.7	62.5	79.7	71.9	60.8	68.7	40.4	13.3	49.9	133
Bauchi	26.3	25.4	18.9	12.5	15.9	51.9	43.4	33.4	20.3	6.1	44.3	14.9	265
Borno	17.7	19.5	16.9	12.4	16.2	25.9	21.3	15.3	17.3	9.7	71.0	7.4	226
Gombe	44.3	44.4	41.3	36.0	39.3	46.2	39.4	27.3	36.1	22.4	51.9	33.6	98
Taraba	45.0	44.1	32.7	21.4	41.6	86.9	73.9	57.5	27.4	14.4	9.7	24.6	143
Yobe	22.9	18.8	15.7	11.0	15.0	34.8	32.6	27.2	10.0	6.9	65.2	10.7	158
North West													
Jigawa	20.4	20.9	12.7	7.0	23.2	67.2	59.3	49.1	10.9	3.6	29.9	9.6	314
Kaduna	57.9	60.5	56.9	43.7	55.0	67.1	60.5	44.3	56.4	35.3	28.9	30.0	219
Kano	27.5	26.2	22.3	18.9	28.3	75.9	70.8	57.9	25.3	13.2	22.3	8.4	530
Katsina	21.9	23.3	17.9	14.6	25.7	94.1	88.7	81.3	42.9	8.7	4.9	5.0	326
Kebbi	5.2	4.9	4.2	2.8	38.5	92.8	90.0	80.5	3.2	2.8	5.8	2.2	220
Sokoto	3.6	3.3	2.9	2.6	10.6	75.0	70.9	63.2	3.6	1.4	24.1	1.6	204
Zamfara	10.5	12.2	8.1	5.6	7.6	69.1	63.7	53.9	7.9	2.1	28.6	5.0	289
South East													
Abia	86.1	93.4	90.8	79.8	87.9	92.5	84.3	60.5	73.1	49.8	5.4	61.4	64
Anambra	87.1	85.5	82.1	78.5	77.7	91.0	88.4	57.9	75.0	51.6	9.0	50.1	128
Ebonyi	91.4	88.7	86.6	80.3	88.0	89.2	86.4	68.6	61.7	51.1	8.1	63.5	137
Enugu	89.7	88.2	87.6	81.8	80.7	90.9	87.5	50.3	78.4	45.0	8.6	50.6	122
Imo	97.2	91.8	89.2	83.1	81.9	90.3	88.3	75.4	75.1	62.4	2.8	62.6	98
South South													
Akwa Ibom	87.5	89.5	85.0	65.3	69.6	92.3	86.8	59.7	75.2	48.0	7.2	53.8	102
Bayelsa	77.4	79.1	73.0	67.7	47.8	79.5	76.4	56.0	73.0	51.5	19.4	32.7	49
Cross River	87.3	86.8	80.9	76.1	69.6	91.9	86.5	66.0	77.1	52.5	6.1	56.6	98
Delta	73.6	73.2	70.8	62.2	54.4	76.6	71.8	60.6	60.4	50.7	19.2	42.9	106
Edo	93.4	91.5	85.7	79.6	75.9	94.4	82.7	64.1	76.5	52.2	1.8	57.2	89
Rivers	86.0	85.1	77.7	69.2	68.8	91.9	85.4	72.6	79.7	55.5	7.4	45.3	148
South West													
Ekiti	97.3	97.6	88.1	79.0	82.6	96.2	90.5	60.9	85.7	49.4	0.0	65.2	33
Lagos	93.3	90.2	86.6	77.4	86.5	91.2	85.8	65.0	75.8	53.9	4.2	55.7	252
Ogun	82.6	77.5	68.1	56.9	73.0	78.1	68.5	33.9	51.0	24.4	12.3	32.8	149
Ondo	72.7	70.3	68.7	62.5	63.0	85.1	78.0	60.2	60.7	47.2	14.9	43.1	90
Osun	93.5	92.2	89.6	82.8	85.5	91.3	88.0	65.8	75.2	55.3	5.8	60.7	98
Oyo	73.8	70.6	64.4	47.7	60.6	77.9	65.9	37.7	45.2	25.8	18.3	39.8	201
Mother's education													
No education	20.7	20.8	16.9	12.0	22.4	66.2	59.8	48.4	18.0	6.9	31.8	10.0	2,807
Primary	63.2	61.7	52.6	40.0	52.4	78.0	68.8	48.9	47.9	26.3	16.2	31.4	1,062
Secondary	84.3	83.4	78.1	69.9	74.1	88.5	82.6	61.7	68.2	46.6	9.1	48.8	1,608
More than secondary	96.9	95.3	94.4	87.1	91.1	95.7	91.8	69.0	88.2	64.1	2.4	59.3	423
Wealth quintile													
Lowest	14.0	14.2	10.9	7.0	15.4	61.2	54.8	45.0	13.2	3.6	37.1	5.9	1,350
Second	31.4	32.4	26.4	18.5	29.9	73.8	65.0	51.7	26.6	11.5	23.6	16.3	1,330
Middle	57.3	56.6	49.5	39.7	49.4	77.0	69.8	50.5	43.9	24.0	19.9	29.5	1,100
Fourth	75.8	74.0	68.5	60.0	66.9	83.5	78.2	56.4	60.6	39.3	12.2	40.4	1,060
Highest	92.3	90.0	86.7	79.5	85.3	91.9	87.4	67.4	77.9	57.7	5.4	56.7	1,060
Total	51.2	50.6	45.6	38.2	46.8	76.5	69.9	53.6	42.1	25.3	20.7	28.0	5,900

[1] Includes pentavalent
[2] Polio 0 is the polio vaccination given at birth.
[3] BCG, measles, and 3 doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

10.2.2 Trends in Vaccination Coverage

Table 10.4 presents data on immunisation coverage trends from the 2003, 2008, and 2013 NDHS surveys. Immunisation coverage in Nigeria has improved over the past 10 years. The proportion of children age 12-23 months who received all basic vaccines almost doubled from 13 percent in 2003 to 25 percent in 2013. While this improvement is appreciable, it still falls far short of the increase needed to achieve the MDG target of more than 90 percent by 2015 (Federal Republic of Nigeria, 2010a). The proportion of children who received none of the six basic vaccinations declined marginally by 6 percentage points from the 2003 level (Figure 10.2). There has been a sustained increase in the proportion of children receiving each of the specific vaccines between 2003 and 2013; the increase is most marked for the polio vaccine, with coverage increasing from 29 percent to 54 percent. The smallest increase in coverage is that for the BCG vaccine, from 48 percent in 2003 to 51 percent in 2013.

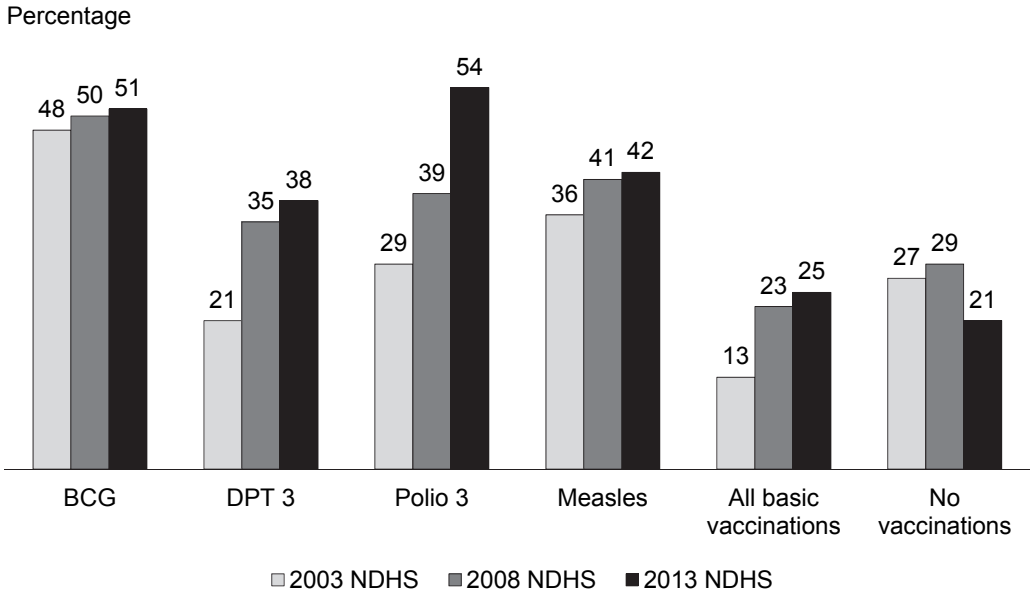
Table 10.4 Trends in vaccination coverage

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), 2003 NDHS, 2008 NDHS, and 2013 NDHS

Source of information	BCG	DPT[1]			Polio[2]				Measles	All basic vaccinations[3]	No vaccinations	Number of children
		1	2	3	0	1	2	3				
2003 NDHS	48.3	42.6	31.7	21.4	27.8	67.2	52.3	29.4	35.9	12.9	26.5	999
2008 NDHS	49.7	52.0	44.7	35.4	36.7	67.8	57.2	38.7	41.4	22.7	28.7	4,945
2013 NDHS	51.2	50.6	45.6	38.2	46.8	76.5	69.9	53.6	42.1	25.4	20.7	5,900

[1] Includes pentavalent
[2] Polio 0 is the polio vaccination given at birth.
[3] BCG, measles, and 3 doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

Figure 10.2 **Trends in vaccination coverage among children age 12-23 months, 2003-2013**



10.3 ACUTE RESPIRATORY INFECTION

Acute respiratory infection (ARI) is among the leading causes of childhood morbidity and mortality in Nigeria and throughout the world. Pneumonia is the most serious outcome of ARI in young children. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by pneumonia. The prevalence of ARI symptoms was estimated by asking mothers whether their children under age 5 had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the survey. These data are subjective (i.e., based on the mother's perception of illness) and not validated by a medical examination.

Table 10.5 shows the percentage of children under age 5 who experienced symptoms of ARI in the two weeks preceding the survey. Two percent of children showed ARI symptoms during this period. Advice or treatment was sought from a health facility or provider for only about a third (35 percent) of children with ARI symptoms, while 37 percent received antibiotics for their illness. ARI symptoms were reported most frequently in children age 12-23 months, children whose mothers smoked cigarettes or tobacco, children in rural areas and the North East, and children whose families were in the lower wealth quintiles.

Table 10.5 Prevalence and treatment of symptoms of ARI

Among children under age 5, the percentage who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey and among children with symptoms of ARI, the percentage for whom advice or treatment was sought from a health facility or provider and the percentage who received antibiotics as treatment, according to background characteristics, Nigeria 2013

	Among children under age 5:		Among children under age 5 with symptoms of ARI:		
Background characteristic	Percentage with symptoms of ARI[1]	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider[2]	Percentage who received antibiotics	Number of children
Age in months					
<6	1.5	2,989	(28.2)	(34.2)	44
6-11	2.9	3,263	33.5	39.7	93
12-23	3.1	5,900	30.5	35.3	184
24-35	2.1	5,490	44.6	36.6	115
36-47	1.0	5,722	31.9	32.6	59
48-59	1.2	5,586	35.8	40.0	69
Sex					
Male	1.9	14,509	36.2	35.9	279
Female	2.0	14,440	32.8	37.0	286
Mother's smoking status[3]					
Smokes cigarettes/tobacco	9.8	52	*	*	5
Does not smoke	1.9	28,796	34.6	36.4	558
Cooking fuel[4]					
Electricity or gas	1.3	467	*	*	6
Kerosene	0.9	5,094	(51.6)	(43.8)	43
Coal/lignite	0.5	117	*	*	1
Charcoal	1.5	957	*	*	15
Wood/straw[5]	2.2	22,256	31.8	34.4	500
Animal dung	(2.7)	35	*	*	1
Residence					
Urban	1.5	10,403	46.6	44.2	154
Rural	2.2	18,547	30.0	33.6	411
Zone					
North Central	2.1	4,019	28.5	23.8	83
North East	5.1	5,034	32.7	37.2	257
North West	0.9	10,485	40.5	31.5	91
South East	2.1	2,585	29.9	28.9	53
South South	1.7	2,742	32.1	55.7	48
South West	0.8	4,084	*	*	33
Mother's education					
No education	2.0	13,945	31.2	34.5	277
Primary	2.1	5,563	27.5	37.1	115
Secondary	2.0	7,697	42.1	38.2	151
More than secondary	1.2	1,744	*	*	22
Wealth quintile					
Lowest	2.1	6,636	26.8	36.5	140
Second	2.9	6,483	27.7	25.2	189
Middle	2.1	5,534	40.7	42.5	114
Fourth	1.4	5,243	36.9	49.9	72
Highest	1.0	5,053	(63.7)	(45.9)	50
Total	2.0	28,950	34.5	36.5	565

Note: State-level disaggregation is not shown due to the small number of cases. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Symptoms of ARI (cough accompanied by short, rapid breathing that is chest-related and/or by difficult breathing that is chest-related) are considered a proxy for pneumonia.
[2] Excludes pharmacy, chemist/PMS, shop, traditional practitioner, market, and other
[3] Excludes children for whom the mother's smoking status is missing
[4] Excludes 12 children who live in households where no food is cooked and 11 children for whom information on the cooking fuel used in the household is missing
[5] Includes grass, shrubs, and crop residues

As a result of differences in the definition of a health facility/provider between the 2008 and 2013 NDHS surveys, the results from these two surveys regarding treatment of ARI cannot be directly compared. The 2013 NDHS excluded pharmacy, chemist/PMS, shop, and traditional practitioner from the definition of a health facility or provider, while the 2008 NDHS included chemist/PMS in the definition. The 2008 NDHS data were rerun to match the 2013 NDHS definition, and the results showed a 9 percent increase in the proportion of children under age 5 for whom advice or treatment was sought from a health facility or provider (from 32 percent in 2008 to 35 percent in 2013) (Figure 10.3).

10.4 FEVER

Fever is a major manifestation of malaria and other acute infections in children. Malaria and fever contribute to high levels of malnutrition and mortality in young children. While fever can occur year-round, malaria is more prevalent after the end of the rainy season. For this reason, temporal factors must be taken into account when interpreting fever as an indicator of malaria prevalence. Since malaria is a major cause of death in infancy and childhood in many developing countries, the presumptive treatment of fever with antimalarial medication is advocated in countries such as Nigeria where malaria is endemic. Information relating to the prevention and treatment of malaria is discussed in greater detail in Chapter 12 of this report.

Table 10.6 shows the percentage of children under age 5 with a fever during the two weeks preceding the survey and the percentage receiving various treatments, by selected background characteristics. Among children under age 5, 13 percent had a fever in the two weeks preceding the survey. Advice or treatment was sought from a health facility or provider for 32 percent of these children; 33 percent took antimalarial drugs, and a quarter took antibiotics.

The prevalence of fever varied by age of the child; it was highest in children age 12-23 months and lowest in children younger than age 6 months. There was little variation in the prevalence of fever by sex of the child, place of residence, or mother's education. Although the proportion of children under age 5 with a fever was similar in rural and urban areas (12-13 percent), children in rural areas were less likely than those in urban areas to receive care and treatment (29 percent versus 37 percent). Children of mothers with little or no education and those born to families in the lower wealth quintiles were also less likely to receive care and treatment. The prevalence of fever was highest among children in the lowest wealth quintile and lowest among children in the highest quintile (14 percent and 10 percent, respectively). Also, fever prevalence varied from 7 percent in the North Central and South West zones to 21 percent in the North East.

Care must be taken in comparing the results from the 2008 and 2013 NDHS surveys regarding the practice of seeking advice and treatment for fever because the 2008 NDHS included chemist/PMS in the health facility/provider category while the 2013 survey excluded pharmacy, chemist/PMS, shop, and traditional practitioner. The 2008 NDHS data were rerun to facilitate such a comparison. The results indicate that while there was a slight decline in the prevalence of fever from 16 percent in 2008 to 13 percent in 2013, there was also an 11 percent decrease in the proportion of children under age 5 for whom advice or treatment was sought from a health facility or provider (Figure 10.3). The proportion of children who took antimalarial drugs remained unchanged at 33 percent, while the proportion who took antibiotics for their illness rose sharply from 18 percent in 2008 to 26 percent in 2013.

Table 10.6 Prevalence and treatment of fever

Among children under age 5, the percentage who had a fever in the two weeks preceding the survey, and among children with fever, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage who took antimalarial drugs, and the percentage who received antibiotics as treatment, by background characteristics, Nigeria 2013

	Among children under age 5:		Among children under age 5 with fever:			
Background characteristic	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider[1]	Percentage who took antimalarial drugs	Percentage who took antibiotic drugs	Number of children
Age in months						
<6	6.8	2,989	33.3	21.6	28.5	203
6-11	17.0	3,263	35.5	33.7	29.1	556
12-23	17.5	5,900	31.8	33.3	26.9	1,034
24-35	13.4	5,490	31.4	33.6	24.0	736
36-47	10.3	5,722	31.1	35.5	24.2	591
48-59	9.2	5,586	26.3	30.4	23.1	512
Sex						
Male	12.9	14,509	31.8	33.2	26.0	1,867
Female	12.2	14,440	31.1	32.3	25.4	1,766
Residence						
Urban	12.1	10,403	36.5	39.9	29.3	1,262
Rural	12.8	18,547	28.8	28.9	23.9	2,370
Zone						
North Central	7.4	4,019	38.6	50.7	15.7	297
North East	20.8	5,034	27.0	25.0	26.5	1,045
North West	9.9	10,485	34.1	29.0	22.8	1,034
South East	19.3	2,585	23.9	29.9	28.2	498
South South	16.8	2,742	28.2	39.8	31.4	460
South West	7.3	4,084	48.6	48.6	30.6	297
State						
North Central						
FCT-Abuja	7.6	196	(47.6)	(29.0)	(10.5)	15
Benue	3.7	878	*	*	*	33
Kogi	3.4	378	*	*	*	13
Kwara	4.3	377	(50.8)	(58.9)	(19.1)	16
Nasarawa	9.8	421	47.8	65.0	42.3	41
Niger	9.3	1,303	38.4	69.5	6.1	121
Plateau	12.5	464	35.5	25.5	20.1	58
North East						
Adamawa	13.2	661	37.2	16.9	26.0	87
Bauchi	25.3	1,243	33.3	19.3	37.1	315
Borno	10.7	1,064	27.7	39.7	31.9	114
Gombe	18.5	529	34.6	38.4	20.5	98
Taraba	21.1	690	22.5	23.4	21.4	146
Yobe	33.7	848	16.4	24.1	17.4	286
North West						
Jigawa	18.9	1,380	41.5	31.6	19.7	260
Kaduna	12.2	1,375	12.4	17.4	17.1	168
Kano	9.1	2,717	37.5	29.2	30.2	248
Katsina	6.3	1,549	27.5	39.2	19.4	98
Kebbi	9.0	1,094	39.7	45.0	5.3	98
Sokoto	6.2	1,005	35.0	20.5	32.9	62
Zamfara	7.3	1,365	42.9	21.0	36.3	100
South East						
Abia	11.2	297	(33.0)	(28.1)	(18.0)	33
Anambra	11.4	608	11.8	18.9	18.9	69
Ebonyi	25.1	663	19.1	21.6	43.6	166
Enugu	24.3	514	29.0	25.8	16.9	125
Imo	20.7	502	30.5	56.2	26.6	104
South South						
Akwa Ibom	18.8	439	21.1	18.9	37.0	83
Bayelsa	3.9	220	(29.6)	(62.9)	(47.4)	9
Cross River	25.6	499	21.0	27.1	29.8	128
Delta	5.2	520	(20.0)	(33.7)	(18.3)	27
Edo	5.9	387	(49.1)	(52.0)	(2.0)	23
Rivers	28.3	676	34.6	55.5	34.8	192
South West						
Ekiti	6.4	188	(48.7)	(43.4)	(31.2)	12
Lagos	9.2	1,220	41.8	54.5	30.3	112
Ogun	2.1	689	*	*	*	15
Ondo	9.6	520	63.6	38.5	46.9	50
Osun	6.9	427	(66.1)	(83.7)	(12.8)	30
Oyo	7.6	1,040	48.9	36.9	28.5	79

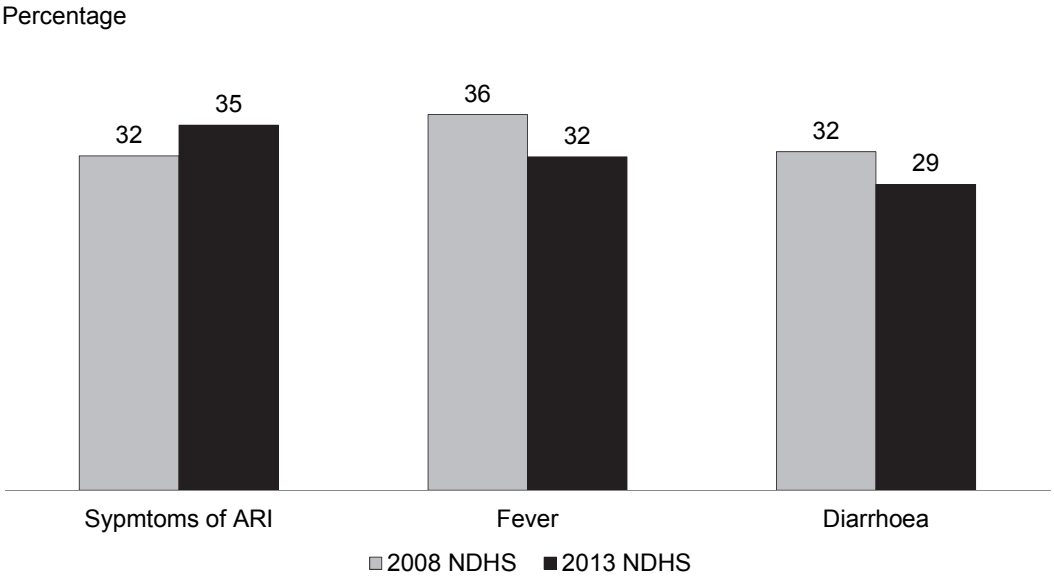
Continued…

Table 10.6—*Continued*

Background characteristic	Among children under age 5: Percentage with fever	Among children under age 5: Number of children	Among children under age 5 with fever: Percentage for whom advice or treatment was sought from a health facility or provider[1]	Among children under age 5 with fever: Percentage who took antimalarial drugs	Among children under age 5 with fever: Percentage who took antibiotic drugs	Among children under age 5 with fever: Number of children
Mother's education						
No education	12.3	13,945	27.9	26.3	22.8	1,718
Primary	12.8	5,563	29.3	31.8	27.2	714
Secondary	12.8	7,697	34.2	41.1	28.4	982
More than secondary	12.5	1,744	54.3	48.8	32.3	219
Wealth quintile						
Lowest	13.6	6,636	25.2	22.1	22.7	899
Second	12.9	6,483	29.1	26.4	22.3	837
Middle	13.7	5,534	30.0	35.0	28.8	756
Fourth	11.7	5,243	35.1	41.6	28.3	614
Highest	10.4	5,053	43.6	47.5	29.0	526
Total	12.5	28,950	31.5	32.7	25.7	3,632

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Excludes pharmacy, chemist/PMS, shop, traditional practitioner, market, and other

Figure 10.3 **Percentage of children with symptoms of ARI, fever, and diarrhoea for whom treatment was sought from a health facility or provider**



Note: Excludes pharmacy, chemist/PMS, shop, traditional practitioner, market, and other. The 2008 NDHS data have been rerun for comparision and might be different from the report.

10.5 DIARRHOEAL DISEASE

Diarrhoea remains a leading cause of childhood morbidity and mortality in developing countries. Dehydration caused by diarrhoea is a major cause of illness and death among young children, even though the condition can be easily treated with oral rehydration therapy (ORT). Exposure to diarrhoea-causing pathogens is frequently related to the consumption of contaminated water and to unhygienic practices in food preparation and disposal of excreta. The combination of high cause-specific mortality and the existence of an effective remedy makes diarrhoea and its treatment a priority concern for health services.

In the 2013 NDHS, mothers were asked whether any of their children under age 5 had diarrhoea at any time during the two-week period preceding the survey. The validity of this indicator is affected by the mother's perception of diarrhoea as an illness and her capacity to recall the events. Moreover, the

prevalence of diarrhoea varies seasonally. Thus, information on diarrhoea should be interpreted with caution. If the child had experienced diarrhoea, the mother was asked about actions she took to treat the illness and feeding practices during the diarrhoeal episode. The mother was also asked if there was blood in the child's stools, which is indicative of dysentery or other specific diseases and needs to be treated somewhat differently than diarrhoea without blood. In addition, questions were asked regarding knowledge of oral rehydration salt (ORS) packets or pre-packaged liquids for treatment of diarrhoea and disposal of children's stools.

10.5.1 Prevalence of Diarrhoea

Table 10.7 shows that 10 percent of children under age 5 were reported to have had diarrhoea in the two-week period before the survey, and 2 percent had diarrhoea with blood. Diarrhoea was most common among children age 12–23 months (17 percent) and least common among those age 48-59 months (5 percent). Diarrhoea with blood was also most common in children age 12-23 months. Children of mothers with no education were twice as likely as children of mothers with more than a secondary education to have had diarrhoea. There was also a direct relationship between family wealth and diarrhoea prevalence, with children from wealthier households being less likely to have diarrhoea. Diarrhoea prevalence was highest in Yobe (35 percent) and lowest in Bayelsa, Edo, and Ogun (2 percent each).

Table 10.7 Prevalence of diarrhoea

Percentage of children under age 5 who had diarrhoea in the two weeks preceding the survey, by background characteristics, Nigeria 2013

Background characteristic	Diarrhoea in the two weeks preceding the survey		Number of children
	All diarrhoea	Diarrhoea with blood	
Age in months			
<6	5.7	0.7	2,989
6-11	16.4	1.3	3,263
12-23	16.7	3.0	5,900
24-35	11.1	1.9	5,490
36-47	6.8	1.3	5,722
48-59	5.0	0.9	5,586
Sex			
Male	10.2	1.5	14,509
Female	10.3	1.7	14,440
Source of drinking water[1]			
Improved	9.5	1.4	16,515
Not improved	11.2	2.0	12,381
Toilet facility[2]			
Improved, not shared	10.1	1.3	9,172
Shared[3]	9.3	1.0	5,551
Non-improved	10.7	2.1	14,141
Residence			
Urban	9.2	0.8	10,403
Rural	10.8	2.1	18,547
Zone			
North Central	7.3	1.7	4,019
North East	21.1	3.6	5,034
North West	9.2	1.3	10,485
South East	10.3	0.7	2,585
South South	4.5	1.5	2,742
South West	6.3	0.5	4,084
State			
North Central			
FCT-Abuja	5.6	0.7	196
Benue	9.5	2.7	878
Kogi	3.3	0.6	378
Kwara	5.3	0.1	377
Nasarawa	8.3	2.5	421
Niger	8.2	2.2	1,303
Plateau	5.6	0.7	464

Continued…

Table 10.7—*Continued*

Background characteristic	Diarrhoea in the two weeks preceding the survey: All diarrhoea	Diarrhoea in the two weeks preceding the survey: Diarrhoea with blood	Number of children
State (continued)			
North East			
Adamawa	16.6	2.3	661
Bauchi	25.7	6.2	1,243
Borno	10.8	0.5	1,064
Gombe	16.7	4.4	529
Taraba	19.7	2.7	690
Yobe	34.6	5.0	848
North West			
Jigawa	14.8	3.5	1,380
Kaduna	13.5	1.0	1,375
Kano	6.5	0.8	2,717
Katsina	7.7	0.9	1,549
Kebbi	13.6	1.4	1,094
Sokoto	4.6	0.8	1,005
Zamfara	6.0	1.4	1,365
South East			
Abia	2.5	0.0	297
Anambra	5.7	0.3	608
Ebonyi	13.2	0.7	663
Enugu	14.7	1.9	514
Imo	12.2	0.4	502
South South			
Akwa Ibom	5.5	1.6	439
Bayelsa	1.8	0.1	220
Cross River	8.0	4.3	499
Delta	2.8	0.6	520
Edo	2.0	0.2	387
Rivers	5.0	1.1	676
South West			
Ekiti	6.6	0.4	188
Lagos	7.5	0.6	1,220
Ogun	1.9	0.3	689
Ondo	5.5	0.5	520
Osun	4.1	0.2	427
Oyo	9.2	0.7	1,040
Mother's education			
No education	11.7	2.2	13,945
Primary	9.9	1.7	5,563
Secondary	8.8	0.8	7,697
More than secondary	5.6	0.5	1,744
Wealth quintile			
Lowest	12.5	2.3	6,636
Second	11.9	2.4	6,483
Middle	9.9	1.7	5,534
Fourth	8.6	0.7	5,243
Highest	7.2	0.5	5,053
Total	10.2	1.6	28,950

[1] See Table 2.1 for definition of categories. Excludes children with missing information on source of drinking water.
[2] See Table 2.2 for definition of categories. Excludes children with missing information on type of toilet facility.
[3] Facilities that would be considered improved if they were not shared by two or more households

10.5.2 Treatment of Diarrhoea

Table 10.8 shows the percentage of children under age 5 with diarrhoea in the two weeks before the survey who were taken to a health facility or provider for advice or treatment, the percentage who received ORT, and the percentage who were given other treatments, by background characteristics.

Overall, 29 percent of children under age 5 with diarrhoea were taken for advice or treatment at a health facility or provider. Children age 6-11 months were more likely than children in other age groups to be taken to a health facility or provider for treatment (33 percent). Urban children were more likely to have been taken for advice or treatment than rural children (35 percent versus 26 percent). Children with bloody diarrhoea, children of better educated mothers, and children in families in the highest wealth quintile were more likely than other children to be taken to a health facility or provider for treatment. For example, 24 percent of children of mothers with no education were taken to a health facility or provider for treatment of

diarrhoea, as compared with 64 percent of children of mothers with more than a secondary education. Mothers in the North Central zone were more likely than those in other zones to seek advice or treatment from a health facility or provider.

A simple and effective response to dehydration caused by diarrhoea is a prompt increase in the child's fluid intake through some form of oral rehydration therapy. ORT may include the use of a solution prepared from commercially produced packets of oral rehydration salts; a recommended home fluid (RHF), usually a homemade mixture prepared from sugar, salt, and water; any kind of thin, nutritious fluid such as rice water, coconut milk, or watery soup; or simply increased fluid intake. Ten

Table 10.8 Diarrhoea treatment

Among children under age 5 who had diarrhoea in the two weeks preceding the survey, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage given oral rehydration therapy (ORT), the percentage given increased fluids, the percentage given ORT or increased fluids, and the percentage given other treatments, by background characteristics, Nigeria 2013

Background characteristic	Percentage of children with diarrhoea for whom advice or treatment was sought from a health facility or provider[1]	Oral rehydration therapy (ORT)					Other treatments							Number of children with diarrhoea
		Fluid from ORS packets or pre-packaged liquid	Recommended home fluids (RHF)	Either ORS or RHF	Increased fluids	ORT or increased fluids	Antibiotic drugs	Anti-motility drugs	Zinc supplements	Intravenous solution	Home remedy/ other	Missing	No treatment	
Age in months														
<6	23.5	20.7	4.1	23.6	11.5	33.2	25.9	2.1	0.5	0.3	29.8	0.7	34.2	171
6-11	33.3	37.1	9.9	41.6	7.3	44.3	36.2	2.6	2.7	0.1	33.6	0.6	19.7	537
12-23	31.2	36.3	10.5	41.2	10.6	47.0	33.2	2.8	1.9	0.4	35.7	0.8	20.7	984
24-35	24.4	30.8	8.2	34.5	9.3	40.8	34.2	3.1	2.8	0.4	34.4	1.3	22.0	609
36-47	29.4	32.1	12.3	37.7	10.7	45.7	37.0	1.3	3.8	0.0	33.1	0.9	17.6	387
48-59	25.0	34.3	10.0	37.9	15.2	47.4	38.5	2.1	1.1	0.3	37.0	1.6	16.3	279
Sex														
Male	28.4	31.8	10.1	36.3	10.4	42.7	34.7	2.9	2.5	0.3	36.5	0.9	20.5	1,482
Female	29.4	35.6	9.4	39.9	10.0	45.9	34.3	2.2	2.2	0.3	32.5	1.0	21.0	1,484
Type of diarrhoea														
Non-bloody	27.6	34.1	9.1	38.3	8.6	43.4	33.3	2.7	2.1	0.3	32.9	0.7	22.6	2,322
Bloody	36.4	33.5	13.6	39.8	15.0	49.8	40.7	2.2	3.3	0.2	42.0	1.2	12.4	470
Missing	26.3	29.1	8.7	31.7	18.6	41.3	33.6	1.2	3.1	0.9	35.2	3.3	19.1	174
Residence														
Urban	35.0	44.7	12.0	49.4	8.4	53.2	45.0	3.3	2.5	0.3	26.0	0.9	15.6	958
Rural	26.0	28.4	8.7	32.7	11.1	40.1	29.5	2.2	2.2	0.3	38.5	1.0	23.2	2,008
Zone														
North Central	42.0	41.7	11.5	46.8	12.6	52.7	40.0	3.2	6.1	0.6	37.1	0.3	12.0	295
North East	24.4	28.5	6.0	30.6	17.7	42.9	32.6	3.1	0.8	0.4	40.0	1.6	19.8	1,061
North West	28.7	33.7	9.5	37.4	4.0	39.4	30.5	1.3	3.1	0.0	31.8	0.4	28.4	961
South East	27.5	37.0	13.0	44.9	4.9	47.4	37.6	3.2	3.8	0.0	28.5	0.0	17.7	266
South South	31.3	31.7	16.3	45.0	14.1	49.6	47.9	1.4	0.4	2.2	30.0	1.5	13.6	124
South West	33.8	43.6	17.3	51.5	3.3	52.6	41.3	3.9	0.8	0.0	27.4	1.5	12.8	259
Mother's education														
No education	24.3	28.6	6.9	31.5	9.7	38.3	29.9	2.3	2.1	0.2	38.5	1.3	24.4	1,638
Primary	32.2	32.0	14.0	39.1	13.0	46.2	36.5	2.5	2.6	0.4	34.9	0.2	17.7	553
Secondary	32.4	42.9	13.1	48.9	8.8	52.9	42.2	3.2	2.5	0.4	26.5	0.4	16.1	677
More than secondary	64.0	65.3	10.1	69.1	12.8	73.8	47.8	0.8	3.8	0.0	20.8	2.0	9.8	98
Wealth quintile														
Lowest	19.1	20.4	4.9	23.2	10.6	31.4	23.8	1.9	1.5	0.4	42.7	1.2	26.6	832
Second	28.0	30.3	9.4	34.7	10.5	41.9	29.6	2.6	2.2	0.2	36.8	1.3	23.4	774
Middle	31.5	38.4	13.6	45.4	11.1	51.0	39.1	2.1	3.5	0.3	34.2	0.6	16.6	549
Fourth	38.0	42.8	10.8	46.4	9.7	50.5	48.9	3.5	2.4	0.0	25.9	0.5	16.5	450
Highest	38.3	53.0	14.3	58.4	8.0	61.2	44.7	3.4	2.7	0.7	21.8	0.8	13.4	362
Total	28.9	33.7	9.7	38.1	10.2	44.3	34.5	2.5	2.3	0.3	34.5	1.0	20.8	2,966

Note: ORT includes fluid prepared from oral rehydration salt (ORS) packets, pre-packaged ORS fluid, and recommended home fluids (RHF). State-level disaggregation is not shown due to the small number of cases.
[1] Excludes pharmacy, chemist/PMS, shop, traditional practitioner, market, and other

percent of children with diarrhoea were given increased fluids, 35 percent were given antibiotic drugs, and 21 percent received no treatment of any kind. Children age 6-11 months (42 percent), children residing in urban areas (49 percent), children living in the South West zone (52 percent), children of mothers with more than a secondary education (69 percent), and children from families in the higher wealth quintiles (58 percent) were most likely to receive ORT.

To allow a comparison of diarrhoea treatment trends between 2008 and 2013, the data from the 2008 NDHS were rerun to reflect the same definition of health facility/provider (i.e., excluding pharmacy, chemist/PMS, shop, and traditional practitioner). The results indicate that while there was a slight decline in mothers' health-seeking behaviour for children with diarrhoea from 32 percent in 2008 to 29 percent in 2013 (Figure 10.3), there was a 7 percentage point increase in the proportion of children given either ORS or RHF during episodes of diarrhoea and an 8 percentage point decline in the proportion of children who received no treatment of any kind when they had diarrhoea.

Zinc supplementation has been shown to reduce the severity and shorten the duration of diarrhoea in children. UNICEF and WHO recommend zinc supplementation for all children who have diarrhoea, and this recommendation is being actively promoted in Nigeria. The proportion of children with diarrhoea in the two weeks preceding the survey who received zinc supplementation increased from less than 1 percent in 2008 to just over 2 percent in 2013. This small increase falls far short of the UNICEF and WHO recommendation (UNICEF/WHO, 2009).

10.5.3 Feeding Practices during Diarrhoea

Mothers are encouraged to continue feeding and increase the amount of fluids given to their children when they suffer from diarrhoea. These practices help to reduce dehydration and minimise the adverse consequences of diarrhoea on the child's nutritional status. Mothers interviewed in the 2013 NDHS were specifically asked whether they gave their child with diarrhoea less, the same amount, or more fluids and food than usual during the illness.

Table 10.9 shows the percentage distribution of children under age 5 who had diarrhoea in the two weeks preceding the survey by feeding practices, according to background characteristics. Ten percent of children with diarrhoea were given more fluids than usual, as recommended. One-third of children (34 percent) were given the same amount of fluids as usual, 29 percent were given somewhat less fluids, and 22 percent were given much less than usual. Four percent of children received no fluids at all when they had diarrhoea. Two percent of children were given more food than usual when they had diarrhoea, one-third were fed the same amount, and a third were given somewhat less food than usual. Four percent were given no food at all. Overall, less than one-third (29 percent) of children under age 5 continued feeding and were given ORT and/or increased fluids when they had diarrhoea. Although this is a slight improvement from the 25 percent recorded in the 2008 NDHS, these findings still suggest that a large proportion of mothers continue to engage in the dangerous practice of restricting fluids and food intake when their children have diarrhoea.

Table 10.9 Feeding practices during diarrhoea

Percent distribution of children under age 5 who had diarrhoea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, the percentage of children given increased fluids and continued feeding during the diarrhoea episode, and the percentage of children who continued feeding and were given ORT and/or increased fluids during the episode of diarrhoea, by background characteristics, Nigeria 2013

Background characteristic	Amount of liquids given							Amount of food given								Percentage given increased fluids and continued feeding[1]	Percentage who continued feeding and were given ORT and/or increased fluids[1]	Number of children with diarrhoea
	More	Same as usual	Somewhat less	Much less	None	Don't know/ missing	Total	More	Same as usual	Somewhat less	Much less	None	Never gave food	Don't know/ missing	Total			
Age in months																		
<6	11.5	48.6	19.4	17.0	3.5	0.0	100.0	3.9	37.7	16.4	13.3	1.1	26.3	1.3	100.0	4.2	17.7	171
6-11	7.3	34.5	30.1	24.9	3.0	0.2	100.0	1.4	31.7	30.5	23.6	6.2	5.8	0.9	100.0	3.5	28.0	537
12-23	10.6	34.3	28.8	22.9	2.3	1.1	100.0	2.6	30.9	35.1	24.7	4.3	1.9	0.4	100.0	6.7	32.6	984
24-35	9.3	34.8	29.5	19.0	5.5	1.9	100.0	2.0	36.1	32.7	24.4	2.7	0.7	1.4	100.0	4.9	27.7	609
36-47	10.7	30.4	30.7	19.9	6.7	1.6	100.0	0.8	34.3	36.7	23.8	3.1	0.0	1.2	100.0	6.1	31.7	387
48-59	15.2	29.2	25.5	25.1	3.7	1.3	100.0	4.5	29.5	30.8	32.5	1.8	0.3	0.6	100.0	7.9	26.7	279
Sex																		
Male	10.4	33.6	29.1	21.2	4.3	1.4	100.0	2.0	33.5	32.2	24.3	4.3	2.7	1.0	100.0	5.9	29.0	1,482
Female	10.0	35.0	28.1	22.7	3.4	0.9	100.0	2.6	32.2	32.8	24.5	3.2	4.0	0.7	100.0	5.3	29.5	1,484
Type of diarrhoea																		
Non-bloody	8.6	37.1	29.5	20.4	3.5	0.9	100.0	2.3	34.7	32.6	22.7	3.2	3.8	0.7	100.0	4.9	29.3	2,322
Bloody	15.0	21.3	25.7	31.0	6.9	0.0	100.0	3.3	24.0	31.0	32.5	6.7	1.9	0.6	100.0	8.7	29.4	470
Missing	18.6	32.1	24.3	17.8	0.7	6.5	100.0	0.0	31.1	35.8	25.5	2.7	0.8	4.0	100.0	7.2	27.8	174
Residence																		
Urban	8.4	43.0	29.2	14.7	3.4	1.3	100.0	2.9	40.6	34.6	15.6	2.9	2.4	0.9	100.0	4.7	39.8	958
Rural	11.1	30.2	28.3	25.4	4.1	1.0	100.0	2.0	29.1	31.5	28.6	4.1	3.8	0.9	100.0	6.1	24.2	2,008
Zone																		
North Central	12.6	37.6	26.3	23.2	0.0	0.3	100.0	7.0	35.1	30.4	26.1	0.3	0.7	0.3	100.0	10.1	37.4	295
North East	17.7	32.9	21.5	22.1	4.7	1.0	100.0	1.7	30.1	26.9	29.6	4.5	6.0	1.1	100.0	7.8	23.1	1,061
North West	4.0	26.0	37.3	26.9	4.0	1.8	100.0	1.6	27.0	38.4	26.2	3.9	2.1	0.9	100.0	3.2	26.8	961
South East	4.9	37.7	33.6	15.8	7.2	0.7	100.0	2.4	43.2	33.1	16.8	2.5	1.3	0.7	100.0	3.1	35.0	266
South South	14.1	39.8	27.7	16.9	1.4	0.0	100.0	3.0	35.1	44.3	11.4	6.1	0.0	0.0	100.0	5.8	36.7	124
South West	3.3	60.8	23.1	9.7	2.1	1.1	100.0	1.2	51.5	29.6	8.5	4.2	3.9	1.1	100.0	3.3	44.3	259
Mother's education																		
No education	9.7	27.9	29.0	26.9	4.8	1.7	100.0	1.5	27.5	31.3	30.3	4.3	3.9	1.2	100.0	4.7	22.7	1,638
Primary	13.0	40.6	29.1	14.8	2.1	0.4	100.0	4.1	40.1	34.1	15.5	3.2	2.7	0.3	100.0	9.2	34.1	553
Secondary	8.8	43.0	27.7	16.9	3.2	0.3	100.0	2.5	38.7	33.6	18.7	3.2	2.9	0.4	100.0	4.7	36.9	677
More than secondary	12.8	45.1	24.3	13.6	2.1	2.0	100.0	2.7	40.2	36.4	16.5	2.2	0.0	2.0	100.0	7.8	58.5	98
Wealth quintile																		
Lowest	10.6	26.6	28.3	29.1	4.1	1.2	100.0	0.7	25.1	31.9	31.7	4.8	4.6	1.2	100.0	4.8	16.4	832
Second	10.5	29.4	29.2	24.4	4.5	2.1	100.0	1.7	29.6	31.9	27.3	4.4	4.0	1.0	100.0	6.1	25.9	774
Middle	11.1	38.6	27.2	18.7	4.1	0.4	100.0	4.8	34.3	33.9	23.2	2.2	1.3	0.2	100.0	8.3	34.7	549
Fourth	9.7	43.1	29.7	14.6	2.8	0.0	100.0	3.4	38.4	35.3	16.5	2.9	3.0	0.6	100.0	5.2	37.5	450
Highest	8.0	44.8	28.8	14.1	2.8	1.4	100.0	2.1	48.3	29.5	13.1	3.4	2.5	1.1	100.0	3.1	47.2	362
Total	10.2	34.3	28.6	21.9	3.9	1.1	100.0	2.3	32.8	32.5	24.4	3.7	3.3	0.9	100.0	5.6	29.2	2,966

Note: It is recommended that children be given more liquids to drink during diarrhoea and that food not be reduced. State-level disaggregation is not shown due to the small number of cases.
[1] Continued feeding practices includes children who were given more, the same as usual, or somewhat less food during the diarrhoea episode.

10.6 KNOWLEDGE OF ORS PACKETS

To ascertain respondents' knowledge of ORS in Nigeria, mothers were asked whether they knew about ORS packets. Table 10.10 presents information on the proportion of mothers with a live birth in the five years preceding the survey who had heard about ORS packets. Overall, 80 percent of mothers had heard about ORS packets, an increase from the figure of 66 percent reported in 2008. Knowledge was highest among mothers age 35-49 (83 percent) and lowest among the youngest mothers (69 percent). Urban mothers (89 percent), mothers in the South East (91 percent), mothers with more than a secondary education (91 percent), and mothers in the highest wealth quintile (89 percent) were most knowledgeable about ORS packets.

10.7 STOOL DISPOSAL

The proper disposal of children's faeces is important in preventing the spread of disease. Diarrhoea and other diseases can be caused by direct contact or by animal contact with human faeces. Table 10.11 presents information on disposal of children's stools.

Fifty-nine percent of children's stools are disposed of safely; 5 percent of children use a toilet or latrine, 52 percent of children's stools are rinsed into the toilet or latrine, and 2 percent are buried. In contrast, the stools of a quarter of children are thrown into the garbage, while 7 percent are left in the open and 2 percent are thrown in a river or riverbank.

There are marked differences in disposal of children's stools according to background characteristics. A higher proportion of urban children's stools than rural children's stools are disposed of safely (69 percent and 54 percent, respectively). Regional differentials in safe disposal also are substantial. For example, in the North West zone, 78 percent of children's stools are disposed of safely, as compared with 28 percent in the North Central zone. There has been a marginal increase in safe stool disposal over the past five years, from 57 percent in the 2008 NDHS to 59 percent in 2013.

Table 10.10 Knowledge of ORS packets or pre-packaged liquids

Percentage of women age 15-49 with a live birth in the five years preceding the survey who know about ORS packets or ORS pre-packaged liquids for treatment of diarrhoea, by background characteristics, Nigeria 2013

Background characteristic	Percentage of women who know about ORS packets or ORS pre-packaged liquids	Number of women
Age		
15-19	69.2	1,323
20-24	75.8	4,009
25-34	80.4	9,623
35-49	82.9	5,513
Residence		
Urban	88.6	7,278
Rural	74.5	13,189
Zone		
North Central	68.7	2,890
North East	82.5	3,434
North West	80.3	7,445
South East	90.7	1,719
South South	70.2	2,002
South West	84.1	2,977
State		
North Central		
FCT-Abuja	91.7	143
Benue	39.0	615
Kogi	66.2	283
Kwara	87.4	278
Nasarawa	81.1	309
Niger	82.4	916
Plateau	51.4	346
North East		
Adamawa	94.7	459
Bauchi	77.0	833
Borno	81.6	716
Gombe	92.4	361
Taraba	85.7	476
Yobe	73.1	588
North West		
Jigawa	71.8	973
Kaduna	91.1	1,051
Kano	90.0	1,907
Katsina	85.3	1,066
Kebbi	52.1	790
Sokoto	71.1	693
Zamfara	82.4	966
South East		
Abia	92.0	199
Anambra	90.3	379
Ebonyi	93.6	467
Enugu	86.1	355
Imo	91.2	319
South South		
Akwa Ibom	86.7	334
Bayelsa	71.3	153
Cross River	80.7	368
Delta	79.3	376
Edo	56.2	264
Rivers	52.0	508
South West		
Ekiti	94.8	139
Lagos	92.3	867
Ogun	84.0	495
Ondo	61.9	385
Osun	92.8	307
Oyo	80.8	783
Education		
No education	75.6	9,794
Primary	78.9	3,915
Secondary	84.2	5,475
More than secondary	90.9	1,283
Wealth quintile		
Lowest	70.4	4,699
Second	75.5	4,588
Middle	79.4	3,902
Fourth	86.6	3,674
Highest	89.2	3,604
Total	79.5	20,467

ORS = Oral rehydration salts

Table 10.11 Disposal of children's stools

Percent distribution of youngest children under age 5 living with their mother by the manner of disposal of the child's last faecal matter, and percentage of children whose stools are disposed of safely, according to background characteristics, Nigeria 2013

Background characteristic	Manner of disposal of children's stools									Total	Percentage of children whose stools are disposed of safely[1]	Number of children
	Child used toilet or latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	River/river-banks	Other	Missing			
Age in months												
<6	2.0	48.8	1.8	7.8	28.9	5.9	1.6	0.2	2.9	100.0	52.6	2,930
6-11	1.9	54.0	1.9	5.1	26.3	5.7	1.8	0.1	3.3	100.0	57.9	3,212
12-23	2.9	53.7	2.0	3.9	24.8	7.3	1.6	0.1	3.6	100.0	58.6	5,606
24-35	5.0	54.6	2.4	3.2	22.0	7.4	1.4	0.0	3.9	100.0	62.1	3,824
36-47	12.0	49.1	2.1	2.5	20.4	7.3	2.1	0.1	4.4	100.0	63.2	2,233
48-59	20.8	44.2	1.6	3.1	16.6	7.2	1.8	0.3	4.4	100.0	66.6	1,483
Toilet facility[2]												
Improved, not shared	7.9	71.0	0.9	2.7	10.8	2.8	0.3	0.1	3.5	100.0	79.8	6,043
Shared[3]	5.2	65.7	0.4	5.0	18.7	1.6	0.2	0.2	3.1	100.0	71.3	3,815
Non-improved or shared	4.0	34.0	3.4	5.2	34.7	11.5	3.2	0.1	4.0	100.0	41.4	9,376
Residence												
Urban	6.3	61.5	1.0	4.4	19.9	2.9	1.3	0.1	2.6	100.0	68.8	6,930
Rural	4.9	46.6	2.6	4.3	26.3	9.0	1.9	0.1	4.2	100.0	54.2	12,357
Zone												
North Central	4.5	19.4	4.2	5.4	55.4	6.5	0.5	0.1	4.0	100.0	28.1	2,739
North East	7.2	56.6	1.5	2.9	22.8	4.5	0.1	0.2	4.1	100.0	65.3	3,233
North West	5.5	71.6	1.0	2.5	6.3	8.7	0.3	0.1	4.1	100.0	78.1	7,030
South East	4.6	40.6	0.8	8.6	31.0	11.3	0.3	0.1	2.7	100.0	46.0	1,621
South South	6.2	32.3	2.7	6.8	30.6	4.6	12.0	0.0	4.9	100.0	41.1	1,853
South West	4.2	48.5	3.5	5.6	30.6	4.0	2.2	0.1	1.3	100.0	56.2	2,811
State												
FCT-Abuja	5.4	48.6	1.3	4.3	33.2	4.7	0.0	0.2	2.2	100.0	55.4	137
Benue	1.2	14.8	2.0	13.7	61.5	2.1	0.0	0.0	4.7	100.0	18.0	556
Kogi	1.4	13.7	0.0	3.9	76.7	1.3	2.0	0.0	1.0	100.0	15.1	266
Kwara	4.3	43.9	0.0	0.8	46.9	1.8	0.0	0.0	2.3	100.0	48.2	268
Nasarawa	3.4	24.8	21.7	1.8	33.2	14.2	0.0	0.3	0.5	100.0	49.9	290
Niger	7.7	12.8	0.4	0.3	65.5	5.7	0.0	0.0	7.6	100.0	20.9	892
Plateau	4.6	13.0	10.5	14.0	36.4	18.2	2.4	0.4	0.5	100.0	28.1	331
North East												
Adamawa	6.0	57.2	0.5	3.1	28.8	2.7	0.1	0.3	1.2	100.0	63.7	434
Bauchi	1.3	68.8	2.1	2.1	14.6	8.2	0.2	0.3	2.3	100.0	72.2	772
Borno	19.1	67.3	0.0	1.3	2.5	2.5	0.4	0.0	6.9	100.0	86.5	688
Gombe	2.9	76.5	0.4	10.0	7.9	1.3	0.0	0.0	1.0	100.0	79.8	332
Taraba	7.9	31.8	0.7	4.8	46.9	3.3	0.0	0.3	4.3	100.0	40.4	446
Yobe	3.6	34.1	4.6	0.0	44.2	6.2	0.0	0.0	7.2	100.0	42.3	560
North West												
Jigawa	4.1	55.5	0.3	2.7	11.7	21.9	0.0	0.0	3.8	100.0	59.8	901
Kaduna	3.9	76.4	0.3	5.6	8.7	2.2	0.1	0.3	2.5	100.0	80.5	1,014
Kano	3.7	89.0	0.5	0.2	1.1	2.9	0.0	0.1	2.5	100.0	93.2	1,799
Katsina	20.5	70.1	0.2	0.1	4.0	0.0	0.0	0.0	5.1	100.0	90.8	1,011
Kebbi	0.9	71.1	0.2	0.4	0.7	22.7	2.0	0.2	1.8	100.0	72.2	747
Sokoto	4.3	33.6	8.2	12.2	26.2	2.2	0.1	0.1	13.1	100.0	46.1	658
Zamfara	0.0	77.3	0.0	0.5	1.2	16.9	0.1	0.1	3.8	100.0	77.3	900
South East												
Abia	6.8	57.8	0.0	2.2	30.2	0.3	0.0	0.0	2.7	100.0	64.6	186
Anambra	1.6	53.6	0.5	21.1	16.9	0.6	1.2	0.6	4.0	100.0	55.6	361
Ebonyi	6.4	21.9	0.2	9.3	54.1	5.2	0.0	0.0	3.0	100.0	28.4	431
Enugu	5.1	23.8	2.2	2.9	35.0	28.1	0.0	0.0	3.0	100.0	31.1	339
Imo	3.4	60.1	0.9	3.1	11.0	20.8	0.0	0.0	0.6	100.0	64.5	304
South South												
Akwa Ibom	8.0	61.8	0.4	13.0	12.5	0.2	0.0	0.0	4.1	100.0	70.1	309
Bayelsa	0.9	10.4	0.3	1.9	16.1	1.8	61.0	0.0	7.6	100.0	11.6	139
Cross River	5.2	23.4	0.5	7.2	56.7	4.3	0.3	0.0	2.3	100.0	29.1	339
Delta	7.1	28.9	5.6	5.3	24.3	2.6	22.2	0.0	4.1	100.0	41.6	353
Edo	1.8	46.0	0.9	3.4	38.0	1.6	1.1	0.0	7.3	100.0	48.7	256
Rivers	9.0	20.6	5.2	6.7	28.4	12.0	12.1	0.0	5.9	100.0	34.8	458
South West												
Ekiti	2.6	42.8	0.5	9.7	36.9	7.3	0.0	0.0	0.3	100.0	45.9	131
Lagos	6.4	56.7	0.0	1.3	32.7	0.2	1.3	0.0	1.5	100.0	63.1	815
Ogun	0.0	69.9	0.0	1.3	23.5	3.9	0.0	0.0	1.5	100.0	69.9	475
Ondo	11.0	25.2	0.6	12.8	32.2	2.6	13.4	0.0	2.1	100.0	36.8	354
Osun	2.3	47.9	0.1	4.6	38.5	4.8	0.9	0.9	0.0	100.0	50.4	301
Oyo	2.5	38.0	13.1	9.3	27.8	8.0	0.0	0.0	1.4	100.0	53.5	735

Continued…

Table 10.11—*Continued*

Background characteristic	Manner of disposal of children's stools									Total	Percentage of children whose stools are disposed of safely[1]	Number of children
	Child used toilet or latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	River/river banks	Other	Missing			
Mother's education												
No education	5.6	55.3	2.2	3.1	19.3	8.9	0.7	0.1	4.6	100.0	63.2	9,221
Primary	4.3	44.7	2.3	5.1	31.1	6.3	3.5	0.1	2.5	100.0	51.3	3,684
Secondary	4.8	50.0	1.8	6.1	27.2	4.6	2.3	0.1	3.2	100.0	56.6	5,168
More than secondary	10.2	56.1	0.8	4.3	24.4	1.7	0.6	0.1	1.8	100.0	67.1	1,214
Wealth quintile												
Lowest	4.9	49.2	2.7	4.2	21.3	13.0	0.3	0.1	4.5	100.0	56.7	4,406
Second	4.8	50.3	2.3	4.6	23.9	8.1	1.9	0.1	4.0	100.0	57.4	4,287
Middle	5.2	43.9	2.7	3.6	31.7	6.2	2.7	0.0	3.9	100.0	51.7	3,678
Fourth	4.6	54.5	1.7	5.0	24.6	3.4	2.7	0.2	3.4	100.0	60.8	3,490
Highest	8.1	63.6	0.6	4.5	18.6	1.4	1.0	0.1	2.1	100.0	72.3	3,428
Total	5.4	51.9	2.0	4.3	24.0	6.8	1.7	0.1	3.7	100.0	59.4	19,288

[1] Children's stools are considered to be disposed of safely if the child used a toilet or latrine, if the faecal matter was put/rinsed into a toilet or latrine, or if it was buried.
[2] See Table 2.2 for definition of categories. Excludes 54 cases with missing information on type of toilet facility.
[3] Facilities that would be considered improved if they were not shared by two or more households

NUTRITION OF CHILDREN AND WOMEN 11

Key Findings

- Thirty-seven percent of children under age 5 are stunted, 18 percent are wasted, and 29 percent are underweight.
- The proportion of stunted children has declined since 2008 (from 41 percent to 37 percent).
- Ninety-eight percent of children were reported to have been breastfed at some time.
- Seventeen percent of children less than age 6 months are exclusively breastfed. The median duration of exclusive breastfeeding (0.5 months) has remained unchanged since 2008.
- Complementary foods are not introduced in a timely fashion for all children. Only 67 percent of breastfed children age 6-9 months received complementary foods.
- Overall, only 10 percent of children age 6-23 months are fed appropriately based on recommended infant and young child feeding (IYCF) practices.
- Eleven percent of women are undernourished (BMI <18.5), and 25 percent are overweight or obese (BMI ≥25.0).

Good nutrition is a prerequisite for the national development of countries and for the well-being of individuals. Although problems related to poor nutrition affect the entire population, women and children are especially vulnerable because of their unique physiology and socioeconomic characteristics.

Adequate nutrition is essential to children's growth and development. The period from conception to age 2 is especially important for optimal physical, mental, and cognitive growth, health, and development. However, this period is often marked by protein-energy and micronutrient deficiencies that interfere with optimal growth. Illnesses such as diarrhoea and acute respiratory infections are also common among children.

A woman's nutritional status has important implications for her health as well as for the health of her children. Among women, malnutrition results in reduced productivity, increased susceptibility to infections, slow recovery from illness, and a heightened risk of adverse pregnancy outcomes. For example, a woman with poor nutritional status, as indicated by a low body mass index (BMI), short stature, anaemia, or other micronutrient deficiencies, has a greater risk of obstructed labour, of having a baby with a low birth weight, of producing low-quality breast milk, of death due to postpartum haemorrhage, and of morbidity for both herself and her baby.

This chapter reviews the nutritional status of children and women in Nigeria. Specific issues discussed include child nutrition based on anthropometric measurements, infant and young child feeding practices, and micronutrient intake among children and women.

11.1 NUTRITIONAL STATUS OF CHILDREN

The nutritional status of children under age 5 is an important measure of children's health. The anthropometric data on height and weight collected in the 2013 NDHS permit the measurement and

evaluation of the nutritional status of young children in Nigeria. This evaluation allows identification of subgroups of the child population that are at increased risk of faltered growth, disease, impaired mental development, and death.

11.1.1 Measurement of Nutritional Status among Young Children

The 2013 NDHS collected data on the nutritional status of children by measuring the height and weight of all children under age 5 in selected households. These data allow the calculation of three indices: height-for-age, weight-for-height, and weight-for-age.

Indicators of the nutritional status of children were calculated using growth standards published by the World Health Organization in 2006. These growth standards were generated through data collected in the WHO Multicentre Growth Reference Study (WHO, 2006). The findings of that study, which sampled 8,440 children in six countries (Brazil, Ghana, India, Norway, Oman, and the United States), illustrated how children should grow under optimal conditions. The WHO child growth standards can therefore be used to assess children all over the world, regardless of ethnicity, social and economic influences, or feeding practices. The WHO growth standards replaced the previously used NCHS/CDC/WHO (U.S. National Center for Health Statistics/U.S. Centers for Disease Control and Prevention/World Health Organization) reference standards.

It should be noted that the WHO child growth standards are not comparable to the previously used NCHS/CDC/WHO standards. Several changes are evident when the WHO standards rather than the previous standards are used (WHO, 2006). For example, the level of stunting is higher, and the level of underweight is substantially higher during the first half of infancy (0-6 months) and decreases thereafter.

The three nutritional status indices are expressed in standard deviation units from the Multicentre Growth Reference Study median. The height-for-age index is an indicator of linear growth retardation and cumulative growth deficits in children. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the WHO reference population are considered short for their age (stunted), or chronically malnourished. Children who are below minus three standard deviations (-3 SD) from the reference median are considered severely stunted. Stunting reflects failure to receive adequate nutrition over a long period of time and is affected by recurrent and chronic illness. Height-for-age, therefore, represents the long-term effects of malnutrition in a population and is not sensitive to recent, short-term changes in dietary intake.

The weight-for-height index measures body mass in relation to height or length and describes current nutritional status. Children with Z-scores below minus two standard deviations (-2 SD) from the reference population median are considered thin (wasted) or acutely malnourished. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or a recent episode of illness causing loss of weight and the onset of malnutrition. Children with a weight-for-height index below minus three standard deviations (-3 SD) from the reference median are considered severely wasted. The weight-for-height index also provides data on overweight and obesity. Children above two standard deviations (+2 SD) from the reference median are considered overweight or obese.

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute malnutrition (wasting) and chronic malnutrition (stunting), but it does not distinguish between the two. Children whose weight-for-age is below minus two standard deviations (-2 SD) from the reference population median are classified as underweight. Children whose weight-for-age is below minus three standard deviations (-3 SD) from the reference median are considered severely underweight.

Z-score means are also calculated as summary statistics representing the nutritional status of children in a population. These mean scores describe the nutritional status of the entire population without the use of a cutoff. A mean Z-score of less than 0 (i.e., a negative mean value for stunting, wasting, or

underweight) suggests that the distribution of an index has shifted downward and that most if not all children in the population suffer from undernutrition relative to the reference population.

11.1.2 Data Collection

Measurements of height and weight were obtained for children born in the five years preceding the survey (i.e., born in January 2008 or later) in all of the selected households. Each team of interviewers carried a scale and measuring board. Measurements were made using lightweight SECA scales (with digital screens) designed and manufactured under the authority of the United Nations Children's Fund (UNICEF). The measuring boards employed were specially made by Shorr Productions for use in survey settings. Children under age 2 were measured lying down on the board (recumbent length), and standing height was measured for all other children.

Every effort was made to successfully carry out the measurements of the eligible women and children. A total of 30,050 children under age 5 (unweighted) in the 2013 NDHS subsample households were eligible for anthropometric measurements. Given the law and order situation of the country during the fieldwork, it was very challenging to carry the instruments to the field in some of the northern states. There was an overall 4 percent nonresponse rate for children with respect to height and weight measurements. Eighty-eight percent of the measurements carried out for children were valid. The following analysis focuses on the 26,190 children for whom valid and complete information on date of birth, height (in centimetres), and weight (in kilograms) is available.

11.1.3 Measures of Child Nutritional Status

Height-for-age

Table 11.1 presents the nutritional status of children under age 5 by various background characteristics. Nationally, 37 percent of children under age 5 are stunted, and 21 percent are severely stunted. Analysis by age groups shows that stunting increases with age, peaking at 46 percent among children age 24-35 months (Figure 11.1). Severe stunting shows a similar pattern, with the highest proportion of severe stunting in children age 24-35 months (27 percent). Stunting is higher in male children (39 percent) than in female children (35 percent). Stunting is higher among children with a preceding birth interval of less than 24 months (41 percent) than among children who were first births and children with a preceding birth interval of 24-47 months or 48 months or more. Nearly one half of children (46 percent) whose perceived size at birth (as reported by the mother) was very small or small are stunted. Mothers' nutritional status, as measured by their body mass index, also has an impact on the level of stunting in their children. Children whose mothers are thin (BMI less than 18.5) have the highest levels of stunting (48 percent), while those whose mothers are overweight or obese (BMI of 25 or above) have the lowest levels (25 percent).

Children in rural areas are more likely to be stunted (43 percent) than those in urban areas (26 percent), and the pattern is similar for severe stunting (26 percent in rural areas and 13 percent in urban areas). The North West has the highest proportion of children who are stunted (55 percent), followed by the North East (42 percent) and North Central (29 percent). At the state level, Kebbi has the highest proportion of stunted children (61 percent), while Enugu has the lowest proportion (12 percent).

Mother's level of education generally has an inverse relationship with stunting; stunting ranges from a low of 13 percent among children whose mothers have a higher education to 50 percent among those whose mothers have no education. A similar inverse relationship is observed between household wealth and stunting. Children in the poorest households are three times as likely to be stunted (54 percent) as children in the wealthiest households (18 percent).

Table 11.1 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Nigeria 2013

Background characteristic	Height-for-age[1]			Weight-for-height				Weight-for-age				Number of children
	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	
Age in months												
<6	7.8	15.7	-0.0	11.8	24.8	7.2	-0.8	7.4	17.0	2.5	-0.7	2,433
6-8	12.1	22.6	-0.5	11.4	25.3	3.9	-1.1	12.9	29.2	0.9	-1.2	1,489
9-11	16.9	28.7	-0.9	11.1	27.3	4.1	-1.1	13.0	31.2	0.7	-1.3	1,394
12-17	20.6	35.3	-1.3	11.0	25.7	2.2	-1.1	14.6	32.1	0.7	-1.4	2,955
18-23	24.1	41.0	-1.6	8.3	18.9	3.1	-0.7	13.2	29.2	1.4	-1.3	2,210
24-35	27.4	45.7	-1.8	8.8	15.7	3.9	-0.5	14.7	32.4	1.3	-1.3	4,961
36-47	25.3	42.8	-1.7	8.1	14.2	3.7	-0.5	12.2	29.4	0.7	-1.3	5,386
48-59	19.7	37.3	-1.6	5.1	11.8	4.0	-0.4	7.2	27.1	0.9	-1.2	5,361
Sex												
Male	22.6	38.6	-1.5	9.3	18.9	3.7	-0.7	12.4	30.2	0.9	-1.3	13,045
Female	19.6	35.0	-1.3	8.0	17.2	4.2	-0.6	10.8	27.3	1.2	-1.2	13,144
Birth interval in months[3]												
First birth[4]	18.7	33.3	-1.2	8.1	17.1	3.8	-0.7	9.8	25.8	1.3	-1.2	4,670
<24	24.6	41.4	-1.6	8.5	17.8	4.2	-0.6	13.6	31.8	1.1	-1.3	4,312
24-47	21.8	38.0	-1.4	9.3	19.1	3.9	-0.7	12.1	29.8	0.9	-1.3	11,792
48+	17.6	31.8	-1.1	9.1	18.7	3.9	-0.7	10.9	26.5	1.4	-1.2	3,671
Size at birth[3]												
Very small	29.3	45.6	-1.7	15.7	28.7	5.1	-1.0	23.7	43.3	1.7	-1.7	948
Small	26.9	44.3	-1.7	11.0	21.9	4.5	-0.8	15.9	36.8	1.3	-1.6	2,426
Average or larger	20.0	35.4	-1.3	8.4	17.6	3.8	-0.6	10.8	27.3	1.0	-1.2	20,727
Missing	20.9	41.3	-1.7	6.2	14.5	3.4	-0.5	10.8	29.5	1.1	-1.3	334
Mother's interview status												
Interviewed	21.1	36.8	-1.4	8.9	18.5	3.9	-0.7	11.8	28.9	1.1	-1.3	24,444
Not interviewed but in household	21.4	34.7	-1.4	5.4	11.6	7.5	-0.3	9.6	24.2	1.6	-1.0	315
Not interviewed and not in the household[5]	21.6	38.1	-1.5	5.3	11.9	3.9	-0.4	9.8	26.6	1.3	-1.1	1,431
Mother's nutritional status[6]												
Thin (BMI <18.5)	29.7	47.6	-1.9	9.7	23.6	3.2	-1.0	17.9	42.7	0.8	-1.8	1,763
Normal (BMI 18.5-24.9)	22.4	38.6	-1.4	9.4	19.7	3.7	-0.7	12.4	30.7	0.9	-1.4	13,131
Overweight/obese (BMI ≥25)	13.5	25.4	-0.9	7.0	14.7	4.1	-0.5	7.4	19.6	1.6	-0.9	4,885
Residence												
Urban	13.0	26.0	-0.9	8.4	17.6	3.2	-0.7	8.8	22.9	1.3	-1.0	9,725
Rural	25.9	43.2	-1.6	8.8	18.3	4.4	-0.6	13.3	32.2	1.0	-1.4	16,465
Zone												
North Central	14.3	29.3	-1.1	4.3	11.7	3.6	-0.4	6.1	18.5	1.3	-0.9	3,764
North East	23.6	42.3	-1.5	9.3	19.5	4.1	-0.7	11.1	30.8	1.3	-1.3	4,286
North West	36.2	54.8	-2.2	15.3	27.1	5.3	-0.9	22.6	47.4	0.5	-1.9	9,049
South East	5.8	16.0	-0.5	4.4	11.9	2.6	-0.5	2.5	11.4	0.9	-0.6	2,455
South South	8.3	18.3	-0.5	3.6	11.1	4.5	-0.4	3.4	12.8	2.4	-0.6	2,619
South West	8.5	22.2	-0.9	3.0	10.0	1.6	-0.5	3.8	14.9	1.2	-0.8	4,016
State												
North Central												
FCT-Abuja	9.0	20.6	-0.6	5.0	13.8	3.8	-0.4	3.4	12.6	2.3	-0.6	184
Benue	10.4	22.6	-0.8	1.4	7.8	2.7	-0.2	3.5	11.3	0.8	-0.6	838
Kogi	10.7	23.1	-0.8	2.8	9.5	1.6	-0.4	2.9	14.6	1.3	-0.8	362
Kwara	10.1	27.1	-1.2	1.4	6.5	4.2	-0.2	3.3	13.8	1.1	-0.9	383
Nasarawa	19.9	34.5	-1.3	3.5	9.8	6.5	-0.2	5.7	20.9	1.4	-0.9	398
Niger	16.9	34.2	-1.2	8.0	17.7	2.8	-0.8	10.6	26.0	1.4	-1.3	1,183
Plateau	18.5	35.8	-1.3	4.4	10.5	5.9	-0.2	5.5	19.9	1.8	-0.9	416
North East												
Adamawa	12.7	34.3	-1.3	5.2	14.5	1.9	-0.6	7.8	23.1	0.3	-1.2	645
Bauchi	30.9	50.8	-1.9	8.6	23.3	1.2	-0.9	15.9	40.6	0.2	-1.7	1,024
Borno	13.7	26.8	-0.4	17.9	28.2	5.2	-1.0	7.6	23.3	2.9	-0.9	760
Gombe	27.2	47.5	-1.8	5.9	14.2	3.3	-0.6	11.9	32.0	0.6	-1.4	473
Taraba	23.8	43.4	-1.6	2.4	7.9	3.2	-0.2	6.8	24.5	1.1	-1.1	675
Yobe	31.1	49.3	-1.8	13.3	23.6	10.7	-0.5	14.6	36.6	2.6	-1.4	709
North West												
Jigawa	41.5	59.0	-2.2	7.8	17.0	5.0	-0.6	18.3	44.1	1.1	-1.7	1,147
Kaduna	41.7	56.6	-2.4	27.6	41.7	5.6	-1.4	36.9	57.6	0.4	-2.3	1,054
Kano	31.1	48.3	-1.9	25.1	39.7	2.5	-1.6	29.0	58.0	0.5	-2.2	2,372
Katsina	38.0	58.5	-2.2	12.0	24.3	5.5	-0.8	20.8	46.0	0.5	-1.9	1,358
Kebbi	42.7	60.6	-2.5	9.4	18.1	11.6	-0.3	17.5	39.0	0.4	-1.6	889
Sokoto	30.8	51.6	-2.1	8.8	19.3	6.8	-0.6	12.3	37.7	0.4	-1.6	929
Zamfara	33.5	55.9	-2.2	6.1	16.2	4.5	-0.5	15.7	37.0	0.2	-1.6	1,301

Continued…

Table 11.1—*Continued*

Background characteristic	Height-for-age[1]			Weight-for-height				Weight-for-age				Number of children
	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	
South East												
Abia	6.2	17.3	-0.6	4.8	11.0	1.2	-0.6	2.3	11.6	0.7	-0.7	299
Anambra	9.2	18.4	-0.4	9.2	17.3	7.4	-0.4	4.0	14.1	0.9	-0.6	498
Ebonyi	6.1	16.2	-0.6	3.2	10.5	1.2	-0.5	3.0	12.4	0.7	-0.7	671
Enugu	2.5	11.7	-0.3	2.0	8.9	1.6	-0.4	1.1	7.1	1.9	-0.4	495
Imo	4.7	16.9	-0.5	3.5	11.8	1.3	-0.6	2.0	11.6	0.2	-0.7	493
South South												
Akwa Ibom	10.9	22.4	-0.8	2.7	10.5	2.7	-0.5	4.5	15.1	0.9	-0.8	424
Bayelsa	8.8	20.5	-0.5	1.3	5.2	3.2	-0.2	1.4	10.0	1.4	-0.5	217
Cross River	8.5	21.7	-0.8	3.1	9.8	1.1	-0.5	3.9	14.8	0.6	-0.8	514
Delta	8.6	14.9	-0.4	7.2	17.0	3.8	-0.6	4.3	15.4	0.6	-0.7	493
Edo	6.8	15.8	-0.5	3.6	10.5	8.9	-0.2	3.1	7.6	3.3	-0.5	349
Rivers	6.8	16.1	-0.2	2.8	10.5	7.1	-0.4	2.4	11.4	6.3	-0.4	622
South West												
Ekiti	7.3	19.2	-0.8	2.3	8.3	1.3	-0.3	2.9	10.4	0.6	-0.6	188
Lagos	6.3	17.0	-0.4	3.8	11.3	1.7	-0.6	3.0	12.9	1.8	-0.6	1,141
Ogun	9.9	23.8	-1.0	4.6	10.0	1.3	-0.6	4.5	18.3	0.4	-1.0	677
Ondo	10.4	24.0	-1.1	1.7	6.6	2.3	-0.4	2.9	13.4	0.5	-0.9	523
Osun	7.9	20.5	-0.7	3.3	11.1	3.0	-0.4	2.2	11.5	3.2	-0.7	429
Oyo	9.6	27.2	-1.2	1.9	10.1	0.9	-0.5	5.4	17.7	0.7	-1.0	1,059
Mother's education[7]												
No education	31.1	49.7	-1.9	11.9	22.7	5.0	-0.8	17.3	39.7	0.9	-1.6	11,534
Primary	17.1	33.1	-1.3	6.7	16.0	3.3	-0.6	9.4	24.4	1.0	-1.2	4,971
Secondary	10.1	22.6	-0.8	6.2	14.3	2.6	-0.6	5.8	17.7	1.2	-0.9	6,736
More than secondary	6.4	13.3	-0.3	4.6	11.0	4.0	-0.4	3.6	10.0	2.5	-0.5	1,515
Wealth quintile												
Lowest	33.8	53.8	-2.0	10.5	21.9	4.9	-0.7	17.3	41.9	0.7	-1.7	5,684
Second	28.5	46.1	-1.8	10.2	19.7	4.7	-0.7	15.6	34.8	1.0	-1.5	5,758
Middle	19.3	35.1	-1.3	8.5	16.8	3.9	-0.6	10.3	25.7	1.0	-1.2	5,073
Fourth	12.2	26.3	-1.0	7.6	16.7	2.8	-0.7	7.9	22.1	0.9	-1.1	4,970
Highest	7.9	18.0	-0.6	5.9	13.9	3.2	-0.6	5.4	15.6	1.9	-0.7	4,704
Total	21.1	36.8	-1.4	8.7	18.0	4.0	-0.7	11.6	28.7	1.1	-1.3	26,190

Note: Table is based on children who stayed in the household on the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the WHO child growth standards adopted in 2006. The indices in this table are NOT comparable to those based on the previously used NCHS/CDC/WHO reference. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight.

[1] Recumbent length is measured for children under age 2 and in the few cases when the age of the child is unknown and the child is less than 85 cm; standing height is measured for all other children.

[2] Includes children who are below -3 standard deviations (SD) from the WHO child growth standards population median

[3] Excludes children whose mothers were not interviewed

[4] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

[5] Includes children whose mothers are deceased

[6] Excludes children whose mothers were not weighed and measured, children whose mothers were not interviewed, and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (body mass index) is presented in Table 11.8.

[7] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire. Excludes 3 cases with missing information on mother's education.

Weight-for-height

Table 11.1 also shows the nutritional status of children less than age 5 as measured by weight-for-height. Overall, 18 percent of children in Nigeria are wasted. Disaggregation of wasting by child's age shows that wasting is highest (27 percent) among children age 9-11 months and lowest (12 percent) among children age 48-59 months. Male children are more likely to be wasted (19 percent) than female children (17 percent). As expected, the data show a linear relationship between wasting and perceived size of the baby at birth. Wasting is higher (29 percent) among children who were reported to be very small at birth than among those whose perceived size at birth was small, average, or large. Twenty-four percent of children born to mothers who are thin (BMI less than 18.5) are wasted, as compared with 15 percent of those born to mothers who are overweight or obese (BMI of 25 or above). An equal proportion of children in urban and rural areas are wasted (18 percent each). Wasting is generally high in the North West (27 percent) and North East (20 percent) and is lowest in the South West (10 percent).

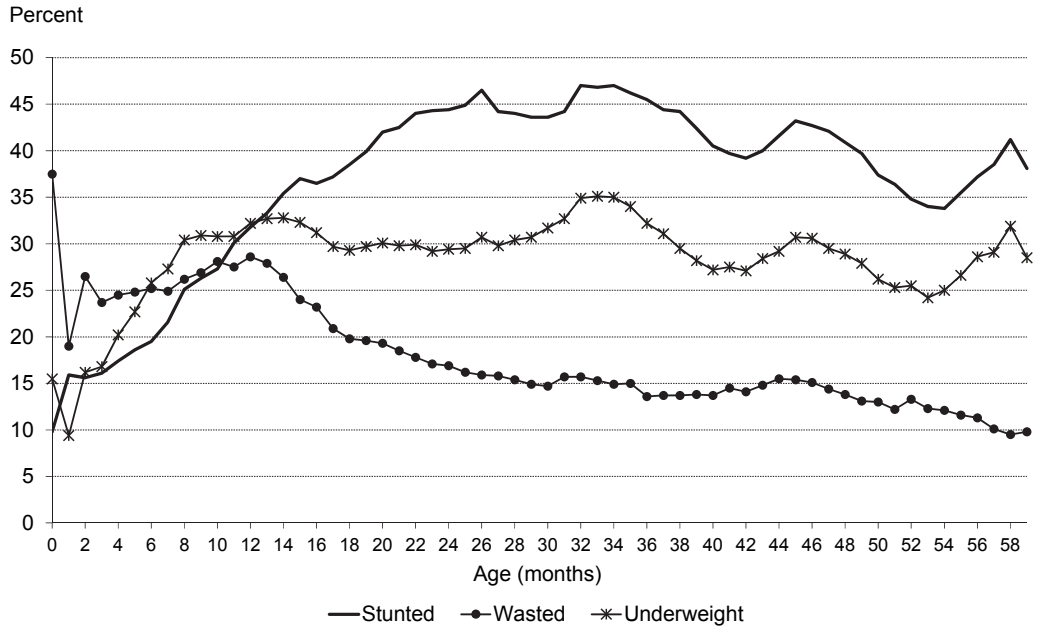
In general, there is an inverse relationship between mother's level of education and wasting, with the lowest proportion of wasting among children of mothers with a higher education (11 percent) and the

highest proportion among children of mothers with no education (23 percent). There is a similar inverse relationship between household wealth and wasting. Four percent of Nigerian children are overweight.

Weight-for-age

As shown in Table 11.1, 29 percent of children under age 5 are underweight (weight-for-age below -2 SD), and 12 percent are severely underweight. The proportion of underweight children is highest (32 percent) among those age 12-17 months and those age 24-35 months. Male children are more likely to be underweight (30 percent) than female children (27 percent). Similar to wasting, underweight shows a strong relationship with perceived size of the baby at birth. Children reported to be very small or small at birth are much more likely to be underweight (43 percent and 37 percent, respectively) than children reported to be average or large at birth (27 percent). Children born to mothers who are thin (BMI less than 18.5) are more likely to be underweight (43 percent) than children born to mothers who are overweight or obese (20 percent). Rural children are more likely to be underweight (32 percent) than urban children (23 percent). Fifty-eight percent of children in Kano and Kaduna are underweight, as compared with only 7 percent in Enugu and 8 percent in Edo.

Figure 11.1 **Nutritional status of children by age**



Note: *Stunting* reflects chronic malnutrition; *wasting* reflects acute malnutrition; *underweight* reflects chronic or acute malnutrition or a combination of both.
Plotted values are smoothed by a five-month moving average.

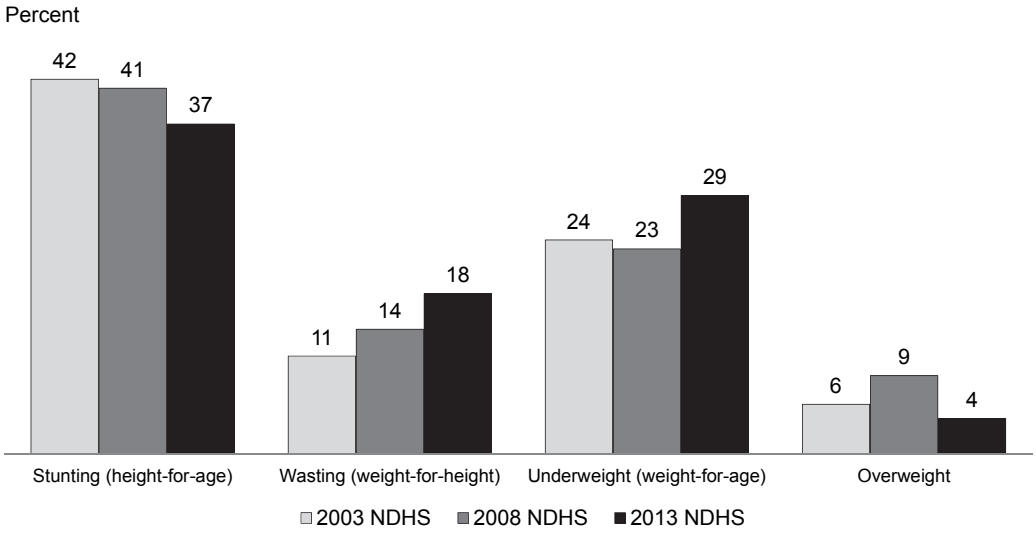
NDHS 2013

As with wasting and stunting, mother's education is associated with underweight. Children born to mothers with no education (40 percent) are four times as likely to be underweight as children born to mothers with a higher education (10 percent). A similar inverse relationship is observed between household wealth and percentage of underweight children: children in the poorest households are almost three times more likely to be underweight (42 percent) than children in the wealthiest households (16 percent).

11.1.4 Trends in Children's Nutritional Status

Trends in the nutritional status of children for the period 2008 to 2013 are shown in Figure 11.2. For the purpose of assessing trends, the data from the 2003 NDHS were recalculated using the WHO child growth standards adopted in 2006. One of the Millennium Development Goal 4 targets is to reduce the proportion of underweight children under age 5 to 20 percent by 2015 (Federal Republic of Nigeria, 2010a).

Figure 11.2 **Trends in nutritional status of children under age 5, 2003-2013**



Note: The data for all three surveys are based on the WHO child growth standards adopted in 2006.

In general, the nutritional status of children in Nigeria has gradually improved over the last decade. The proportion of children who are stunted declined from 41 percent in 2008 to 37 percent in 2013. However, the extent of wasting has worsened, indicating a more recent nutritional deficiency among children in the country.

11.2 BREASTFEEDING AND COMPLEMENTARY FEEDING

Feeding practices play a critical role in child development. Poor feeding practices can adversely impact the health and nutritional status of children, which in turn has direct consequences for their mental and physical development. Duration and intensity of breastfeeding also affect a mother's period of postpartum infertility and, hence, the length of the birth interval and fertility levels.

11.2.1 Initiation of Breastfeeding

Early initiation of breastfeeding is important for both the mother and the child. Early suckling stimulates the release of prolactin, which helps in the production of milk, and oxytocin, which is responsible for the ejection of milk. It also stimulates contraction of the uterus after childbirth and reduces postpartum blood loss. The first liquid to come from the breast, known as colostrum, is produced in the first few days after delivery. Colostrum is highly nutritious and contains antibodies that provide natural immunity to the infant. It is recommended that children be fed colostrum immediately after birth (within one hour) and that they continue to be exclusively breastfed even if the regular breast milk has not yet started to flow.

Table 11.2 shows the percentage of last-born children born in the two years preceding the survey according to whether they were ever breastfed, when they began breastfeeding, and whether they were fed anything other than breast milk prior to the commencement of breastfeeding. Ninety-eight percent of children were reported to have been breastfed at some time. Differences in the proportion of children ever breastfed by background characteristics are minor. One of the goals of the 2008 national infant and young child feeding (IYCF) strategy was to increase the percentage of newborns who are breastfed. The Saving Newborn Lives program reports that Nigeria has one of the poorest exclusive breastfeeding rates in Africa. Efforts are being made to help mothers by increasing community awareness about the benefits of early and exclusive breastfeeding and addressing harmful practices, such as discarding colostrum that may prevent optimal infant feeding (Federal Ministry of Health, 2011). However, the 2013 NDHS results show that only a third of children were breastfed within one hour of birth. Seventy-four percent of children were breastfed within one day of birth.

Table 11.2 Initial breastfeeding

Among last-born children who were born in the two years preceding the survey, the percentage who were ever breastfed and the percentages who started breastfeeding within one hour and within one day of birth, and among last-born children born in the two years preceding the survey who were ever breastfed, the percentage who received a prelacteal feed, by background characteristics, Nigeria 2013

	Among last-born children born in the past two years:				Among last-born children born in the past two years who were ever breastfed:	
Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Number of last-born children	Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
Sex						
Male	97.4	33.0	73.3	6,287	58.7	6,124
Female	98.3	33.3	74.1	6,185	58.4	6,083
Assistance at delivery						
Health professional[3]	97.5	39.2	80.1	5,288	44.4	5,157
Traditional birth attendant	98.6	31.5	69.5	2,756	69.1	2,718
Other	97.9	29.5	70.9	2,734	67.1	2,678
No one	98.5	23.1	65.4	1,640	71.7	1,616
Missing	69.0	18.7	51.7	56	(74.4)	38
Place of delivery[4]						
Health facility	97.4	40.1	80.5	4,655	43.3	4,535
At home	98.3	29.1	69.8	7,781	67.6	7,652
Other	*	*	*	15	*	15
Residence						
Urban	97.7	40.1	83.0	4,404	48.2	4,304
Rural	97.9	29.4	68.6	8,069	64.2	7,902
Zone						
North Central	98.2	46.7	77.6	1,692	49.3	1,662
North East	98.0	37.9	67.1	2,152	73.0	2,109
North West	98.3	25.7	69.7	4,554	68.3	4,475
South East	97.4	32.6	75.7	1,150	53.4	1,120
South South	96.8	42.5	77.5	1,191	46.5	1,153
South West	97.4	27.7	84.7	1,733	35.5	1,687
State						
North Central						
FCT-Abuja	98.9	51.3	85.5	75	51.7	74
Benue	98.2	47.7	90.1	374	36.7	367
Kogi	98.4	73.6	94.1	168	44.1	165
Kwara	98.8	71.4	94.9	161	40.5	159
Nasarawa	97.1	40.9	75.4	197	40.1	191
Niger	98.9	31.2	54.6	514	69.7	508
Plateau	96.6	45.8	84.7	204	39.4	197
North East						
Adamawa	97.7	33.3	66.5	289	63.8	282
Bauchi	97.5	31.7	62.7	573	87.9	558
Borno	99.7	67.8	79.4	408	58.0	407
Gombe	97.1	48.2	70.3	231	79.1	225
Taraba	98.0	14.4	79.6	300	50.9	294
Yobe	97.8	30.6	47.8	350	88.9	342
North West						
Jigawa	98.0	13.7	57.5	608	68.8	596
Kaduna	98.2	35.6	92.4	496	63.2	487
Kano	97.6	40.9	69.0	1,188	78.2	1,160
Katsina	99.3	18.2	82.6	688	71.2	683
Kebbi	97.9	8.3	77.4	479	45.5	469
Sokoto	99.5	40.8	67.4	444	91.2	442
Zamfara	98.0	12.3	47.1	652	51.7	639
South East						
Abia	96.7	63.9	86.8	135	40.7	131
Anambra	97.0	39.7	77.3	245	52.0	237
Ebonyi	96.5	17.3	76.0	313	46.8	302
Enugu	98.9	24.6	64.9	230	63.3	227
Imo	97.6	35.2	77.8	228	61.2	222
South South						
Akwa Ibom	97.7	43.7	69.3	202	32.3	198
Bayelsa	97.2	27.4	60.4	95	73.9	92
Cross River	99.1	32.8	85.6	221	55.5	219
Delta	95.1	47.2	83.7	220	47.5	210
Edo	97.1	54.8	83.0	168	37.4	163
Rivers	95.6	43.4	74.5	285	44.8	272

Continued…

Table 11.2—*Continued*

Background characteristic	Among last-born children born in the past two years: Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Number of last-born children	Among last-born children born in the past two years who were ever breastfed: Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
South West						
Ekiti	95.6	21.2	78.8	78	14.8	75
Lagos	96.8	20.0	79.5	519	43.4	502
Ogun	97.3	30.8	83.3	294	28.0	286
Ondo	95.7	38.1	81.5	225	40.1	215
Osun	98.9	28.0	91.9	189	25.0	187
Oyo	98.6	30.4	91.6	428	37.3	422
Mother's education						
No education	98.3	28.7	66.3	5,940	71.1	5,837
Primary	97.0	35.0	79.7	2,253	53.0	2,186
Secondary	97.8	37.5	80.9	3,466	45.9	3,390
More than secondary	97.3	42.7	80.7	815	35.9	793
Wealth quintile						
Lowest	97.9	22.4	59.6	2,888	73.8	2,828
Second	98.2	29.9	71.0	2,842	62.7	2,791
Middle	97.8	36.2	79.0	2,360	56.3	2,307
Fourth	97.7	41.5	81.8	2,247	52.5	2,195
Highest	97.6	40.2	81.9	2,135	41.1	2,084
Total	97.9	33.2	73.7	12,473	58.6	12,206

Note: Table is based on last-born children born in the two years preceding the survey regardless of whether the children were living or dead at the time of the interview. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes children who started breastfeeding within 1 hour of birth
[2] Children given something other than breast milk during the first 3 days of life
[3] Doctor, nurse/midwife, or auxiliary midwife
[4] Excludes 5 cases with missing information on place of delivery

The government has introduced Maternal Newborn Child Health Week along with other interventions designed to encourage exclusive breastfeeding for the first six months of life, early initiation of breastfeeding with colostrum, timely and appropriate complementary feeding practices, and adequate micronutrient intake (particularly twice-a-year vitamin A, iron, iodine, and zinc supplementation and deworming for children above age 12 months). These key nutrition-specific interventions will be scaled up in health facilities across the nation (National Primary Healthcare Development Agency, 2012).

The prevalence of early initiation of breastfeeding (within one hour) varies according to specific background characteristics, including area of residence (40 percent in urban areas and 29 percent in rural areas). There are also zonal differences, with the highest proportion in the North Central zone (47 percent) and the lowest in the North West (26 percent). Early initiation of breastfeeding differs according to place of delivery as well (40 percent among children born in a health facility and 29 percent among those delivered at home). Last-born children of mothers with a higher education are more likely to be breastfed within an hour of birth and within the first day than other children. Women from the higher wealth quintiles are more likely to start breastfeeding within an hour of birth than women from the lowest quintile.

The practice of providing a prelacteal feed is discouraged because it limits the frequency of suckling by the infant and exposes the baby to the risk of infection. The data show that 59 percent of newborns were given something other than breast milk (prelacteal feed) during the first three days of life.

There are differences among children who are given a prelacteal feed by place of birth (43 percent for those born in a health facility and 68 percent for those born at home). Prelacteal feeding is more common among newborns whose mothers have no education (71 percent) than among newborns whose mothers have a higher education (36 percent). Prelacteal feeding is most common (74 percent) among children in the lowest wealth quintile and least prevalent among those in the highest quintile (41 percent).

Although discouraged, the practice of giving a prelacteal feed has increased from 56 percent in 2008[1] to 59 percent in 2013. Some mothers lack antenatal counselling, and some have obstetric complications necessitating that they introduce prelacteal feeding (Federal Ministry of Health, 2005).

11.2.2 Breastfeeding Status by Age

UNICEF and WHO recommend that children be exclusively breastfed (no other liquid, solid food, or plain water) during the first six months of life (WHO/UNICEF, 2002; Pan American Health Organization [PAHO]/WHO, 2003). Also, recent evidence suggests that suboptimal breastfeeding can increase the risk of mortality for children in the first two years of life (Black et al., 2013). Nigeria's national nutrition strategy promotes exclusive breastfeeding through age 6 months (National Planning Commission, 2012) and, thereafter, the introduction of semisolid or solid foods along with continued breast milk until the child is at least age 2. Introducing breast milk substitutes to infants before age 6 months can displace exclusive breastfeeding. Substitutes such as formula, other kinds of milk, and porridge are often inadequate in nutrients and calories. Furthermore, possible contamination of these substitutes exposes infants to the risk of illness.

After six months, a child requires adequate complementary foods for normal growth. Lack of appropriate complementary feeding may lead to undernutrition and frequent illness, which in turn may lead to death. However, even with complementary feeding, children should continue to be breastfed for two years or more.

The 2013 NDHS used a 24-hour recall method to collect data on infant and young child feeding for all last-born children under age 2 living with their mothers. Table 11.3 shows the percentage of youngest children under age 2 by breastfeeding status and the percentage using a bottle with a nipple, according to age in months. Although only 17 percent of children under age 6 months are exclusively breastfed, this is an improvement from the 2008 NDHS, when the figure was 13 percent. As can be seen in Figure 11.3 and Table 11.3, supplementing breast milk with water, other liquids, or foods starts at an early age in Nigeria. More than half of children received water in addition to breast milk in the first three months of life. Furthermore, contrary to the recommendation of exclusive breastfeeding, 47 percent of children under age 6 months were given plain water, 5 percent received other milk, and 23 percent were fed complementary foods in addition to breast milk.

Table 11.3 also shows complementary feeding practices among breastfeeding children of different ages. Contrary to recommendations, 9 percent of children age 0-1 month, 16 percent of children age 2-3 months, and 38 percent of children age 4-5 months are given complementary foods in addition to breast milk. Although children age 6-8 months should receive solid/semisolid foods, Table 11.3 shows that only 64 percent received complementary feeding the day or night preceding the survey in addition to breast milk. The data show that 16 percent of infants less than age 6 months are fed using a bottle with a nipple.

[1] The data for the 2008 NDHS were rerun to allow a comparison of this indicator. In 2008, this information was derived for children born in the five years preceding the survey, whereas in 2013 it was calculated for last-born children in the two years preceding the survey.

Table 11.3 Breastfeeding status by age

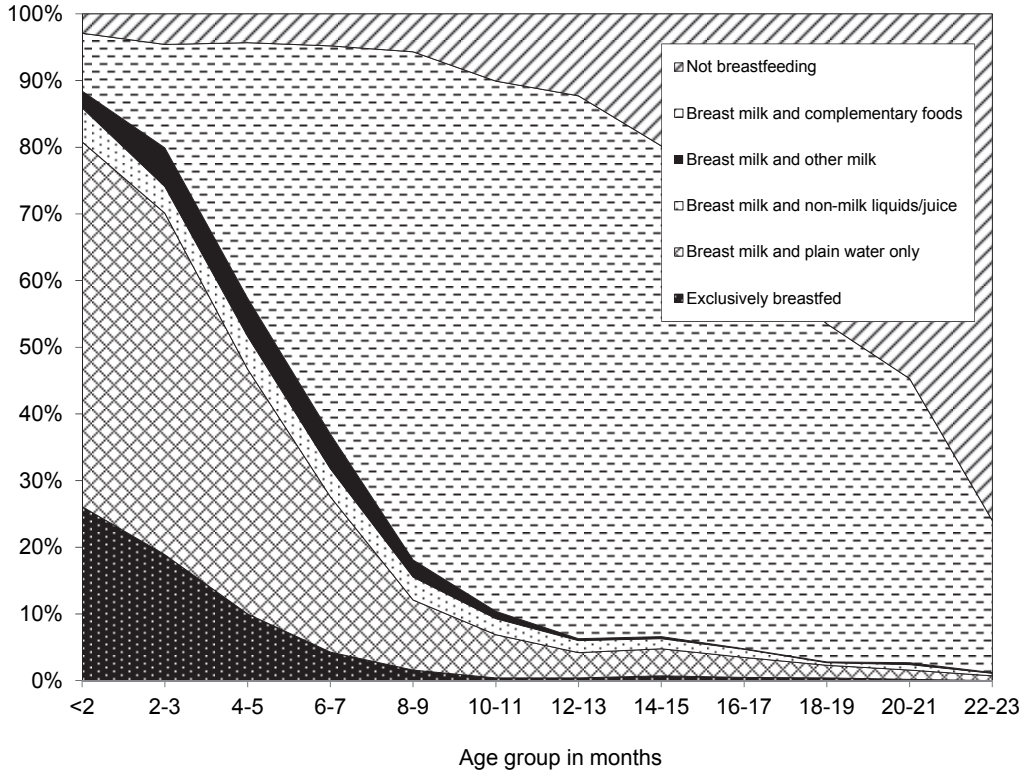
Percent distribution of youngest children under age 2 who are living with their mother by breastfeeding status and the percentage currently breastfeeding, and the percentage of all children under age 2 using a bottle with a nipple, according to age in months, Nigeria 2013

		Breastfeeding status									
Age in months	Not breast-feeding	Exclusively breastfed	Breast-feeding and consuming plain water only	Breast-feeding and consuming non-milk liquids[1]	Breast-feeding and consuming other milk	Breast-feeding and consuming comple-mentary foods	Total	Percentage currently breast-feeding	Number of youngest children under age 2 living with their mother	Percentage using a bottle with a nipple	Number of all children under age 2
0-1	2.9	26.1	54.7	5.1	2.5	8.7	100.0	97.1	776	15.9	802
2-3	4.6	18.9	51.2	4.0	5.8	15.5	100.0	95.4	1,029	15.5	1,046
4-5	4.3	10.0	36.7	4.9	5.7	38.3	100.0	95.7	1,125	16.7	1,141
6-8	4.5	3.3	20.1	4.1	4.3	63.6	100.0	95.5	1,657	17.4	1,682
9-11	9.1	0.9	6.8	2.5	1.7	78.9	100.0	90.9	1,555	15.6	1,581
12-17	21.5	0.5	3.7	1.5	0.2	72.6	100.0	78.6	3,312	10.9	3,411
18-23	58.1	0.2	1.4	0.5	0.2	39.6	100.0	41.9	2,294	6.6	2,489
0-3	3.9	22.0	52.7	4.5	4.4	12.6	100.0	96.1	1,805	15.6	1,848
0-5	4.1	17.4	46.6	4.6	4.9	22.5	100.0	95.9	2,930	16.1	2,989
6-9	5.2	2.9	17.0	3.8	3.9	67.1	100.0	94.8	2,201	16.8	2,235
12-15	16.0	0.6	4.0	1.7	0.3	77.6	100.0	84.0	2,378	11.9	2,439
12-23	36.4	0.4	2.7	1.1	0.2	59.1	100.0	63.6	5,606	9.1	5,900
20-23	64.7	0.1	1.1	0.6	0.2	33.2	100.0	35.3	1,465	6.3	1,621

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semisolids) are hierarchical and mutually exclusive, and their percentages sum to 100 percent. Thus, children who receive breast milk and non-milk liquids and who do not receive other milk and do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

[1] Non-milk liquids include juice, juice drinks, clear broth, or other liquids.

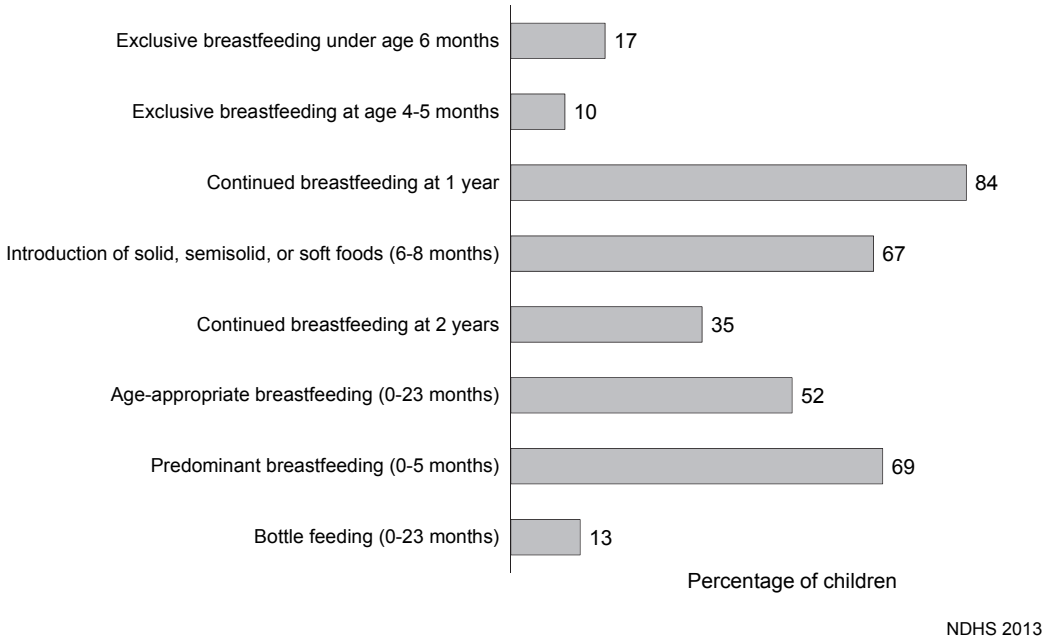
Figure 11.3 Infant feeding practices by age



NDHS 2013

Figure 11.4 shows the 2013 NDHS results for key IYCF breastfeeding practices among children under age 2 who are living with their mothers. Seventeen percent of children under age 6 months are exclusively breastfed, while only 10 percent are exclusively breastfed up to 4-5 months. Eighty-four percent continue breastfeeding at age 1, and 35 percent continue to breastfeed until age 2. Sixty-seven percent of children start receiving complementary foods at the appropriate age of 6-8 months. Fifty-two percent of children age 0-23 months are breastfed appropriately for their age (i.e., exclusive breastfeeding for children age 0-5 months and continued breastfeeding along with complementary foods for children age 6-23 months). Sixty-nine percent of children are predominantly breastfed (breast milk and only plain water or non-milk liquids such as juice, clear broth, and other liquids); 13 percent of children under age 2 are bottle fed.

Figure 11.4 **IYCF indicators on breastfeeding status**



11.2.3 Duration of Breastfeeding

Table 11.4 provides information on the median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey by selected background characteristics. The median duration of any breastfeeding in Nigeria is 18.3 months. Median duration of breastfeeding is higher among children residing in rural areas (19.5 months), children of mothers with no education (21.0 months), and those in the lowest wealth quintile (21.4 months). The median duration of breastfeeding is highest in the North West (21.0 months) and lowest in the South East (14.1 months). The mean duration of any breastfeeding for all children is 18.2 months.

Table 11.4 also shows that the median duration of exclusive breastfeeding is 0.5 months, which indicates that 50 percent of infants do not exclusively breastfeed for even a month. The median duration of breastfeeding has remained the same in the last five years. However, the median duration of predominant breastfeeding is slightly higher than in 2008 (4.4 months versus 3.0 months).

Table 11.4 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the 3 years preceding the survey, by background characteristics, Nigeria 2013

Background characteristic	Median duration (months) of breastfeeding among children born in the past three years[1]		
	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding[2]
Sex			
Male	18.1	0.5	4.0
Female	18.5	0.5	4.6
Residence			
Urban	16.5	0.6	4.5
Rural	19.5	0.5	4.3
Zone			
North Central	18.2	0.5	3.4
North East	20.1	0.5	5.1
North West	21.0	0.4	5.0
South East	14.1	0.6	3.0
South South	14.5	0.6	2.6
South West	16.1	0.9	4.7
Mother's education			
No education	21.0	0.4	4.7
Primary	17.8	0.5	4.1
Secondary	15.6	0.6	4.1
More than secondary	14.5	1.5	3.8
Wealth quintile			
Lowest	21.4	0.4	4.9
Second	20.0	0.5	4.5
Middle	17.7	0.5	3.9
Fourth	17.1	0.6	4.0
Highest	15.0	1.1	4.4
Total	18.3	0.5	4.4
Mean for all children	18.2	1.8	5.8

Note: Median and mean durations are based on the distributions at the time of the survey of the proportion of births by months since birth. Includes children living and deceased at the time of the survey. State-level disaggregation is not shown because of the small number of cases.

[1] It is assumed that non-last-born children and last-born children not currently living with their mother are not currently breastfeeding.

[2] Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only

11.2.4 Types of Complementary Foods

It is recommended that complementary foods (solid or semisolid foods fed to infants in addition to breast milk) be started at age 6 months. The reason is that, at this age, breast milk alone is no longer sufficient to maintain the child's recommended daily nutritional requirements and enhance growth. Children are fed small quantities of solid and semisolid foods while continuing to breastfeed up to age 2 or beyond. The amount of food is increased gradually from 6 to 23 months, the period of transition to eating the regular family diet. This period is characterised by an increase in the prevalence of malnutrition because of poor feeding practices and infections. Table 11.5 shows the percentage of youngest children under age 2 who are living with their mother by types of foods consumed in the day or night preceding the interview, according to breastfeeding status and age.

The data show that, contrary to WHO recommendations, the practice of feeding children liquids other than milk and giving them solid or semisolid foods starts early in life. Nine percent of breastfeeding children have received a liquid (not plain water) other than infant formula or other types of milk by age 2-3 months. Sixteen percent of breastfeeding children have received some kind of solid or semisolid food by age 2-3 months, and this proportion increases to 40 percent by age 4-5 months.

Overall, 85 percent of breastfed children age 6-23 months received solid or semisolid complementary foods in addition to breast milk. These complementary foods included fortified baby foods (5 percent), foods made from grains (64 percent), fruits and vegetables rich in vitamin A (31 percent), other fruits and vegetables (12 percent), and food made from roots and tubers (13 percent). Children were also fed protein-rich foods such as legumes and nuts (20 percent); meat, fish, and poultry (23 percent); and eggs (11 percent). Fifteen percent of children were given cheese, yogurt, and other milk products. In addition, 10 percent of children in this age group were given other milk, and 38 percent were given other liquids. Use of infant formula was minimal (5 percent).

Table 11.5 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under age 2 who are living with their mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Nigeria 2013

	Liquids			Solid or semisolid foods										
Age in months	Infant formula	Other milk[1]	Other liquids[2]	Fortified baby foods	Food made from grains[3]	Fruits and vege-tables rich in vitamin A[4]	Other fruits and vege-tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk products	Any solid or semi-solid food	Number of children
BREASTFEEDING CHILDREN														
0-1	2.0	2.4	8.7	0.6	1.8	1.1	0.2	0.3	0.4	0.3	0.0	4.9	9.0	754
2-3	5.2	3.8	9.2	0.5	4.8	2.7	0.8	1.7	1.0	1.4	1.2	4.1	16.3	981
4-5	6.8	6.7	19.2	4.3	16.3	4.4	1.7	2.2	3.2	3.2	2.2	9.1	40.1	1,076
6-8	8.8	11.4	30.1	6.4	38.1	13.2	5.9	5.9	10.8	11.8	7.4	8.8	66.6	1,582
9-11	6.4	12.9	40.4	6.5	63.7	27.5	11.0	13.0	20.5	23.9	13.2	11.8	86.9	1,413
12-17	2.9	7.9	40.4	3.5	75.5	38.7	14.2	15.1	24.7	27.7	11.6	19.1	92.4	2,601
18-23	2.2	9.0	42.4	3.3	77.6	42.7	13.9	19.1	24.4	25.7	9.1	18.9	94.5	961
6-23	4.9	10.0	38.2	4.8	64.2	30.7	11.5	13.0	20.4	22.7	10.5	15.0	85.3	6,556
Total	4.9	8.4	30.6	4.0	47.5	22.4	8.3	9.6	14.8	16.5	7.8	12.4	66.7	9,368
NONBREASTFEEDING CHILDREN														
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	23
2-3	2.6	2.0	6.8	0.0	1.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	12.8	48
4-5	13.8	6.6	19.7	7.7	13.2	1.9	5.8	2.7	8.7	3.8	5.0	6.1	36.3	49
6-8	9.8	8.5	45.3	6.4	37.9	12.8	6.1	8.4	21.4	14.2	7.2	14.7	72.1	75
9-11	11.5	23.0	39.9	9.3	62.9	33.8	16.2	19.6	26.7	38.1	16.9	15.8	85.4	142
12-17	8.8	24.5	56.4	9.3	79.3	46.1	22.8	26.1	32.9	49.9	26.6	19.0	94.5	710
18-23	4.8	16.7	49.4	5.5	82.5	47.5	23.3	29.2	33.6	50.9	26.0	17.0	98.0	1,333
6-23	6.6	19.3	50.8	7.0	78.8	45.1	22.1	26.9	32.5	48.5	25.0	17.5	95.2	2,260
Total	6.6	18.6	48.9	6.8	75.1	42.9	21.1	25.6	31.1	46.2	23.8	16.7	91.4	2,379

Note: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Other milk includes fresh, tinned, and powdered cow or other animal milk.
[2] Does not include plain water
[3] Includes fortified baby food
[4] Includes pumpkin, carrots, squash, red sweet potatoes, dark green leafy vegetables, ripe mangoes, paw paw, papayas, palm nuts, and other locally grown fruits and vegetables that are rich in vitamin A

Ninety-five percent of nonbreastfeeding children age 6-23 months received solid or semisolid foods, as compared with 85 percent of breastfeeding children. Consumption of different types of food was also higher among nonbreastfeeding children than among breastfeeding children.

11.3 INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES

Appropriate IYCF practices include timely initiation of feeding solid or semisolid foods at age 6 months and increasing the amount and variety of foods and frequency of feeding as the child gets older while maintaining frequent breastfeeding (WHO, 2008). Guidelines have been established for IYCF practices among children age 0-23 months (PAHO/WHO, 2003; WHO, 2005, 2008). Although breastfeeding is recommended for infants up to age 2, some infants have stopped breastfeeding before reaching age 2 because, for example, their mother is HIV positive or has died; guidelines on feeding this group of children have also been developed (WHO, 2005).

Appropriate nutrition includes feeding children age 6-23 months a variety of foods a desired number of times to ensure that their nutrient and caloric requirements are met. Minimum dietary diversity refers to feeding the child food from at least four food groups, a cutoff selected because of its association with better-quality diets for both breastfed and nonbreastfed children. Studies have shown that plant-based complementary foods by themselves are insufficient to meet the needs for certain micronutrients (WHO and UNICEF, 1998). Therefore, it is recommended that meat, poultry, fish, and eggs be eaten daily or as often as possible. Fruits and vegetables rich in vitamin A should be consumed daily to achieve the proven health benefits associated with vitamin A (Allen and Gillespie, 2001). Children's diets should include an adequate fat content, because fat provides essential fatty acids, facilitates absorption of fat-soluble vitamins (such as vitamin A), and enhances dietary energy density. It is highly likely that children consuming foods from at least four groups are consuming at least one animal source of food and at least one fruit or vegetable in addition to a staple food (grains, roots, or tubers) (WHO, 2008). These four food groups should come from the following seven categories: grains, roots, and tubers; legumes and nuts; dairy products (milk, yogurt, cheese); flesh foods (meat, fish, poultry, liver/organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables.

Minimum dietary diversity scores may be reported separately for breastfed and nonbreastfed children. However, diversity scores for breastfed and nonbreastfed children should not be directly compared, because breast milk is not counted in any of the above-stated food groups. The recommended numbers of feedings are as follows:

- Breastfed children age 6-23 months should receive animal-source foods and vitamin-A rich fruits and vegetables daily (PAHO/WHO, 2003). Breastfed infants age 6-8 months should be fed meals of complementary foods two to three times per day, with one to two snacks as desired; breastfed children age 9-23 months should be fed meals three to four times per day, with one to two snacks.

- Nonbreastfed children age 6-23 months should receive milk products at least twice a day to ensure that their calcium needs are met. In addition, they need animal-source foods and vitamin A-rich fruits and vegetables. Therefore, four food groups are considered the minimum acceptable number for nonbreastfed children. Nonbreastfed children should be fed meals four to five times per day, with one to two snacks as desired (WHO, 2005). Meal frequency is considered a proxy for energy intake from foods other than breast milk; therefore, the feeding frequency indicator for nonbreastfed children includes both milk feeds and solid/semisolid feeds (WHO, 2008).

These minimum feeding frequencies are based on the energy needs estimated from age-specific total daily energy requirements. Infants with low breast milk intake would need to be fed more frequently. However, overly frequent feeding may lead to displacement of breast milk (PAHO/WHO, 2003).

Table 11.6 and Figure 11.5 show IYCF practices according to breastfeeding status. The IYCF recommendations for children age 6-23 months take into account feeding practices that meet minimum standards with respect to:

- Food diversity (the number of food groups consumed)
- Feeding frequency (the number of times the child is fed)
- Consumption of breast milk or other types of milk or milk products

Table 11.6 shows that only about one in five children age 6-23 months (breastfed and nonbreastfed) receive the appropriately diverse diet; 58 percent of children are fed the recommended number of times with solid or semisolid foods, and 79 percent are given breast milk or other milk products. Only 10 percent of children are fed in compliance with the IYCF recommendations of consuming breast milk or other milk products, having the minimum dietary diversity, and having the minimum meal frequency.

Table 11.6 Infant and young child feeding (IYCF) practices

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF feeding practices based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, by background characteristics, Nigeria 2013

	Among breastfed children 6-23 months, percentage fed:				Among nonbreastfed children 6-23 months, percentage fed:					Among all children 6-23 months, percentage fed:				
Background characteristic	4+ food groups[1]	Minimum meal frequency[2]	Both 4+ food groups and minimum meal frequency	Number of breastfed children 6-23 months	Milk or milk products[3]	4+ food groups[1]	Minimum meal frequency[4]	With 3 IYCF practices[5]	Number of non-breastfed children 6-23 months	Breast milk, milk, or milk products[6]	4+ food groups[1]	Minimum meal frequency[7]	With 3 IYCF practices	Number of all children 6-23 months
Age in months														
6-8	6.6	57.2	6.0	1,582	17.0	3.7	28.1	1.5	75	96.2	6.5	55.9	5.8	1,657
9-11	16.2	55.8	11.7	1,413	22.4	25.2	44.8	6.3	142	92.9	17.0	54.8	11.2	1,555
12-17	18.1	64.4	14.0	2,601	20.9	35.5	52.1	8.7	710	83.1	21.8	61.8	12.9	3,312
18-23	15.7	66.8	12.6	961	13.3	34.3	48.6	6.4	1,333	49.6	26.5	56.2	9.0	2,294
Sex														
Male	13.2	62.0	10.2	3,256	16.6	32.3	49.6	7.3	1,191	77.7	18.3	58.7	9.4	4,448
Female	15.9	60.4	12.6	3,300	16.2	34.0	47.9	6.5	1,069	79.5	20.4	57.3	11.1	4,370
Residence														
Urban	21.2	58.8	15.9	2,096	22.1	42.4	53.1	9.6	1,078	73.5	28.4	56.8	13.8	3,173
Rural	11.4	62.3	9.2	4,461	11.3	24.7	44.9	4.5	1,183	81.4	14.2	58.7	8.2	5,645
Zone														
North Central	14.1	55.0	9.2	864	13.5	30.4	34.7	5.6	321	76.6	18.5	49.5	8.2	1,185
North East	15.3	65.1	13.3	1,191	8.8	28.9	56.9	1.8	314	81.0	18.1	63.4	10.9	1,505
North West	11.0	66.1	9.7	2,798	10.6	19.2	53.5	2.2	448	87.7	12.1	64.4	8.6	3,246
South East	28.2	56.7	18.6	454	30.4	55.3	54.8	18.2	357	69.4	40.1	55.9	18.5	811
South South	25.2	62.1	19.8	474	24.9	43.4	56.5	13.0	368	67.2	33.2	59.7	16.8	842
South West	12.5	46.1	7.6	776	11.8	26.0	37.7	2.4	453	67.5	17.5	43.0	5.6	1,229
State														
North Central														
FCT-Abuja	35.9	73.3	27.8	34	43.8	51.4	72.1	21.2	22	77.9	42.0	72.8	25.2	55
Benue	16.9	61.3	16.7	160	6.5	38.2	38.2	5.0	94	65.4	24.8	52.7	12.4	255
Kogi	22.8	49.9	12.9	106	(26.7)	(49.8)	(56.3)	(24.2)	27	85.0	28.3	51.2	15.2	133
Kwara	21.5	18.1	3.9	82	(15.6)	(47.8)	(4.2)	(2.9)	30	77.4	28.5	14.4	3.6	112
Nasarawa	15.6	63.7	13.8	110	(11.6)	(25.7)	(29.3)	(3.8)	29	81.5	17.7	56.5	11.7	139
Niger	4.8	63.7	1.8	264	11.1	6.7	30.6	0.0	79	79.4	5.2	56.0	1.4	343
Plateau	10.3	42.7	6.0	109	8.7	24.2	26.6	0.0	39	75.9	13.9	38.5	4.4	148
North East														
Adamawa	11.0	77.9	9.9	146	5.3	27.6	77.8	1.7	56	73.9	15.6	77.9	7.6	202
Bauchi	9.7	63.4	9.0	311	3.8	28.8	41.8	0.0	74	81.4	13.4	59.2	7.2	386
Borno	16.6	48.0	12.9	230	(14.3)	(31.8)	(53.3)	(1.7)	79	78.1	20.5	49.4	10.0	308
Gombe	39.7	76.9	38.2	134	(1.5)	(47.4)	(69.4)	(0.0)	27	83.7	41.0	75.7	31.9	160
Taraba	12.9	55.8	11.1	159	7.0	15.6	37.9	1.7	42	80.4	13.5	52.1	9.1	201
Yobe	11.2	77.0	8.6	212	(19.9)	(26.8)	(76.5)	(7.7)	36	88.4	13.4	76.9	8.5	247
North West														
Jigawa	13.0	56.1	9.7	368	23.8	28.8	50.7	7.3	64	88.8	15.3	55.3	9.3	432
Kaduna	17.2	89.5	16.9	318	(24.2)	(24.0)	(79.4)	(2.2)	68	86.7	18.4	87.8	14.3	385
Kano	11.7	63.3	10.9	732	5.0	16.8	60.5	1.1	83	90.3	12.2	63.0	9.9	815
Katsina	6.9	71.8	5.7	403	6.4	11.6	59.4	1.9	80	84.5	7.7	69.8	5.1	483
Kebbi	19.7	64.3	18.3	292	(5.1)	(26.3)	(37.3)	(2.5)	53	85.5	20.7	60.1	15.9	344
Sokoto	8.4	75.4	8.1	263	2.4	14.5	31.5	0.0	49	84.6	9.4	68.5	6.8	312
Zamfara	2.7	52.0	1.1	421	(5.4)	(13.5)	(39.4)	(0.0)	54	89.2	4.0	50.6	1.0	475
South East														
Abia	27.2	24.4	11.5	49	32.6	46.6	44.3	20.9	43	68.5	36.3	33.7	15.9	92
Anambra	30.5	42.3	18.4	84	41.1	70.5	54.8	30.8	92	69.1	51.5	48.9	24.9	176
Ebonyi	24.3	83.8	22.3	139	16.9	42.5	69.6	13.2	69	72.4	30.3	79.1	19.3	208
Enugu	42.3	43.8	23.5	96	30.8	61.7	37.5	18.2	70	70.8	50.5	41.1	21.2	167
Imo	17.1	59.6	11.7	86	28.4	47.9	62.7	6.8	82	65.0	32.1	61.1	9.3	168
South South														
Akwa Ibom	15.2	44.3	7.1	86	16.0	37.8	26.3	9.6	56	66.9	24.1	37.2	8.1	142
Bayelsa	23.5	73.9	22.4	37	21.0	27.4	63.3	4.7	27	66.2	25.2	69.4	14.8	64
Cross River	33.9	75.1	28.9	95	7.5	35.6	54.5	3.2	55	66.2	34.5	67.6	19.5	150
Delta	8.2	51.5	7.1	81	21.8	22.6	64.2	5.4	77	61.9	15.2	57.7	6.3	157
Edo	14.3	62.8	8.0	79	25.1	24.7	47.0	5.7	41	74.7	17.8	57.5	7.2	120
Rivers	49.6	69.0	41.6	96	40.6	74.9	69.1	29.3	112	68.0	63.2	69.0	34.9	209
South West														
Ekiti	13.8	32.0	1.6	34	10.1	32.6	18.9	2.6	20	66.5	20.8	27.1	2.0	54
Lagos	10.7	42.0	4.1	210	21.7	20.0	50.7	1.9	155	66.7	14.7	45.7	3.2	365
Ogun	4.3	29.9	0.0	128	5.5	13.4	22.6	0.0	84	62.6	7.9	27.0	0.0	212
Ondo	19.1	62.5	16.9	105	0.0	46.7	31.7	0.0	46	69.7	27.4	53.2	11.8	150
Osun	27.9	84.2	26.0	91	22.5	61.6	72.9	14.8	49	73.1	39.6	80.3	22.1	140
Oyo	9.2	37.8	3.9	209	2.1	17.8	19.4	0.0	100	68.4	12.0	31.9	2.6	309

Continued…

Table 11.6—*Continued*

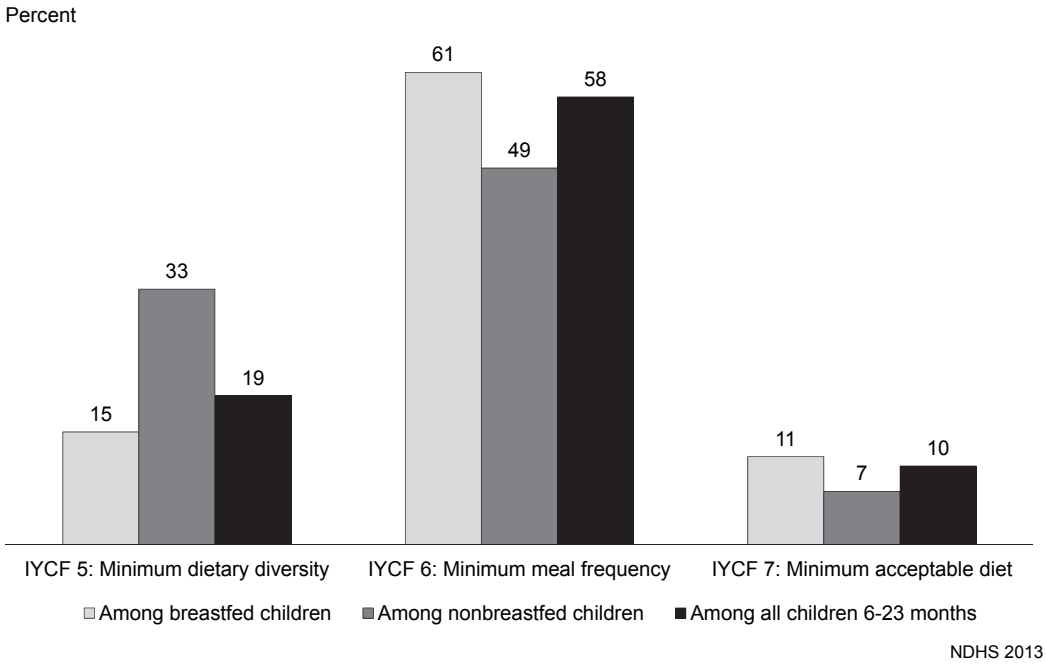
Background characteristic	Among breastfed children 6-23 months, percentage fed: 4+ food groups[1]	Minimum meal frequency[2]	Both 4+ food groups and minimum meal frequency	Number of breastfed children 6-23 months	Among non-breastfed children 6-23 months, percentage fed: Milk or milk products[3]	4+ food groups[1]	Minimum meal frequency[4]	With 3 IYCF practices[5]	Number of non-breastfed children 6-23 months	Among all children 6-23 months, percentage fed: Breast milk, milk, or milk products[6]	4+ food groups[1]	Minimum meal frequency[7]	With 3 IYCF practices	Number of all children 6-23 months
Mother's education														
No education	9.8	62.7	7.9	3,494	7.7	18.7	46.4	1.3	670	85.1	11.2	60.1	6.9	4,165
Primary	18.3	63.1	14.4	1,144	8.0	27.7	41.8	2.8	427	75.0	20.8	57.3	11.3	1,570
Secondary	20.3	57.9	15.8	1,586	21.4	41.4	51.1	9.4	890	71.7	27.9	55.5	13.5	2,477
More than secondary	24.5	53.8	16.0	333	34.8	50.0	58.5	19.1	273	70.6	36.0	55.9	17.4	606
Wealth quintile														
Lowest	7.9	62.2	6.6	1,732	10.3	18.6	48.8	2.7	286	87.3	9.4	60.3	6.0	2,018
Second	11.0	64.5	9.2	1,591	4.8	20.4	40.8	1.2	352	82.7	12.7	60.2	7.8	1,943
Middle	16.9	63.2	12.7	1,215	8.7	26.2	42.2	4.8	473	74.4	19.5	57.3	10.5	1,688
Fourth	21.5	58.5	17.1	1,111	17.6	38.0	51.5	5.9	497	74.5	26.6	56.3	13.7	1,609
Highest	22.1	53.8	15.6	909	30.1	47.7	56.0	14.3	652	70.8	32.8	54.7	15.0	1,561
Total	14.6	61.2	11.4	6,558	16.4	33.1	48.8	6.9	2,260	78.6	19.3	58.0	10.2	8,818

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Food groups: a. infant formula, milk other than breast milk, cheese or yogurt or other milk products; b. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; c. vitamin A-rich fruits and vegetables (and red palm oil); d. other fruits and vegetables; e. eggs; f. meat, poultry, fish, and shellfish (and organ meats); g. legumes and nuts.
[2] For breastfed children, minimum meal frequency is receiving solid or semisolid food at least twice a day for infants age 6-8 months and at least 3 times a day for children age 9-23 months.
[3] Includes 2 or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yogurt
[4] For nonbreastfed children age 6-23 months, minimum meal frequency is receiving solid or semisolid food or milk feeds at least 4 times a day.
[5] Nonbreastfed children age 6-23 months are considered to be fed with a minimum standard of 3 IYCF practices if they receive other milk or milk products at least twice a day, receive the minimum meal frequency, and receive solid or semisolid foods from at least 4 food groups not including the milk or milk products food group.
[6] Breastfeeding, or not breastfeeding and receiving 2 or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yogurt
[7] Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in notes 2 and 4.

The proportion of children age 6-23 months who are fed according to all three IYCF recommendations varies slightly between boys (9 percent) and girls (11 percent); there are also differences across other background characteristics. Children living in urban areas (14 percent) are more likely to be fed according to the recommendations than their rural counterparts (8 percent). Children in the South East (19 percent) and South South (17 percent) are more likely to be fed according to all three IYCF recommendations. None of the children residing in Ogun and only 1 percent in Zamfara are fed according to the IYCF recommendations. The highest prevalence of compliance with IYCF practices is observed in Rivers, and the proportion there (35 percent) is almost three times the national average. There is a positive relationship between infant and child feeding practices and mother's education and wealth.

Nonbreastfed children are more likely than breastfed children to consume a diverse diet, while higher proportions of breastfed children are fed in accordance with minimum frequency guidelines. Overall, breastfed children are more likely to be fed in compliance with minimum acceptable dietary recommendations (Figure 11.5).

Figure 11.5 IYCF indicators on minimum acceptable diet



NDHS 2013

11.4 MICRONUTRIENT INTAKE AMONG CHILDREN

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Children can receive micronutrients from foods, food fortification, and direct supplementation. The 2013 NDHS collected information on consumption of foods rich in vitamin A and iron and the status of children receiving vitamin A capsules, iron supplements, and deworming medication during national campaigns.

Table 11.7 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, the percentages who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey, and among all children age 6-59 months, the percentages who were given vitamin A supplements in the six months preceding the survey, who were given iron supplements in the past seven days, and who were given deworming medication in the six months preceding the survey by background characteristics, Nigeria 2013

	Among youngest children age 6-23 months living with their mother:			Among all children age 6-59 months:			
Background characteristic	Percentage who consumed foods rich in vitamin A in last 24 hours[1]	Percentage who consumed foods rich in iron in last 24 hours[2]	Number of children	Percentage given vitamin A supplements in last 6 months	Percentage given iron supplements in last 7 days	Percentage given deworming medication in last 6 months[3]	Number of children
Age in months							
6-8	23.9	15.9	1,657	31.7	3.9	7.0	1,682
9-11	44.2	30.4	1,555	40.6	5.9	14.1	1,581
12-17	58.3	37.7	3,312	44.4	6.1	17.8	3,411
18-23	67.2	47.0	2,294	45.3	5.8	23.2	2,489
24-35	na	na	na	42.5	6.3	22.2	5,490
36-47	na	na	na	40.2	5.6	21.5	5,722
48-59	na	na	na	40.6	5.3	21.5	5,586
Sex							
Male	51.7	35.0	4,448	41.5	5.7	20.6	13,023
Female	51.6	34.4	4,370	41.1	5.6	19.2	12,938
Breastfeeding status							
Breastfeeding	44.6	27.1	6,558	36.8	5.0	12.6	7,184
Not breastfeeding	72.3	56.9	2,247	43.0	5.9	22.7	18,347
Missing	*	*	13	42.3	7.4	23.7	430
Mother's age at birth							
15-19	43.3	23.8	674	29.4	2.9	12.2	1,124
20-29	51.3	35.2	4,496	39.6	5.3	18.2	12,284
30-39	54.0	37.2	2,997	45.3	6.2	23.3	9,895
40-49	51.7	31.6	652	39.4	6.6	18.6	2,657
Residence							
Urban	58.9	48.5	3,173	53.2	7.2	28.4	9,360
Rural	47.6	27.0	5,645	34.6	4.8	15.2	16,600

Continued…

Table 11.7—*Continued*

Background characteristic	Among youngest children age 6-23 months living with the mother:			Among all children age 6-59 months:			
	Percentage who consumed foods rich in vitamin A in last 24 hours[1]	Percentage who consumed foods rich in iron in last 24 hours[2]	Number of children	Percentage given vitamin A supplements in last 6 months	Percentage given iron supplements in last 7 days	Percentage given deworming medication in last 6 months[3]	Number of children
Zone							
North Central	53.2	39.5	1,185	44.6	10.6	17.2	3,586
North East	55.9	29.6	1,505	31.1	5.2	12.1	4,493
North West	42.8	20.2	3,246	26.1	1.7	9.0	9,448
South East	66.1	54.9	811	56.7	13.2	41.9	2,311
South South	63.8	57.7	842	64.8	5.0	44.5	2,457
South West	50.3	45.8	1,229	64.4	7.3	30.2	3,665
State							
North Central							
FCT-Abuja	72.5	62.5	55	48.4	2.3	34.4	180
Benue	75.8	64.4	255	35.4	1.1	5.1	782
Kogi	60.3	52.0	133	73.9	7.3	29.6	347
Kwara	62.6	55.3	112	71.8	3.2	27.5	336
Nasarawa	52.4	35.0	139	52.2	30.2	21.4	374
Niger	38.0	17.2	343	33.4	16.7	16.3	1,146
Plateau	29.7	20.8	148	37.6	6.5	12.4	419
North East							
Adamawa	55.5	36.2	202	75.8	5.9	25.6	591
Bauchi	61.9	18.7	386	36.3	13.0	13.2	1,095
Borno	51.1	35.7	308	16.2	1.7	3.5	971
Gombe	73.0	46.7	160	21.0	4.1	9.8	476
Taraba	68.2	36.8	201	31.6	0.8	19.5	608
Yobe	31.6	16.8	247	13.8	1.8	6.3	752
North West							
Jigawa	38.8	23.4	432	17.7	2.5	6.7	1,251
Kaduna	56.6	47.2	385	37.3	4.0	6.1	1,286
Kano	43.7	10.6	815	5.4	1.0	1.0	2,418
Katsina	43.5	9.9	483	77.1	2.7	45.2	1,382
Kebbi	50.7	37.8	344	10.7	0.2	1.4	985
Sokoto	48.1	27.1	312	17.9	0.2	2.3	901
Zamfara	24.1	4.8	475	24.5	1.1	0.5	1,225
South East							
Abia	65.3	51.7	92	65.9	5.8	45.5	264
Anambra	72.9	63.9	176	34.1	14.2	31.9	547
Ebonyi	62.0	50.0	208	55.1	15.8	31.3	587
Enugu	74.4	62.1	167	64.6	21.5	38.7	458
Imo	56.3	46.2	168	72.4	4.7	69.0	455
South South							
Akwa Ibom	49.3	39.9	142	60.2	9.8	30.7	392
Bayelsa	75.0	70.7	64	52.9	11.7	30.1	196
Cross River	66.3	55.6	150	83.4	1.2	43.4	439
Delta	52.9	50.8	157	63.9	8.7	36.3	471
Edo	51.7	46.7	120	53.7	2.3	28.7	344
Rivers	83.6	78.9	209	65.4	1.4	73.5	616
South West							
Ekiti	37.2	35.8	54	84.8	14.0	40.8	166
Lagos	54.4	49.8	365	74.1	4.7	51.6	1,103
Ogun	26.7	22.1	212	57.4	2.8	10.2	621
Ondo	58.2	53.5	150	39.3	7.7	21.3	465
Osun	65.2	63.9	140	84.8	13.8	45.6	381
Oyo	53.5	47.0	309	58.1	9.3	14.3	929
Mother's education							
No education	43.6	19.7	4,165	24.9	3.8	9.4	12,493
Primary	55.7	40.6	1,570	47.3	6.9	20.4	5,024
Secondary	60.2	50.7	2,477	59.1	7.5	33.6	6,877
More than secondary	61.6	57.2	606	74.6	9.1	42.5	1,565
Wealth quintile							
Lowest	41.7	15.5	2,018	20.9	2.6	7.9	5,932
Second	47.7	24.9	1,943	30.9	3.9	11.8	5,780
Middle	53.0	37.7	1,688	42.8	7.0	18.8	4,975
Fourth	57.2	47.0	1,609	53.0	7.9	27.7	4,708
Highest	62.3	55.9	1,561	67.3	8.1	39.1	4,565
Total	51.6	34.7	8,818	41.3	5.7	19.9	25,960

Note: Information on vitamin A is based on both mother's recall and the immunization card (where available). Information on iron supplements and deworming medication is based on the mother's recall. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A, and red palm nuts
[2] Includes meat (and organ meat), fish, poultry, and eggs.
[3] Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis.

Vitamin A is an essential micronutrient for the immune system that plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage. VAD can also increase the severity of diseases, such as measles and diarrhoeal diseases in children, and slow recovery from illness. Vitamin A is found in breast milk, other milk, liver, eggs, fish, butter, mangoes, papayas, carrots, pumpkins, and dark green leafy vegetables. The liver can store an adequate amount of the vitamin for four to six months.

Table 11.7 shows that 52 percent of children age 6-23 months consumed foods rich in vitamin A the day or night preceding the survey. The proportion of children consuming vitamin A-rich foods increases with age. Nonbreastfeeding children (72 percent) are more likely to consume foods rich in vitamin A than breastfeeding children (45 percent). Also, urban children are more likely to consume vitamin A-rich foods (59 percent) than children in rural areas (48 percent). Children in the North West zone are least likely to receive vitamin A-rich foods (43 percent). Among the states, children residing in Rivers are most likely to consume vitamin A-rich foods (84 percent), and children in Zamfara (24 percent) are least likely to do so. Mother's education has a positive relationship with consumption of vitamin A-rich foods; 44 percent of children whose mothers have no education consume vitamin A-rich foods, as compared with 62 percent of children whose mothers have a higher education. Children born to families in the highest wealth quintile are more likely than children born to families in the lowest quintile to consume vitamin A-rich foods (62 percent versus 42 percent).

Iron is essential for red blood cell formation and cognitive development, and low iron intake can contribute to anaemia. Iron requirements are greatest at age 6-23 months, when growth is extremely rapid. The results of the 2013 NDHS (Table 11.7) show that 35 percent of children age 6-23 months consumed foods rich in iron in the 24 hours prior to the survey. Consumption of iron-rich foods is highest among children age 18-23 months (47 percent), children in urban areas (49 percent), children in Rivers (79 percent), and children in the highest wealth quintile (56 percent). Children whose mothers have a higher education (57 percent) are more likely to consume iron-rich foods than those whose mothers have no education (20 percent).

Periodic dosing (usually every six months) of vitamin A supplements is one method of ensuring that children at risk do not develop VAD. In Nigeria, campaigns are in place for semiannual mass supplementation with vitamin A capsules.

The 2013 NDHS collected data on vitamin A supplements for children under age 5. Table 11.7 shows that 41 percent of children age 6-59 months were given vitamin A supplements in the six months before the survey. Children age 18-23 months (45 percent), those living in urban areas (53 percent), and those born to women age 30-39 (45 percent) are more likely to receive vitamin A supplementation. There are substantial differences in the proportion of children receiving vitamin A supplements by geographical area, with the highest coverage in the South South (65 percent) and the lowest in the North West (26 percent). Mother's education and wealth have a marked impact on use of vitamin A supplementation. Children of mothers with a higher education are more likely than children of mothers with no education to receive vitamin A supplementation (75 percent and 25 percent, respectively). Similarly, children in the highest wealth quintile are more than three times as likely as children in the lowest quintile to receive supplementation (67 percent and 21 percent, respectively).

As a means of assessing iron supplementation coverage, mothers were asked if their children under age 5 had received an iron tablet or syrup or iron sprinkles in the seven days prior to the survey. Table 11.7 shows that, overall, only 6 percent of children age 6-59 months received iron supplementation.

Certain types of intestinal parasites can cause anaemia. Periodic deworming for organisms such as helminthes can improve children's micronutrient status. Table 11.7 shows that 20 percent of children age 6-59 months received deworming medication in the six months before the survey. Children in urban areas (28 percent) were more likely than children in rural areas (15 percent) to receive deworming medication.

Likelihood of receiving deworming medication increased with child's age, with the highest proportion among children age 18-23 months (23 percent). Seventy-four percent of children in Rivers received deworming medication, as compared with less than 1 percent in Zamfara. Children of mothers age 30-39, children of mothers with a higher education, and children residing in households in the highest wealth quintile were most likely to receive deworming medication.

11.5 NUTRITIONAL STATUS OF WOMEN

The nutritional status of women was assessed with two anthropometric indices: height and body mass index. To derive these indices, the 2013 NDHS took height and weight measurements among women age 15-49 in every household that was selected for an interview. Women who were pregnant and women who had given birth in the two months preceding the survey were excluded from the analysis.

Short stature is associated with poor socioeconomic conditions and inadequate nutrition during childhood and adolescence. In a woman, short stature is a risk factor for poor birth outcomes and obstetric complications. For example, short stature is associated with small pelvic size, which increases the likelihood of difficulty during delivery and the risk of bearing low birth weight babies. A woman is considered to be at risk if her height is below 145 cm.

According to Table 11.8, only 2 percent of women are shorter than 145 cm. Women in rural areas are slightly more likely to be below 145 cm than women in urban areas. Women in Kano are most likely to be short (7 percent). There is no correlation between likelihood of short stature and education or wealth quintile.

BMI (expressed as the ratio of weight in kilograms to the square of height in metres [kg/m^2]) is used to measure thinness or obesity. A BMI below 18.5 kg/m^2 indicates thinness or acute undernutrition, and a BMI of 25.0 kg/m^2 or above indicates overweight or obesity. A BMI below 16 kg/m^2 indicates severe undernutrition and is associated with increased mortality. Low pre-pregnancy BMI, as with short stature, is associated with poor birth outcomes and obstetric complications.

Table 11.8 shows that the mean BMI among women age 15-49 is 23.0 kg/m^2. Mean BMI generally increases with age. Urban women have a mean BMI of 23.9 kg/m^2, while the mean among rural women is 22.3 kg/m^2. There are only small differences among women living in the different zones, although women in the North West have the lowest mean BMI (21.9 kg/m^2). Mean BMI is lower among women with no education (21.9 kg/m^2) than among those with a primary or higher education (23.3 kg/m^2 and 25.4 kg/m^2, respectively). Mean BMI shows a steady increase with increasing wealth, from 21.3 kg/m^2 among women in the lowest wealth quintile to 24.9 kg/m^2 among those in the highest quintile.

Eleven percent of women of reproductive age are thin or undernourished (BMI less than 18.5 kg/m^2). The proportions of mild thinness (17.0-18.4 kg/m^2) and moderate and severe thinness (less than 17 kg/m^2) are 8 percent and 4 percent, respectively. Twenty-three percent of women age 15-19 are thin, as compared with 7 percent of women age 30-39 and 6 percent of women age 40-49. Rural women are more likely to be thin (13 percent) than urban women (10 percent). Women in Gombe and Bauchi (23 percent each) are more likely to be thin than women in other states.

As also indicated in the 2008 NDHS, obesity is a public health problem in Nigeria. Seventeen percent of women are overweight (BMI of 25-29 kg/m^2), and 8 percent are obese (BMI of 30 kg/m^2 or above). Variations in overweight or obesity among women are apparent by background characteristics. The prevalence of overweight and obesity among women of reproductive age increases with age and is higher in urban areas (33 percent) than rural areas (18 percent). In addition, 42 percent of women in the highest wealth quintile are overweight or obese, as compared with only 10 percent of women in the lowest quintile. Overweight or obesity is most prevalent in Lagos (44 percent) and the Federal Capital Territory-Abuja (43 percent).

Table 11.8 Nutritional status of women

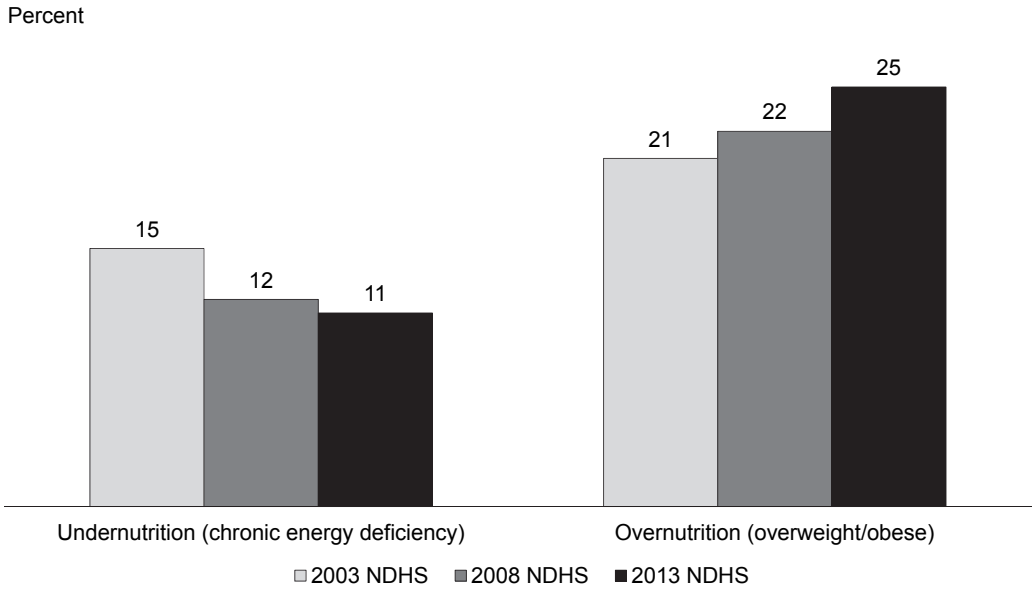
Among women age 15-49, the percentage with height under 145 cm, mean body mass index (BMI), and the percentage with specific BMI levels, by background characteristics, Nigeria 2013

Background characteristic	Height		Body mass index[1]								
				Normal	Thin			Overweight/obese			
	Percentage below 145 cm	Number of women	Mean BMI	18.5-24.9 (total normal)	<18.5 (total thin)	17.0-18.4 (mildly thin)	<17 (moderately and severely thin)	≥25.0 (total overweight or obese)	25.0-29.9 (overweight)	≥30.0 (obese)	Number of women
Age											
15-19	5.2	7,643	20.6	70.9	23.1	13.8	9.3	6.1	4.9	1.1	6,955
20-29	1.4	13,705	22.4	70.4	10.7	7.4	3.3	18.9	14.5	4.4	10,925
30-39	0.8	10,043	24.3	57.8	6.6	4.7	1.9	35.6	23.7	11.8	8,349
40-49	1.0	6,928	24.7	53.5	6.4	4.5	1.9	40.1	26.2	13.9	6,587
Residence											
Urban	1.6	16,139	23.9	57.4	9.6	6.3	3.3	33.0	21.7	11.4	14,313
Rural	2.2	22,181	22.3	69.0	12.8	8.4	4.4	18.2	13.7	4.5	18,502
Zone											
North Central	1.7	5,512	23.2	67.5	7.2	5.3	1.9	25.3	17.7	7.6	4,748
North East	1.4	5,587	22.2	65.5	15.9	10.3	5.5	18.7	13.4	5.3	4,659
North West	3.0	11,716	21.9	68.4	16.0	9.4	6.6	15.6	12.0	3.6	9,522
South East	0.7	4,391	23.8	62.8	7.0	5.3	1.7	30.2	20.8	9.5	3,965
South South	2.7	4,858	23.9	59.9	7.4	5.2	2.3	32.7	22.4	10.3	4,352
South West	1.0	6,255	23.9	55.7	9.8	7.1	2.7	34.5	22.1	12.4	5,569
State											
North Central											
FCT-Abuja	0.8	311	25.0	52.2	4.9	3.6	1.3	42.9	26.3	16.6	281
Benue	2.6	1,231	22.5	73.6	8.0	5.5	2.5	18.4	14.8	3.7	1,042
Kogi	0.6	694	23.5	63.3	9.3	7.6	1.7	27.4	16.8	10.6	621
Kwara	1.6	596	23.6	58.1	10.7	8.1	2.6	31.2	19.3	11.9	546
Nasarawa	2.0	581	23.2	72.3	4.9	3.8	1.2	22.8	16.4	6.4	503
Niger	1.4	1,453	23.0	69.8	6.5	4.7	1.9	23.7	18.1	5.6	1,192
Plateau	1.9	647	23.6	68.4	4.7	3.6	1.1	26.9	18.8	8.1	562
North East											
Adamawa	1.2	819	22.7	62.6	14.5	9.9	4.6	22.9	15.1	7.8	665
Bauchi	2.2	1,119	21.1	63.5	23.1	13.9	9.1	13.4	9.9	3.5	888
Borno	0.6	1,327	22.2	68.3	15.3	10.3	5.0	16.4	11.2	5.2	1,148
Gombe	1.7	536	21.5	60.6	23.4	13.8	9.6	16.0	11.0	5.0	440
Taraba	1.8	835	23.0	67.2	9.1	6.0	3.0	23.7	17.3	6.4	722
Yobe	0.9	950	22.5	67.0	11.8	8.6	3.1	21.2	16.8	4.3	796
North West											
Jigawa	2.1	1,326	21.9	66.3	20.7	14.1	6.6	13.0	7.5	5.5	1,096
Kaduna	0.6	2,086	22.8	67.0	10.1	6.8	3.3	22.9	16.3	6.5	1,628
Kano	7.4	3,148	21.7	64.6	18.7	8.6	10.1	16.7	13.7	2.9	2,662
Katsina	1.4	1,511	21.4	74.9	15.2	11.3	3.8	10.0	7.3	2.7	1,197
Kebbi	0.5	1,238	22.3	71.7	11.1	8.0	3.2	17.2	14.3	2.8	991
Sokoto	2.1	1,086	21.2	67.8	19.3	10.2	9.1	13.0	11.2	1.8	885
Zamfara	2.1	1,323	21.4	72.8	15.8	8.9	7.0	11.4	9.4	2.0	1,061
South East											
Abia	1.2	514	23.7	63.0	6.8	5.2	1.6	30.1	21.1	9.1	465
Anambra	0.3	1,009	24.7	60.6	3.2	2.2	1.0	36.2	26.5	9.7	926
Ebonyi	1.3	1,108	22.0	69.9	12.8	10.2	2.6	17.4	13.3	4.1	984
Enugu	0.3	931	24.0	61.4	5.4	4.5	0.9	33.2	22.1	11.1	843
Imo	0.7	829	24.6	57.5	6.0	3.7	2.3	36.5	21.9	14.7	747
South South											
Akwa Ibom	1.7	845	23.6	59.6	8.2	5.5	2.7	32.2	22.9	9.3	785
Bayelsa	0.3	358	23.9	62.8	5.7	4.2	1.5	31.5	21.7	9.8	310
Cross River	1.6	701	23.3	62.7	8.7	7.2	1.5	28.6	20.7	8.0	622
Delta	5.3	972	23.4	65.5	7.4	4.9	2.5	27.1	20.0	7.1	857
Edo	2.3	725	24.0	58.7	8.0	5.4	2.7	33.3	22.3	11.0	667
Rivers	2.9	1,258	24.7	54.0	6.4	4.2	2.2	39.6	25.1	14.5	1,111
South West											
Ekiti	1.7	326	23.7	63.3	7.3	6.2	1.1	29.4	18.9	10.5	297
Lagos	0.6	1,927	25.2	48.2	7.5	5.6	1.9	44.3	26.1	18.2	1,750
Ogun	1.3	873	23.8	53.2	11.8	8.6	3.2	35.0	23.6	11.3	763
Ondo	0.7	805	23.6	61.1	8.3	6.3	2.0	30.6	20.6	10.0	719
Osun	2.0	762	23.3	62.8	9.2	7.1	2.0	28.1	19.3	8.8	697
Oyo	0.8	1,562	22.9	58.5	13.5	9.0	4.5	28.0	19.2	8.8	1,343
Education											
No education	1.9	14,458	21.9	69.8	14.6	9.3	5.3	15.6	12.0	3.6	11,781
Primary	2.4	6,634	23.3	60.5	10.4	6.8	3.6	29.1	20.3	8.9	5,653
Secondary	2.1	13,706	23.1	63.5	10.8	7.2	3.6	25.7	17.7	8.0	12,196
More than secondary	0.3	3,521	25.4	49.7	4.1	3.1	1.0	46.2	28.7	17.5	3,185
Wealth quintile											
Lowest	2.1	7,008	21.3	72.3	17.5	11.1	6.4	10.1	8.3	1.9	5,654
Second	2.8	7,297	21.8	71.8	13.8	8.7	5.2	14.4	11.5	2.9	6,013
Middle	2.2	7,358	22.5	67.3	11.7	8.0	3.7	20.9	15.8	5.1	6,356
Fourth	1.6	7,905	23.5	60.2	10.0	6.8	3.1	29.9	21.0	8.8	6,927
Highest	1.2	8,751	24.9	52.2	6.3	4.2	2.1	41.5	25.6	15.9	7,865
Total	1.9	38,319	23.0	63.9	11.4	7.5	3.9	24.7	17.2	7.5	32,815

Note: Body mass index is expressed as the ratio of weight in kilograms to the square of height in metres (kg/m^2).
[1] Excludes pregnant women and women with a birth in the preceding 2 months

Figure 11.6 presents trends in women's nutritional status since 2003. There has been a slight decline over time in undernutrition and an increase in the prevalence of overweight among women of reproductive age.

Figure 11.6 **Trends in nutritional status of women**



11.6 MICRONUTRIENT INTAKE AMONG MOTHERS

Adequate micronutrient intake by women has important benefits for both women and their children. Breastfeeding children benefit from micronutrient supplementation that mothers receive, especially vitamin A. Iron supplementation of women during pregnancy protects the mother and infant against anaemia, which is considered a major cause of perinatal and maternal mortality. Anaemia also results in an increased risk of premature delivery and low birth weight. Finally, iodine deficiency is related to a number of adverse pregnancy outcomes including abortion, foetal brain damage and congenital malformation, stillbirth, and prenatal death.

In Nigeria, micronutrient deficiency among pregnant and lactating mothers is a common public health problem. Thus, the 2013 NDHS collected data on the use of vitamin A and iron-folic acid supplements among women age 15-49 with a child born in the past five years, as well as the use of deworming medication during the last pregnancy.

A single dose of vitamin A is typically given to women within 45 days of childbirth, aimed at increasing the mother's vitamin A level and the content of the vitamin in her breast milk for the benefit of her child. Because of the risk of teratogenesis (abnormal development of the foetus) resulting from high doses of vitamin A during pregnancy, the supplement should not be given to pregnant women.

Table 11.9 includes measures that are useful in assessing micronutrient intake by women during pregnancy and the two months after delivery (postpartum period). The findings show that 29 percent of women received a vitamin A dose during the postpartum period, a higher proportion than in 2008 (25 percent). There is substantial variation across geographical areas, with the highest proportion in the South West (58 percent) and the lowest in the North East (9 percent). The proportion of women receiving postpartum vitamin A also differs by urban and rural residence (45 percent and 21 percent, respectively). Women with a higher education are more likely than those with no education to receive a postpartum vitamin A supplement (64 percent and 13 percent, respectively). The coverage of postpartum vitamin A supplementation increases with increasing wealth, from 9 percent in the lowest quintile to 59 percent in the highest quintile.

Table 11.9 Micronutrient intake among mothers

Among women age 15-49 with a child born in the past five years, the percentage who received a vitamin A dose in the first two months after the birth of the last child, the percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child, and the percentage who took deworming medication during the pregnancy of the last child, by background characteristics, Nigeria 2013

Background characteristic	Percentage who received vitamin A dose postpartum[1]	Number of days women took iron tablets or syrup during pregnancy of last birth						Percentage of women who took deworming medication during pregnancy of last birth	Number of women
		None	<60	60-89	90+	Don't know/ missing	Total		
Age									
15-19	17.9	48.0	27.3	7.4	13.2	4.0	100.0	10.7	1,323
20-29	27.7	35.9	32.0	7.6	19.2	5.4	100.0	14.7	9,384
30-39	33.7	32.6	29.5	8.2	24.0	5.6	100.0	14.8	7,420
40-49	28.2	38.6	29.7	7.1	19.0	5.6	100.0	13.7	2,340
Residence									
Urban	44.6	15.0	31.2	12.1	34.1	7.6	100.0	19.3	7,278
Rural	20.8	47.3	30.1	5.3	13.0	4.2	100.0	11.7	13,189
Zone									
North Central	37.4	27.4	46.2	5.1	15.7	5.6	100.0	15.7	2,890
North East	9.0	37.9	23.1	8.3	25.7	5.0	100.0	12.0	3,434
North West	15.9	55.6	29.6	5.5	5.8	3.5	100.0	13.0	7,445
South East	42.4	10.4	31.3	13.3	38.3	6.6	100.0	18.9	1,719
South South	48.0	28.4	26.6	5.9	26.2	12.8	100.0	18.8	2,002
South West	58.0	11.8	28.2	13.1	42.0	5.0	100.0	13.7	2,977
State									
North Central									
FCT-Abuja	50.2	10.3	11.8	4.5	69.7	3.8	100.0	12.8	143
Benue	37.5	43.7	47.1	2.9	3.6	2.7	100.0	16.9	615
Kogi	65.2	13.6	13.5	13.1	47.1	12.7	100.0	21.9	283
Kwara	69.0	3.8	16.3	13.5	57.9	8.4	100.0	22.9	278
Nasarawa	40.8	31.8	61.2	2.3	1.8	3.0	100.0	18.6	309
Niger	19.8	23.2	66.5	3.6	2.5	4.2	100.0	10.2	916
Plateau	27.7	42.6	42.7	2.8	2.4	9.5	100.0	15.7	346
North East									
Adamawa	13.4	15.0	10.3	11.0	61.8	1.8	100.0	17.0	459
Bauchi	6.5	33.0	27.9	10.0	26.1	3.0	100.0	15.2	833
Borno	7.0	59.9	11.7	3.1	15.3	10.1	100.0	1.8	716
Gombe	14.7	24.0	36.7	9.9	26.1	3.4	100.0	31.8	361
Taraba	13.5	37.3	22.4	10.2	22.9	7.2	100.0	7.1	476
Yobe	4.6	44.8	32.3	7.7	11.8	3.4	100.0	7.7	588
North West									
Jigawa	12.5	49.4	36.9	4.6	5.2	3.9	100.0	10.9	973
Kaduna	34.6	33.5	31.6	11.7	21.1	2.1	100.0	18.6	1,051
Kano	6.5	39.6	50.9	6.2	2.3	0.9	100.0	22.6	1,907
Katsina	27.4	66.5	11.7	5.4	5.6	10.8	100.0	15.6	1,066
Kebbi	4.2	77.5	16.1	0.2	0.0	6.3	100.0	3.8	790
Sokoto	1.9	80.2	9.8	5.3	4.3	0.4	100.0	2.5	693
Zamfara	24.4	70.0	23.1	3.1	2.5	1.2	100.0	2.5	966
South East									
Abia	53.7	14.6	44.3	12.7	24.5	3.9	100.0	26.0	199
Anambra	37.4	15.1	30.9	5.9	28.8	19.2	100.0	14.1	379
Ebonyi	35.9	11.5	37.1	21.7	25.4	4.2	100.0	27.5	467
Enugu	37.7	6.4	16.3	12.0	64.7	0.6	100.0	14.1	355
Imo	56.2	5.2	31.9	11.6	47.8	3.5	100.0	12.9	319
South South									
Akwa Ibom	48.2	36.8	49.8	3.2	3.5	6.7	100.0	26.1	334
Bayelsa	29.5	41.0	32.4	6.7	15.4	4.6	100.0	28.0	153
Cross River	66.6	16.8	34.6	7.0	24.1	17.5	100.0	23.0	368
Delta	40.3	38.0	7.4	4.6	45.6	4.4	100.0	13.9	376
Edo	50.3	20.4	35.7	5.5	18.0	20.4	100.0	7.5	264
Rivers	44.5	24.4	13.4	8.0	36.0	18.2	100.0	17.8	508
South West									
Ekiti	50.8	3.6	30.4	11.7	33.6	20.7	100.0	8.6	139
Lagos	80.9	8.5	14.0	15.0	56.2	6.3	100.0	18.1	867
Ogun	51.6	8.2	53.6	12.8	24.4	1.0	100.0	12.0	495
Ondo	46.9	17.8	15.4	13.4	51.7	1.7	100.0	6.3	385
Osun	55.6	1.5	24.8	20.4	53.0	0.3	100.0	23.6	307
Oyo	44.4	20.1	35.0	8.3	30.0	6.7	100.0	10.7	783
Education									
No education	12.5	56.6	27.8	4.3	7.8	3.5	100.0	9.0	9,794
Primary	33.2	25.0	36.1	9.3	23.1	6.6	100.0	16.8	3,915
Secondary	48.4	13.3	32.8	12.0	34.6	7.3	100.0	20.9	5,475
More than secondary	64.0	6.3	24.5	10.9	50.2	8.2	100.0	20.4	1,283
Wealth quintile									
Lowest	9.1	67.7	21.2	3.6	5.3	2.2	100.0	7.3	4,699
Second	16.6	48.7	30.5	5.6	11.1	4.1	100.0	11.7	4,588
Middle	29.9	27.7	38.8	7.6	19.6	6.3	100.0	15.5	3,902
Fourth	41.4	14.0	37.3	11.5	29.7	7.6	100.0	19.8	3,674
Highest	58.8	8.7	26.9	12.1	44.1	8.2	100.0	20.3	3,604
Total	29.3	35.8	30.5	7.7	20.5	5.4	100.0	14.4	20,467

[1] In the first two months after delivery of last birth

Nutritional deficiencies such as anaemia are often exacerbated during pregnancy because of the additional nutrient demands associated with foetal growth. Iron status can be enhanced by including iron supplements in food consumed by women, improving women's diets, and controlling intestinal parasites. Iron supplementation is necessary for pregnant women because their needs are usually too high to be met solely by food intake. According to Table 11.9, 21 percent of women took iron tablets daily for 90 or more days during their last pregnancy. Eight percent took iron supplements for 60 to 89 days, and 31 percent took supplements for less than 60 days. Thirty-six percent of pregnant women did not take iron supplements at all.

The proportion of women taking daily iron supplements for 90 or more days differs substantially between urban and rural areas (34 percent and 13 percent, respectively). Seventy percent of pregnant women in the Federal Capital Territory-Abuja took iron supplements daily for 90 or more days, while none of the women in Kebbi did so. Women with a higher education are more likely to take iron tablets for 90 days or more (50 percent) than women with no education (8 percent). Women in the highest wealth quintile are much more likely than those in the lowest quintile to take iron tablets for 90 or more days (44 percent versus 5 percent).

Infections caused by helminthes (intestinal parasites) are one of the factors contributing to anaemia among pregnant women. Deworming during pregnancy is a cost-effective intervention against intestinal worms that allows better absorption of nutrients and iron, thus reducing the prevalence of anaemia.

Table 11.9 shows that 14 percent of women took deworming medication during their last pregnancy. Urban women were more likely than rural women to take deworming medication during pregnancy (19 percent and 12 percent, respectively). Also, women in the South East and South South (19 percent each) were more likely than women in the North East (12 percent) to take deworming medication. Women with no education and those in the lowest wealth quintile were less likely than other women to take deworming medication during their pregnancy.

MALARIA 12

Key Findings

- Fifty-five percent of households have at least one mosquito net, 50 percent have at least one insecticide-treated mosquito net (ITN), and 48 percent have at least one long-lasting insecticidal net.
- Two percent of households reported that they had received indoor residual spraying (IRS) during the past 12 months.
- Fifty percent of households have at least one ITN and/or have had IRS in the last 12 months.
- Twenty-three percent of households have at least one ITN for every two people and/or have had IRS in the last 12 months.
- Overall, 36 percent of households have access to an insecticide-treated net.
- Twenty-four percent of the household population in households with at least one ITN slept under an ITN the night before the survey, and 18 percent of children under age 5 slept under a mosquito net.
- Among households with at least one ITN, 28 percent of children under age 5 slept under an ITN.
- Overall, 18 percent of pregnant women slept under some type of mosquito net the night before the survey.
- Among pregnant women living in households that possess an ITN, 3 in 10 slept under an ITN the night before the survey.
- Twenty-three percent of women who had their last birth in the two years preceding the survey received intermittent preventive treatment during their pregnancy; that is, they took two or more doses of sulphadoxine-pyrimethamine (SP)/Fansidar and received at least one dose during an antenatal care visit.
- While advice or treatment was sought for 70 percent of children with a fever, only 4 percent had artemisinin-based combination therapy (ACT) the same or next day.
- Chloroquine and SP continue to be the most common antimalarial drugs taken by children (31 percent each), while 18 percent receive ACT.

Malaria is endemic in Nigeria, with year-round transmission. Rates of transmission are slightly lower in the Sahel regions and the high mountain area of the plateau. *Plasmodium falciparum* is the predominant parasite species, mainly transmitted by *Anopheles gambiae S.S.*, *An. funestus*, and *An. arabiensis*. Prior to 2010, available data were insufficient to clearly micro-stratify the country's malaria epidemiological profile. However, the 2010 Nigeria Malaria Indicators Survey revealed that malaria parasite prevalence is still high, with an average prevalence of 42 percent among children under age 5 and zonal variations ranging from 28 percent in the South East to 50 percent in the South West (National Population Commission, National Malaria Control Programme, and ICF International, 2012).

Malaria remains an important cause of morbidity and mortality in Nigeria. Nigeria accounted for 32 percent of the global estimate of 655,000 malaria deaths in 2010 (World Health Organization, 2012). An estimated 97 percent of the country's approximate population of 160 million residents are at risk of malaria. Children under age 5 and pregnant women are the groups most vulnerable to illness and death from malaria infection in Nigeria. In addition to the direct health impact of malaria, there are also severe

social and economic burdens on communities and the country as a whole, with about 480 billion Naira lost to malaria annually in the form of treatment costs, prevention efforts, loss of work time, and so forth (Sach, 2001, as cited by Federal Ministry of Health [FMoH], 2012).

The National Malaria Control Strategic Plan (NMCSP) addresses national health and development priorities including the Roll Back Malaria goals and the Millennium Development Goals. The NMCSP includes the following priorities: reducing malaria-related mortality, reducing malaria parasite prevalence in children under age 5, increasing possession and use of insecticide-treated nets (ITNs) and long-lasting insecticidal nets (LLINs), introducing and scaling up indoor residual spraying (IRS), increasing the use of diagnostic tests for fever patients, improving efforts related to appropriate and timely treatment of malaria, and increasing coverage of intermittent preventive treatment (IPT) of malaria during pregnancy. The NMCSP outlined specific targets to be achieved by 2010 and sustained through 2013 (FMoH, 2009).

The 2009-2013 NMCSP addressed malaria control through three core interventions: prevention of malaria transmission through an integrated vector management strategy, prompt diagnosis and adequate treatment of clinical cases at all levels and in all sectors of health care, and prevention and treatment of malaria in pregnancy. Through the NMCSP, approximately 60 million LLINs (with a massive influx of resources from donors) were distributed in an effort to achieve universal access and universal coverage (FMoH, 2009).

Moreover, a new 2014-2020 national strategic plan for malaria control has been developed in Nigeria that includes massive scaling up of interventions. It is expected that such massive deployment of effective interventions will change the epidemiological profile of malaria in the country (FMoH, 2013b).

12.1 MOSQUITO NETS

The use of ITNs is currently considered the most cost-effective method of malaria prevention in highly endemic areas. The use of ITNs or LLINs is the main method of malaria prevention employed in Nigeria. Free LLINs are distributed through mass campaigns, public health facilities, faith-based organisations, nongovernmental organisations (NGOs), retail commercial outlets, and maternal and child health weeks with the goal of achieving universal access.

Nets are distributed through stand-alone campaigns and through integration with other interventions such as measles vaccination. Nigeria implements a nationwide, routine LLIN distribution system through health facilities that is modelled on the modified ITN Massive Promotion and Awareness Campaign (IMPAC) system. Under this system, pregnant women attending antenatal clinics receive an LLIN at first attendance, and children receive an LLIN on completion of their third dose of the diphtheria, pertussis, and tetanus vaccine (DPT3).

All households in the 2013 NDHS were asked whether they possess a mosquito net and, if so, how many. Table 12.1 shows the percentage of households with any mosquito net, insecticide-treated mosquito net, or long-lasting insecticidal net, by background characteristics. Possession of ITNs among surveyed households measures access to effective personal protection from malaria parasite-carrying mosquitoes.

Table 12.1 Household possession of mosquito nets

Percentage of households with at least one mosquito net (treated or untreated), insecticide-treated net (ITN), and long-lasting insecticidal net (LLIN); average number of nets, ITNs, and LLINs per household; and percentage of households with at least one net, ITN, and LLIN per two persons who stayed in the household the night before the survey, by background characteristics, Nigeria 2013

Background characteristic	Percentage of households with at least one mosquito net			Average number of nets per household			Number of households	Percentage of households with at least one net for every two persons who stayed in the household the night before the survey[1]			Number of households with at least one person who stayed in the household the night before the survey
	Any mosquito net	Insecticide-treated mosquito net (ITN)[2]	Long-lasting insecticidal net (LLIN)	Any mosquito net	Insecticide-treated mosquito net (ITN)[2]	Long-lasting insecticidal net (LLIN)		Any mosquito net	Insecticide-treated mosquito net (ITN)[2]	Long-lasting insecticidal net (LLIN)	
Residence											
Urban	48.2	42.1	39.8	0.9	0.8	0.7	16,609	21.8	18.9	17.7	16,576
Rural	60.7	55.2	54.3	1.2	1.1	1.1	21,913	27.0	24.6	24.1	21,881
Zone											
North Central	54.4	49.6	48.9	1.1	1.0	1.0	5,942	24.9	22.8	22.5	5,918
North East	64.9	60.9	60.6	1.4	1.3	1.3	5,115	28.7	26.0	25.8	5,114
North West	57.7	49.2	49.0	1.2	1.0	1.0	9,992	20.5	17.7	17.7	9,986
South East	63.8	57.1	55.1	1.2	1.0	1.0	4,687	33.9	30.3	29.0	4,686
South South	46.6	42.7	40.1	0.9	0.8	0.7	5,239	23.1	21.2	19.9	5,234
South West	47.2	42.3	38.7	0.8	0.7	0.6	7,546	23.1	20.4	18.6	7,520
State											
North Central											
FCT-Abuja	37.4	27.4	25.0	0.7	0.5	0.4	361	16.6	12.1	11.0	361
Benue	74.6	73.2	73.0	1.6	1.5	1.5	1,365	41.5	40.7	40.5	1,351
Kogi	29.4	25.5	23.8	0.5	0.4	0.4	876	14.1	12.1	11.6	876
Kwara	54.2	34.0	33.1	0.9	0.6	0.6	617	21.5	12.8	12.4	616
Nasarawa	58.6	52.7	52.0	1.2	1.1	1.1	550	24.3	21.6	21.4	546
Niger	50.9	49.4	49.4	1.0	1.0	1.0	1,504	18.6	18.2	18.2	1,500
Plateau	59.7	57.2	56.9	1.2	1.1	1.1	669	28.0	26.6	26.5	667
North East											
Adamawa	74.8	72.8	72.8	1.7	1.7	1.7	726	36.7	35.2	35.2	725
Bauchi	70.2	68.8	68.8	1.6	1.5	1.5	932	24.9	23.7	23.7	932
Borno	58.0	50.2	49.4	1.1	0.9	0.9	1,560	31.2	25.6	25.0	1,560
Gombe	74.5	71.2	71.2	1.7	1.6	1.6	464	28.5	27.2	27.2	464
Taraba	62.0	59.4	59.3	1.2	1.2	1.2	634	22.5	21.3	21.2	634
Yobe	59.7	56.9	56.6	1.2	1.2	1.2	799	25.9	24.3	24.2	799
North West											
Jigawa	75.3	57.7	56.9	1.7	1.3	1.2	1,152	32.2	23.9	23.8	1,151
Kaduna	35.3	24.9	24.4	0.6	0.4	0.4	1,915	13.1	9.2	9.0	1,913
Kano	47.2	33.8	33.6	0.8	0.6	0.6	2,606	11.9	9.3	9.2	2,606
Katsina	67.9	67.3	67.2	1.4	1.4	1.4	1,257	24.0	23.7	23.7	1,255
Kebbi	64.2	60.3	60.3	1.3	1.2	1.2	1,069	21.8	20.5	20.5	1,069
Sokoto	58.7	56.0	56.0	1.3	1.2	1.2	898	21.1	20.2	20.2	897
Zamfara	84.2	82.3	82.3	1.9	1.8	1.8	1,096	35.5	34.6	34.6	1,096
South East											
Abia	60.0	59.6	59.3	1.1	1.1	1.1	644	35.4	34.9	34.7	644
Anambra	55.1	47.2	45.4	0.9	0.8	0.7	1,050	23.4	18.9	17.7	1,049
Ebonyi	60.2	57.7	57.4	1.2	1.1	1.1	978	28.7	27.3	27.2	978
Enugu	65.4	46.5	43.7	1.3	0.9	0.8	920	34.9	25.2	23.8	920
Imo	76.3	73.7	69.6	1.5	1.4	1.3	1,096	46.9	45.3	42.6	1,096
South South											
Akwa Ibom	45.6	43.6	42.8	0.8	0.8	0.8	892	19.8	19.2	18.7	891
Bayelsa	48.9	46.7	45.5	1.0	0.9	0.9	322	20.6	19.9	19.2	322
Cross River	66.5	57.9	56.3	1.2	1.0	1.0	848	34.9	29.6	29.0	847
Delta	42.1	38.7	34.2	0.7	0.7	0.6	946	21.2	19.3	17.6	945
Edo	62.0	61.0	54.1	1.2	1.2	1.1	702	28.6	28.0	24.3	700
Rivers	31.2	27.0	25.7	0.6	0.5	0.5	1,529	17.7	15.9	15.2	1,529
South West											
Ekiti	46.9	43.3	42.2	0.8	0.7	0.7	376	21.6	19.5	18.8	375
Lagos	57.6	48.0	42.9	1.0	0.8	0.7	2,240	29.1	23.3	20.6	2,225
Ogun	38.0	37.8	37.8	0.6	0.6	0.6	1,355	18.6	18.6	18.6	1,353
Ondo	64.9	58.4	52.0	1.2	1.1	1.0	920	36.6	32.6	28.7	918
Osun	24.8	23.1	17.6	0.4	0.4	0.3	853	9.4	9.0	7.3	850
Oyo	42.9	39.1	36.8	0.7	0.7	0.6	1,802	19.0	17.5	16.2	1,799
Wealth quintile											
Lowest	60.7	55.1	55.0	1.3	1.1	1.1	6,245	23.0	20.8	20.8	6,241
Second	60.7	54.6	53.8	1.2	1.1	1.1	7,166	25.7	23.1	22.8	7,159
Middle	58.6	52.5	51.3	1.1	1.0	1.0	7,894	28.5	25.7	25.2	7,871
Fourth	50.9	45.8	43.6	0.9	0.9	0.8	8,310	23.5	21.2	20.1	8,296
Highest	48.4	42.5	39.8	0.9	0.8	0.7	8,907	23.1	19.9	18.4	8,889
Total	55.3	49.5	48.0	1.1	1.0	0.9	38,522	24.8	22.1	21.4	38,457

[1] De facto household members
[2] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) a pretreated net obtained within the past 12 months.

The 2013 NDHS results indicate that 55 percent of households in Nigeria possess at least one mosquito net (treated or untreated), 50 percent possess at least one ITN, and 48 percent possess at least one LLIN. On average, each household possesses one mosquito net of any type. The majority of mosquito nets in Nigeria are LLINs. Twenty-five percent of households had at least one net for every two persons who stayed in the household the night before the survey; 22 percent had at least one ITN, and 21 percent had at least one LLIN.

More rural households (61 percent) than urban households (48 percent) possess any mosquito net. Similarly, possession of ITNs (55 percent versus 42 percent) and LLINs (54 percent versus 40 percent) is greater in rural than urban areas. Possession of mosquito nets varies by zone as well. The percentage of households that own any mosquito net in the northern zones ranges from 54 percent in the North Central zone to 65 percent in the North East, while the percentage in the Southern zones ranges from 47 percent in the South South and South West to 64 percent in the South East. Possession of any type of mosquito net is highest among households in the North East and lowest in the South West. Among the states, possession of any mosquito net varies markedly. In six states—Kogi, Kaduna, Rivers, Osun, Ogun, and FCT-Abuja—less than 40 percent of households possess any mosquito net, while in the remaining 31 states more than 40 percent possess a mosquito net, with the highest proportion in Zamfara (84 percent). Possession of ITNs and LLINs shows similar variations across states. Possession of any type of mosquito net decreases with increasing wealth quintile.

12.2 INDOOR RESIDUAL SPRAYING

Indoor residual spraying (IRS) is another component of efforts to control malaria transmission in Nigeria. To obtain information on coverage of indoor residual spraying, all households interviewed in the 2013 NDHS were asked whether the interior walls of their dwelling had been sprayed against mosquitoes during the 12-month period before the survey and, if so, who had sprayed the dwelling. Part of the new strategy in the fight against malaria is to increase IRS coverage in Nigeria.[1]

Households are considered to be covered if they own at least one ITN and/or the dwelling has been sprayed at any time in the past 12 months. Table 12.2 indicates that only 2 percent of households reported having been sprayed in the past 12 months. However, 50 percent of households are covered through having at least one ITN and/or having had IRS in the past 12 months. Twenty-three percent of households have at least one ITN for every two persons and/or have had IRS in the last 12 months. Slightly more rural households (2 percent) than urban households (1 percent) reported that someone has come into their dwelling to spray the interior walls against mosquitoes. The states with the highest percentages of IRS are Jigawa (15 percent), Yobe (10 percent), and Nasarawa (6 percent).

[1] The goal is for at least 80 percent of the targeted population to use appropriate preventive measures by 2020. One of the core technical strategies is to expand universal access to insecticide-treated materials. This will involve sustained mass distribution of long-lasting insecticidal nets, significantly scaling up indoor residual spraying, and expanding larval source management (larviciding and environmental management). There will also be support for intermittent preventive therapy and seasonal malaria chemoprevention.

Table 12.2 Indoor residual spraying against mosquitoes

Percentage of households in which someone has come into the dwelling to spray the interior walls against mosquitoes (IRS) in the past 12 months, the percentage of households with at least one ITN and/or IRS in the past 12 months, and the percentage of households with at least one ITN for every two persons and/or IRS in the past 12 months, by background characteristics, Nigeria 2013

Background characteristic	Percentage of households with IRS[1] in the past 12 months	Percentage of households with at least one ITN[2] and/or IRS in the past 12 months	Percentage of households with at least one ITN[2] for every two persons and/or IRS in the past 12 months	Number of households
Residence				
Urban	2.4	43.0	20.6	16,609
Rural	1.1	55.6	25.3	21,913
Zone				
North Central	1.1	50.1	23.5	5,942
North East	2.4	61.2	27.5	5,115
North West	2.4	50.1	19.6	9,992
South East	1.0	57.5	31.0	4,687
South South	1.4	43.5	22.2	5,239
South West	1.4	42.7	21.2	7,546
State				
North Central				
FCT-Abuja	3.9	29.5	15.3	361
Benue	0.0	73.2	40.2	1,365
Kogi	0.6	25.9	12.8	876
Kwara	0.0	34.0	12.8	617
Nasarawa	6.3	56.0	26.2	550
Niger	0.4	49.4	18.5	1,504
Plateau	0.6	57.3	26.9	669
North East				
Adamawa	0.1	72.8	35.3	726
Bauchi	2.8	69.3	25.6	932
Borno	0.2	50.2	25.8	1,560
Gombe	2.9	71.7	29.2	464
Taraba	0.1	59.4	21.3	634
Yobe	9.9	58.0	29.9	799
North West				
Jigawa	15.4	63.1	35.4	1,152
Kaduna	0.4	25.2	9.6	1,915
Kano	0.2	33.8	9.5	2,606
Katsina	0.0	67.3	23.6	1,257
Kebbi	0.3	60.3	20.6	1,069
Sokoto	5.0	58.3	24.4	898
Zamfara	0.0	82.3	34.7	1,096
South East				
Abia	4.3	61.0	38.4	644
Anambra	0.4	47.2	19.1	1,050
Ebonyi	0.3	57.9	27.5	978
Enugu	0.2	46.6	25.3	920
Imo	0.8	74.0	45.9	1,096
South South				
Akwa Ibom	0.7	43.8	19.5	892
Bayelsa	0.8	46.7	20.0	322
Cross River	0.5	57.9	29.7	848
Delta	3.3	41.1	22.5	946
Edo	0.6	61.2	28.4	702
Rivers	1.7	28.0	17.1	1,529
South West				
Ekiti	0.7	43.4	20.0	376
Lagos	4.4	49.6	26.0	2,240
Ogun	0.0	37.8	18.6	1,355
Ondo	0.2	58.5	32.7	920
Osun	0.0	23.1	8.9	853
Oyo	0.0	39.1	17.5	1,802
Wealth quintile				
Lowest	1.2	55.4	21.7	6,245
Second	1.2	55.0	24.0	7,166
Middle	1.6	53.2	26.9	7,894
Fourth	2.0	46.4	22.7	8,310
Highest	2.1	43.3	21.3	8,907
Total	1.7	50.1	23.3	38,522

[1] Indoor residual spraying (IRS) is limited to spraying conducted by a government, private, or nongovernmental organisation.
[2] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) a pretreated net obtained within the past 12 months.

Among households with IRS, 69 percent reported that government workers or government-sponsored programmes sprayed their dwelling (Table 12.3). Ten percent of households with IRS reported that a private company sprayed the dwelling's interior walls against mosquitoes, while 3 percent reported that NGOs provided this service. In both rural (78 percent) and urban (63 percent) areas, government workers or government-sponsored programmes are reported as the main provider of IRS. Thirteen percent of urban households reported that a private company sprayed their interior walls, as compared with 5 percent of rural households, while 3 percent of urban households and 4 percent of rural households reported that an NGO sprayed their dwelling. Reports of government workers or programmes as the primary source of IRS ranged from a high of 87 percent of households in the North West to a low of 44 percent of households in the South West. Also, households in the lower wealth quintiles were more likely to have been sprayed by government workers or programmes than households in the higher wealth quintiles. Twenty-six percent of households in the highest wealth quintile reported that a private company sprayed their dwelling.

Table 12.3 Source of IRS

Among households in which someone has come into the dwelling to spray interior walls against mosquitoes in the past 12 months, percentage who received the spraying from various organisations, Nigeria 2013

Background characteristic	Government worker/ programme	Private company	Non-governmental organisation (NGO)	Other	Don't know/ missing	Number of households sprayed in past 12 months
Residence						
Urban	63.2	12.7	2.6	6.9	6.5	515
Rural	78.0	5.3	4.0	1.7	2.2	281
Zone						
North Central	52.6	9.9	4.3	8.2	10.7	97
North East	77.5	0.8	6.8	1.1	6.0	146
North West	87.2	0.0	1.2	0.0	3.4	270
South East	74.2	20.8	3.0	0.0	0.0	47
South South	50.7	28.9	5.8	7.9	3.3	86
South West	44.4	23.4	0.8	16.1	5.4	150
Wealth quintile						
Lowest	83.5	0.7	1.8	0.0	4.1	86
Second	78.7	0.2	3.4	0.0	4.5	108
Middle	83.8	1.9	3.1	0.7	4.1	147
Fourth	79.4	4.4	3.6	1.6	4.9	194
Highest	42.6	26.1	3.0	13.8	6.0	262
Total	68.5	10.1	3.1	5.1	5.0	796

12.3 ACCESS TO AN INSECTICIDE-TREATED NET (ITN)

The 2013 NDHS asked about access to mosquito nets among household members during the night before the survey. Access to an ITN on the night before the survey is taken as typical net usage. The proportion of the household population sleeping under an ITN is a key indicator of the effectiveness of the malaria programme in Nigeria.

Table 12.4 shows that, overall, 36 percent of the de facto population who stayed in the household the night before the survey could sleep under an ITN if each net were used by a maximum of two people. Access to an ITN varies according to the number of people who stayed in the household the night before the survey. Forty-five percent of households with four people had access to an ITN. Similarly, 43 percent each of households with two people and households with three people had access to an ITN.

Table 12.4 Access to an insecticide-treated net (ITN)

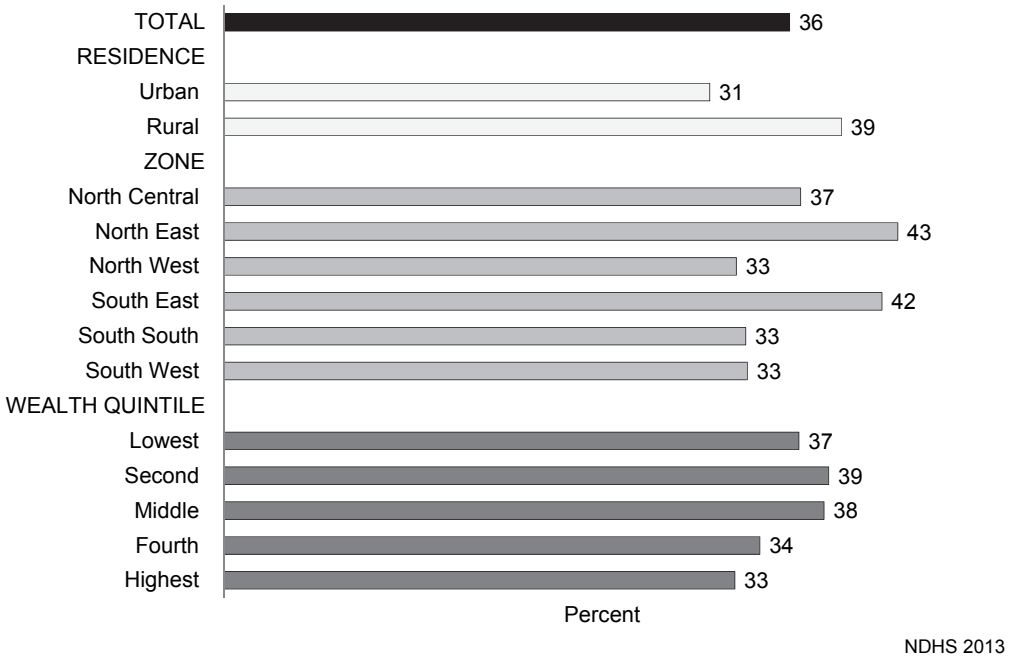
Percent distribution of the de facto household population by number of ITNs the household owns, according to number of persons who stayed in the household the night before the survey, Nigeria 2013

	Number of persons who stayed in the household the night before the survey								
Number of ITNs	1	2	3	4	5	6	7	8+	Total
0	68.8	57.1	50.0	46.1	45.3	44.5	42.4	41.2	45.5
1	21.5	21.4	19.8	18.3	14.9	13.6	12.3	7.4	13.4
2	8.6	19.4	25.6	28.5	30.7	28.9	28.8	21.9	25.3
3	1.0	1.9	4.2	6.5	8.3	11.2	14.5	21.5	12.5
4	0.0	0.2	0.3	0.5	0.5	1.3	1.4	3.6	1.7
5	0.0	0.0	0.1	0.1	0.1	0.3	0.5	1.1	0.5
6	0.0	0.0	0.0	0.0	0.2	0.2	0.2	2.5	0.9
7+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	6,173	9,354	15,956	20,561	23,924	23,722	19,114	57,771	176,574
Percent with access to an ITN[1]	31.2	42.9	43.4	44.7	39.6	36.8	34.4	29.1	36.1

[1] Percentage of the de facto household population that could sleep under an ITN if each ITN in the household were used by up to two people

Figure 12.1 shows the percentage of the de facto household population with access to an ITN, by background characteristics. A higher percentage of rural than urban households have access to an ITN (39 percent and 31 percent, respectively). In three zones—the North Central (37 percent), North East (43 percent), and South East (42 percent)—the percentage of the household population with access to an ITN is higher than the national average (36 percent). There is no clear pattern between household wealth and access to an ITN.

Figure 12.1 **Percentage of the de facto population with access to an ITN in the household, by background characteristics, 2013**



NDHS 2013

12.4 USE OF MOSQUITO NETS BY PERSONS IN THE HOUSEHOLD

The 2013 NDHS asked about use of mosquito nets by household members during the night before the survey. Table 12.5 shows that 14 percent of the de facto household population slept under any mosquito net the night before the survey; 13 percent slept under an ITN, and 13 percent slept under an LLIN.

It is interesting to note that only 24 percent of the population in households with at least one ITN slept under an ITN the night before the survey. However, since use of mosquito nets is seasonal, this result should be assessed with caution. Net usage on the night before the survey may not be representative of the pattern of use during periods of high malaria transmission.

The percentage of the household population that slept under any net varies by age. For example, 11 percent of children age 5-14 slept under a net, as compared with 18 percent of children less than age 5.

Table 12.5 Use of mosquito nets by persons in the household

Percentage of the de facto household population that slept the night before the survey under a mosquito net (treated or untreated), under an insecticide-treated net (ITN), under a long-lasting insecticidal net (LLIN), and under an ITN or in a dwelling in which the interior walls have been sprayed against mosquitoes (IRS) in the past 12 months, and among the de facto household population in households with at least one ITN, the percentage who slept under an ITN the night before the survey, by background characteristics, Nigeria 2013

	Household population					Household population in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any net the night before the survey	Percentage who slept under an ITN[1] the night before the survey	Percentage who slept under an LLIN the night before the survey	Percentage who slept under an ITN[1] the night before the survey or in a dwelling sprayed with IRS[2] in the past 12 months	Number	Percentage who slept under an ITN[1] the night before the survey	Number
Age (in years)[3]							
<5	18.2	16.6	16.1	17.9	30,327	28.4	17,664
5-14	10.9	9.8	9.5	11.4	50,337	17.5	28,249
15-34	13.5	12.2	11.9	13.6	51,969	23.7	26,865
35-39	16.2	14.7	14.3	16.2	23,686	27.0	12,896
50+	16.8	15.1	14.5	16.3	20,211	28.9	10,540
Sex[4]							
Male	13.1	11.9	11.5	13.4	87,034	22.0	46,808
Female	15.5	14.0	13.6	15.3	89,529	25.4	49,419
Residence							
Urban	13.9	12.6	12.0	14.7	70,439	26.6	33,346
Rural	14.6	13.2	12.9	14.2	106,135	22.2	62,890
Zone							
North Central	14.9	13.4	13.2	14.5	26,922	24.5	14,753
North East	10.7	10.1	10.1	12.0	26,898	15.6	17,513
North West	12.3	10.8	10.7	12.6	56,241	20.5	29,678
South East	19.8	17.9	17.2	18.8	18,960	29.8	11,352
South South	16.3	14.7	14.0	16.2	20,159	30.5	9,722
South West	16.1	14.8	13.8	15.8	27,394	30.7	13,219
State							
North Central							
FCT-Abuja	15.8	12.1	11.2	16.3	1,352	36.2	453
Benue	23.6	23.3	23.2	23.3	5,949	30.1	4,603
Kogi	9.1	7.6	7.0	7.9	3,186	25.3	950
Kwara	19.0	11.8	11.4	11.8	2,640	30.4	1,022
Nasarawa	12.9	11.4	11.3	16.3	2,867	18.9	1,726
Niger	9.3	9.0	9.0	9.7	7,791	16.9	4,175
Plateau	15.8	15.4	15.2	16.0	3,137	26.5	1,823
North East							
Adamawa	11.0	10.8	10.8	10.9	3,763	14.2	2,854
Bauchi	5.7	5.6	5.6	9.0	5,701	7.7	4,140
Borno	9.6	8.6	8.6	9.1	6,423	15.2	3,639
Gombe	11.9	11.0	11.0	13.1	2,787	15.0	2,049
Taraba	11.9	11.3	11.2	11.5	3,618	18.6	2,192
Yobe	16.4	16.0	16.0	20.4	4,606	28.0	2,639

Continued…

Table 12.5—*Continued*

Background characteristic	Household population					Household population in households with at least one ITN[1]	
	Percentage who slept under any net the night before the survey	Percentage who slept under an ITN[1] the night before the survey	Percentage who slept under an LLIN the night before the survey	Percentage who slept under an ITN[1] the night before the survey or in a dwelling sprayed with IRS[2] in the past 12 months	Number	Percentage who slept under an ITN[1] the night before the survey	Number
North West							
Jigawa	25.5	19.9	19.6	31.0	6,448	32.4	3,969
Kaduna	4.9	3.9	3.7	4.3	9,078	14.1	2,493
Kano	7.1	5.3	5.2	5.5	15,677	14.4	5,765
Katsina	21.2	21.0	20.9	21.0	7,423	30.3	5,155
Kebbi	19.5	18.8	18.8	18.9	6,314	30.2	3,932
Sokoto	8.9	8.5	8.5	12.8	5,086	13.9	3,106
Zamfara	7.8	7.2	7.2	7.2	6,215	8.5	5,256
South East							
Abia	19.0	18.7	18.4	24.8	2,337	29.9	1,461
Anambra	11.5	9.8	9.5	10.0	4,338	18.7	2,272
Ebonyi	23.5	23.1	23.0	23.2	4,476	38.3	2,695
Enugu	20.4	14.7	13.9	14.8	3,894	31.1	1,834
Imo	24.5	23.6	21.9	24.1	3,916	29.9	3,091
South South							
Akwa Ibom	15.3	14.4	14.1	15.1	3,649	29.3	1,786
Bayelsa	20.6	19.2	18.6	19.9	1,520	37.2	786
Cross River	29.1	25.1	24.3	25.3	3,268	41.4	1,984
Delta	9.4	7.6	6.9	11.5	3,800	17.7	1,623
Edo	15.9	15.6	13.7	16.3	2,997	23.3	2,007
Rivers	12.7	11.7	11.4	13.4	4,924	37.5	1,536
South West							
Ekiti	17.8	16.6	16.1	17.3	1,375	33.9	675
Lagos	14.8	13.1	12.2	16.3	8,157	24.3	4,416
Ogun	17.0	17.0	17.0	17.0	4,113	37.2	1,882
Ondo	25.6	22.1	19.6	22.3	3,522	35.0	2,225
Osun	4.7	4.4	3.6	4.4	3,223	16.0	885
Oyo	17.3	16.2	15.2	16.2	7,003	36.2	3,136
Wealth quintile							
Lowest	10.3	9.4	9.4	10.3	35,222	16.4	20,252
Second	16.3	14.6	14.4	15.6	35,167	25.1	20,477
Middle	17.7	16.0	15.6	17.5	35,356	28.0	20,180
Fourth	14.0	12.7	12.1	14.7	35,410	24.4	18,397
Highest	13.2	12.0	11.3	13.9	35,418	25.0	16,930
Total	14.3	12.9	12.6	14.4	176,574	23.7	96,236

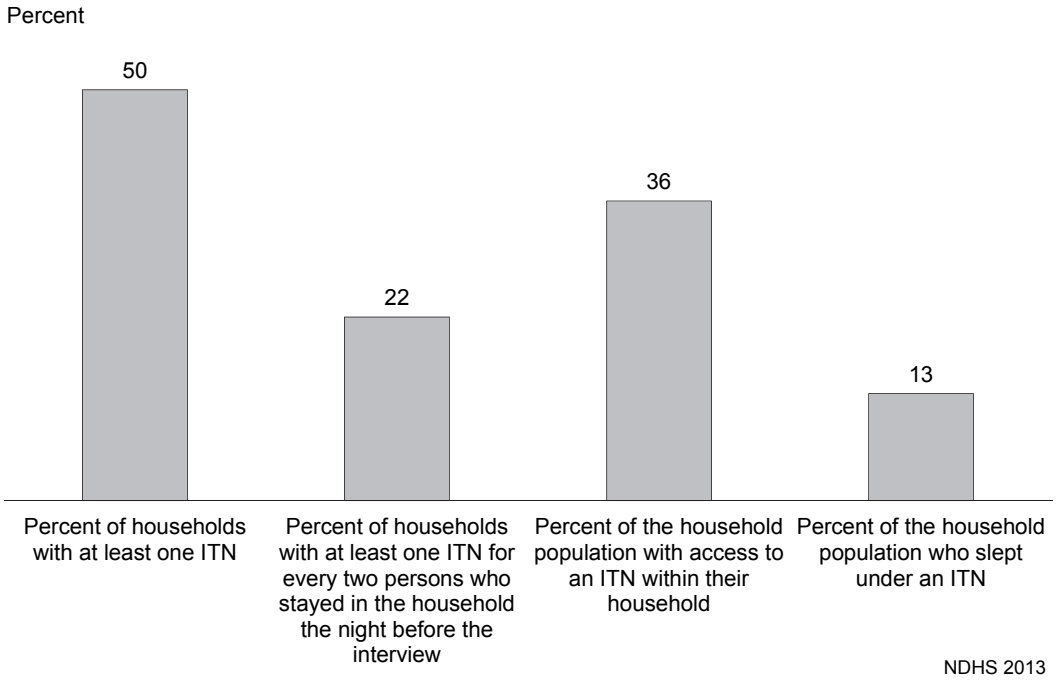
[1] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) a pretreated net obtained within the past 12 months.
[2] Indoor residual spraying (IRS) is limited to spraying conducted by a government, private, or nongovernmental organisation.
[3] Excludes 45 cases with missing information on age
[4] Excludes 11 cases with missing information on sex

Among zones, the percentage of the household population that slept under any mosquito net ranged from 11 percent in the North East to 20 percent in the South East. The use of mosquito nets varied among the states. Ten percent or less of the household population in 10 states—Kogi, Niger, Adamawa, Kaduna, Kano, Delta, Sokoto, Bauchi, Zamfara, and Osun—slept under any type of mosquito net the night before the survey. The percentages of the household population that slept under any net the night before the survey were highest in Cross River (29 percent), Ondo and Jigawa (26 percent each), and Imo (25 percent). Similar state patterns were observed for the proportion of the household population that slept under an ITN or LLIN and for the proportion that slept under ITN and/or had their dwelling sprayed in the last 12 months.

Although mosquito net use varies according to wealth, there is no distinct pattern. The proportion of the household population that slept under any mosquito net the night before the survey rises from a low of 10 percent in the lowest wealth quintile to a high of 18 percent in the middle quintile before decreasing to 14 percent in the fourth quintile and 13 percent in the highest quintile. Similar variations were seen for the proportion of the household population that slept under an ITN or LLIN and the proportion that slept under an ITN or had their dwelling sprayed in the last 12 months.

Figure 12.2 shows that 50 percent of households have at least one ITN. One in five households have at least one ITN for every two persons who stayed in the household the night before the survey. Thirty-six percent of the household population had access to an ITN, and 13 percent slept under an ITN.

Figure 12.2 **Ownership of, access to, and use of ITNs**



12.5 USE OF EXISTING ITNS

Table 12.6 shows that 35 percent of the ITNs reported as owned by households were used by someone in the household the night before the survey. The percentage of use of existing ITNs is lower in rural areas than in urban areas (33 percent and 38 percent, respectively).

A comparison by zones shows that the percentage of use is higher in all southern zones than in the northern zones. The South South has the highest usage (41 percent), while the North East has the lowest (24 percent). The South East and South West have equal proportions of use (39 percent). Use of existing ITNs varies among the states as well. FCT-Abuja has the highest usage (54 percent) and Bauchi the lowest (12 percent). By wealth, the proportion of net usage is highest in the middle wealth quintile (41 percent) and lowest in the lowest wealth quintile (25 percent).

Table 12.6 Use of existing ITNs

Percentage of insecticide-treated nets (ITNs) that were used by anyone the night before the survey, by background characteristics, Nigeria 2013

Background characteristic	Percentage of existing ITNs[1] used the night before the survey	Number of ITNs[1]
Residence		
Urban	38.2	12,546
Rural	32.8	24,065
Zone		
North Central	37.6	5,773
North East	23.8	6,493
North West	33.1	10,057
South East	38.9	4,899
South South	40.8	4,040
South West	39.1	5,349
State		
North Central		
FCT-Abuja	54.4	173
Benue	37.1	2,083
Kogi	41.5	389
Kwara	52.3	349
Nasarawa	33.2	604
Niger	34.0	1,431
Plateau	37.1	744
North East		
Adamawa	18.8	1,211
Bauchi	12.4	1,434
Borno	21.6	1,441
Gombe	26.7	738
Taraba	29.5	732
Yobe	44.6	937
North West		
Jigawa	47.1	1,448
Kaduna	23.3	855
Kano	27.1	1,586
Katsina	50.1	1,761
Kebbi	45.9	1,336
Sokoto	25.2	1,069
Zamfara	12.7	2,003
South East		
Abia	36.7	694
Anambra	28.6	789
Ebonyi	50.9	1,075
Enugu	40.4	806
Imo	36.1	1,534
South South		
Akwa Ibom	47.0	687
Bayelsa	50.1	294
Cross River	53.0	856
Delta	23.8	633
Edo	33.1	838
Rivers	40.2	733
South West		
Ekiti	48.7	259
Lagos	30.3	1,807
Ogun	45.5	758
Ondo	43.8	1,004
Osun	19.8	329
Oyo	47.5	1,192
Wealth quintile		
Lowest	25.3	7,134
Second	36.2	7,688
Middle	40.6	8,019
Fourth	35.7	7,067
Highest	34.9	6,703
Total	34.7	36,610

[1] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) a pretreated net obtained within the past 12 months.

12.6 USE OF MOSQUITO NETS BY CHILDREN UNDER AGE 5

The use of mosquito nets by vulnerable groups in highly endemic communities is one of the major indicators in the 2014-2020 national malaria strategic plan (FMoH, 2013b). Table 12.7 presents data on the extent to which children under age 5 slept under various types of nets on the night before the interview. Overall, 18 percent of children slept under any net, 17 percent slept under an ITN, and 16 percent slept under an LLIN. The likelihood of sleeping under any net decreases with increasing age, from 21 percent among children younger than age 1 to 15 percent among children age 4. Children in urban areas are more likely to sleep under a net than children in rural areas (20 percent and 17 percent, respectively).

Table 12.7 Use of mosquito nets by children

Percentage of children under age 5 who, the night before the survey, slept under a mosquito net (treated or untreated), under an insecticide-treated net (ITN), under a long-lasting insecticidal net (LLIN), and under an ITN or in a dwelling in which the interior walls have been sprayed against mosquitoes (IRS) in the past 12 months, and among children under age 5 in households with at least one ITN, the percentage who slept under an ITN the night before the survey, by background characteristics, Nigeria 2013

	Children under age 5 in all households					Children under age 5 in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any net the night before the survey	Percentage who slept under an ITN[1] the night before the survey	Percentage who slept under an LLIN the night before the survey	Percentage who slept under an ITN[1] the night before the survey or in a dwelling sprayed with IRS[2] in the past 12 months	Number of children	Percentage who slept under an ITN[1] the night before the survey	Number of children
Age (in years)							
<1	20.8	18.9	18.3	20.1	6,372	32.0	3,757
1	19.6	17.9	17.4	19.1	6,060	30.4	3,568
2	19.2	17.4	17.0	18.8	5,737	29.8	3,358
3	16.2	14.9	14.4	16.4	6,137	26.0	3,512
4	15.2	13.7	13.3	15.0	6,021	23.7	3,469
Sex[3]							
Male	18.0	16.3	15.9	17.8	15,275	27.9	8,961
Female	18.5	16.8	16.3	18.0	15,049	29.1	8,702
Residence							
Urban	19.9	18.1	17.3	20.0	10,979	34.9	5,699
Rural	17.3	15.7	15.4	16.7	19,348	25.4	11,965
Zone							
North Central	18.9	16.9	16.7	18.0	4,177	29.3	2,411
North East	12.6	12.1	12.1	13.6	5,237	17.5	3,609
North West	16.6	14.8	14.7	16.4	10,994	26.1	6,239
South East	26.5	24.2	23.3	25.6	2,739	38.9	1,701
South South	20.9	19.0	17.8	20.1	2,915	37.6	1,474
South West	21.2	19.6	18.2	20.4	4,264	37.5	2,229
State							
North Central							
FCT-Abuja	25.0	20.7	18.9	25.4	202	47.9	87
Benue	29.5	29.4	29.4	29.4	897	36.5	722
Kogi	12.7	9.9	9.4	9.9	400	29.8	133
Kwara	31.3	17.9	17.1	17.9	403	44.5	162
Nasarawa	15.9	14.5	14.5	18.3	446	22.9	283
Niger	10.5	10.3	10.3	11.4	1,342	18.4	751
Plateau	18.1	18.0	18.0	18.6	487	32.1	273
North East							
Adamawa	12.9	12.6	12.6	12.7	701	15.8	560
Bauchi	6.9	6.8	6.8	9.1	1,259	9.0	952
Borno	11.3	10.7	10.7	11.1	1,110	17.0	699
Gombe	12.8	11.7	11.7	13.5	559	16.0	408
Taraba	15.5	14.5	14.5	14.6	712	23.6	436
Yobe	19.7	19.1	19.1	22.9	896	30.9	554
North West							
Jigawa	29.8	24.4	24.0	33.4	1,430	38.9	895
Kaduna	7.1	5.0	4.9	5.5	1,441	17.7	404
Kano	9.1	7.3	7.2	7.5	2,860	17.9	1,163
Katsina	29.0	28.9	28.6	28.9	1,617	40.8	1,146
Kebbi	24.7	23.5	23.5	23.5	1,173	37.5	736
Sokoto	13.3	12.3	12.3	14.7	1,061	19.5	672
Zamfara	10.0	9.1	9.1	9.1	1,413	10.6	1,223

Continued…

Table 12.7—*Continued*

Background characteristic	Children under age 5 in all households					Children under age 5 in households with at least one ITN[1]	
	Percentage who slept under any net the night before the survey	Percentage who slept under an ITN[1] the night before the survey	Percentage who slept under an LLIN the night before the survey	Percentage who slept under an ITN[1] the night before the survey or in a dwelling sprayed with IRS[2] in the past 12 months	Number of children	Percentage who slept under an ITN[1] the night before the survey	Number of children
South East							
Abia	23.5	23.5	23.4	33.6	315	34.1	218
Anambra	15.9	14.1	13.8	14.6	630	26.9	330
Ebonyi	31.0	30.7	30.5	30.9	727	50.2	444
Enugu	29.0	21.2	20.4	21.4	540	41.2	278
Imo	32.4	30.7	27.8	30.9	527	37.4	432
South South							
Akwa Ibom	16.5	14.9	14.5	15.2	478	31.0	229
Bayelsa	25.8	24.2	23.7	25.0	235	44.3	128
Cross River	33.6	29.2	27.7	29.4	534	46.9	332
Delta	12.3	9.7	8.6	12.8	553	23.8	225
Edo	22.9	22.9	20.7	23.2	407	30.8	303
Rivers	18.0	17.5	16.1	18.9	709	48.4	256
South West							
Ekiti	22.9	20.8	20.8	22.1	199	39.4	105
Lagos	21.5	19.4	18.0	22.0	1,254	31.5	770
Ogun	20.0	20.0	20.0	20.0	711	42.6	333
Ondo	29.3	25.2	21.6	25.2	544	41.9	328
Osun	8.4	7.8	5.7	7.8	456	25.7	138
Oyo	22.7	21.6	20.5	21.6	1,100	42.8	556
Wealth quintile							
Lowest	12.6	11.8	11.8	12.7	6,927	19.8	4,146
Second	19.5	17.4	17.2	18.1	6,818	28.4	4,164
Middle	21.9	19.8	19.3	21.5	5,812	33.0	3,495
Fourth	18.4	17.0	16.3	19.2	5,547	30.7	3,076
Highest	19.6	17.7	16.7	19.1	5,222	33.2	2,783
Total	18.2	16.6	16.1	17.9	30,327	28.4	17,664

Note: Table is based on children who stayed in the household the night before the interview.
[1] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) a pretreated net obtained within the past 12 months.
[2] Indoor residual spraying (IRS) is limited to spraying conducted by a government, private, or nongovernmental organisation.
[3] Excludes 2 cases with missing information on sex

Net usage among children living in households with an ITN was lowest in the North East (13 percent) and highest in the South East (27 percent). The percentage of children under age 5 who slept under any net was lowest in Bauchi and Kaduna (7 percent each) and highest in Cross River (34 percent). By wealth quintile, children's use of mosquito nets varied from 13 percent in the lowest quintile to 22 percent in the middle quintile.

12.7 USE OF MOSQUITO NETS BY ALL WOMEN AND PREGNANT WOMEN AGE 15-49

Use of mosquito nets by pregnant women is an important strategy to prevent malaria morbidity and to reduce the negative effects of malaria on pregnancy and pregnancy outcomes. The 2013 NDHS collected information on the use of mosquito nets by women age 15-49, including women who were pregnant at the time of the survey. The results are presented in Table 12.8.

Table 12.8 shows that 18 percent of pregnant women slept under a mosquito net the night before the survey, an appreciable increase from the 2008 NDHS figure of 12 percent. In addition, 16 percent of women slept under an ITN, as compared with only 4 percent in 2008. Similarly, 16 percent of women slept under an LLIN the night before the survey. Use of all three types of nets is slightly higher in urban areas than in rural areas, which is a reversal of the trend observed in the 2008 NDHS. The urban-rural difference in net usage among pregnant women is smaller than in 2008.

Table 12.8 Use of mosquito nets by pregnant women

Percentages of pregnant women age 15-49 who, the night before the survey, slept under a mosquito net (treated or untreated), under an insecticide-treated net (ITN), under a long-lasting insecticidal net (LLIN), and under an ITN or in a dwelling in which the interior walls have been sprayed against mosquitoes (IRS) in the past 12 months, and among pregnant women age 15-49 in households with at least one ITN, the percentage who slept under an ITN the night before the survey, by background characteristics, Nigeria 2013

	Among pregnant women age 15-49 in all households					Among pregnant women age 15-49 in households with at least one ITN[1]	
Background characteristic	Percentage who slept under any net the night before the survey	Percentage who slept under an ITN[1] the night before the survey	Percentage who slept under an LLIN the night before the survey	Percentage who slept under an ITN[1] the night before the survey or in a dwelling sprayed with IRS[2] in the past 12 months	Number of women	Percentage who slept under an ITN[1] the night before the survey	Number of women
Residence							
Urban	18.4	17.1	16.3	18.1	1,565	36.0	741
Rural	17.4	16.0	15.8	16.8	3,151	27.3	1,848
Zone							
North Central	17.0	15.7	15.5	16.5	644	28.3	358
North East	14.3	13.2	13.2	13.9	795	19.8	532
North West	17.4	15.9	15.7	16.9	1,930	29.4	1,043
South East	24.1	23.2	22.7	24.3	347	40.2	200
South South	17.6	16.4	15.1	17.5	424	37.6	185
South West	21.0	18.9	17.7	19.3	576	40.0	272
State							
North Central							
FCT-Abuja	22.4	14.2	12.7	15.5	26	(39.8)	9
Benue	21.4	21.4	21.4	21.4	160	26.8	128
Kogi	11.5	8.5	7.5	8.5	66	(21.8)	26
Kwara	22.1	14.8	14.8	14.8	44	(37.0)	17
Nasarawa	15.3	14.3	13.3	19.5	62	24.0	37
Niger	14.0	14.0	14.0	14.0	217	29.7	102
Plateau	17.5	17.5	17.5	19.8	69	31.3	39
North East							
Adamawa	13.1	13.1	13.1	13.1	128	16.8	99
Bauchi	9.2	8.3	8.3	10.6	188	11.2	139
Borno	15.9	13.8	13.8	13.8	181	23.2	108
Gombe	17.6	16.5	16.5	16.8	77	23.6	54
Taraba	13.1	11.7	11.7	11.7	91	20.4	52
Yobe	19.7	18.7	18.7	19.6	131	30.8	80
North West							
Jigawa	29.8	26.1	26.1	32.5	203	41.6	128
Kaduna	6.3	5.0	5.0	5.2	457	18.2	125
Kano	11.1	8.8	8.1	9.0	405	20.8	171
Katsina	36.2	36.2	35.7	36.2	264	53.4	179
Kebbi	29.5	28.8	28.8	28.8	213	42.0	146
Sokoto	9.7	9.1	9.1	11.9	158	14.0	102
Zamfara	12.1	10.6	10.6	10.6	230	12.7	192
South East							
Abia	18.9	18.9	18.9	29.2	38	(33.6)	22
Anambra	13.8	13.8	13.8	13.8	63	(30.2)	29
Ebonyi	34.5	34.5	34.5	34.5	100	60.4	57
Enugu	24.0	20.0	20.0	20.0	77	(36.0)	43
Imo	21.2	21.2	18.6	21.2	68	29.3	49
South South							
Akwa Ibom	15.2	15.2	15.2	18.5	45	(32.2)	21
Bayelsa	21.9	18.7	18.7	19.7	42	48.4	16
Cross River	37.8	34.7	33.3	34.7	61	(54.3)	39
Delta	10.8	9.9	7.3	11.8	107	(20.1)	52
Edo	16.8	16.8	13.4	16.8	47	(25.7)	31
Rivers	13.0	12.3	12.3	13.0	122	*	25
South West							
Ekiti	29.4	27.9	26.4	27.9	23	(44.9)	14
Lagos	16.8	14.3	12.5	16.0	142	25.6	80
Ogun	19.8	19.8	19.8	19.8	96	(43.9)	43
Ondo	28.0	22.5	19.2	22.5	74	(41.5)	40
Osun	2.0	1.1	1.1	1.1	53	*	8
Oyo	26.3	24.2	23.4	24.2	188	53.2	86
Education							
No education	17.2	15.8	15.6	16.7	2,310	27.6	1,321
Primary	20.8	19.0	18.5	19.9	846	34.9	461
Secondary	17.4	16.0	15.2	16.9	1,273	31.0	656
More than secondary	15.2	15.1	14.6	15.7	287	28.7	151
Wealth quintile							
Lowest	13.7	12.9	12.9	13.2	1,156	22.6	658
Second	18.0	17.1	16.9	17.8	1,117	29.7	643
Middle	23.7	20.9	20.5	22.3	866	35.5	511
Fourth	19.9	18.1	17.2	19.6	821	35.5	418
Highest	14.5	13.6	12.8	14.3	757	28.6	360
Total	17.8	16.4	16.0	17.2	4,716	29.8	2,589

Note: Table is based on women who stayed in the household the night before the interview. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] An insecticide-treated net (ITN) is (1) a factory-treated net that does not require any further treatment (LLIN) or (2) a pretreated net obtained within the past 12 months.

[2] Indoor residual spraying (IRS) is limited to spraying conducted by a government, private, or nongovernmental organisation.

Use of any type of mosquito net is generally higher in the southern zones of the country than in the northern zones. Proportions range from 14 percent in the North East to 24 percent in the South East.

The results also show that use of mosquito nets by pregnant women varies by education and wealth quintile. Pregnant women with a primary education are most likely to use mosquito nets (21 percent), while pregnant women with more than a secondary education are least likely to do so (15 percent).

Thirty percent of pregnant women in households with at least one ITN slept under an ITN on the night before the survey. Among pregnant women in households with at least one ITN, 36 percent in urban areas and 27 percent in rural areas slept under an ITN in the night before the survey. The proportion of pregnant women sleeping under a net the night before the survey was higher in the southern zones than the northern zones.

The use of mosquito nets by pregnant women varies by state. Osun has the lowest proportion (2 percent), followed by Kaduna (6 percent), while Cross River has the highest (38 percent) proportion of pregnant women sleeping under any net the night before the survey.

12.8 Prophylactic Use of Antimalarial Drugs and Use of Intermittent Preventive Treatment in Pregnant Women

Pregnant women who carry the malaria parasite may be at risk for serious problems that jeopardise their own health, compromise the health of the foetus, and increase the likelihood of adverse pregnancy outcomes such as stillbirth, spontaneous abortion, and low birth weight. As a protective measure, in 2001, the Federal Ministry of Health recommended that pregnant women receive intermittent preventive treatment (IPT) of malaria during pregnancy using two doses of sulphadoxine-pyrimethamine (SP). There are many brand names of SP available in Nigeria; Fansidar, Amalar, and Maloxine are some of the most common. IPT is offered through the focused antenatal care strategy. In accordance with the national protocol, SP is given free of charge to pregnant women through antenatal care (ANC) services at public health facilities and NGO facilities. Using an approach of directly observed therapy, one dose each of SP is given during the second and third trimesters. A third dose is recommended for pregnant women who are HIV positive. However, recent recommendations stress the importance of three doses of SP during pregnancy for all women.

Table 12.9 shows information on malaria prevention for pregnant women through prophylactic antimalarial drug use and IPT. According to the 2013 NDHS, 23 percent of women received an antimalarial drug for prevention of malaria during the pregnancy for their last live birth in the two years preceding the survey, an improvement from the 8 percent figure reported in 2008 (Figure 12.3). Thirty-one percent of women in urban areas and 18 percent in rural areas took antimalarial drugs during pregnancy for prevention of malaria, as compared with 13 percent and 6 percent, respectively, in 2008.

The survey also collected information on the number of SP doses taken by pregnant women. Overall, 15 percent of pregnant women reported receiving the recommended two doses of SP, with at least one dose administered during an ANC visit. This is an improvement over the 5 percent figure reported in the 2008 NDHS. A higher proportion of women in urban areas than rural areas received two or more doses of SP (19 percent and 12 percent, respectively). Among the zones, the proportion was highest in the South East (18 percent) and lowest in the South South (10 percent). Pregnant women with a secondary or more than a secondary education and those in the fourth wealth quintile were more likely to receive IPT during an ANC visit than other women.

Table 12.9 Use of intermittent preventive treatment by women during pregnancy

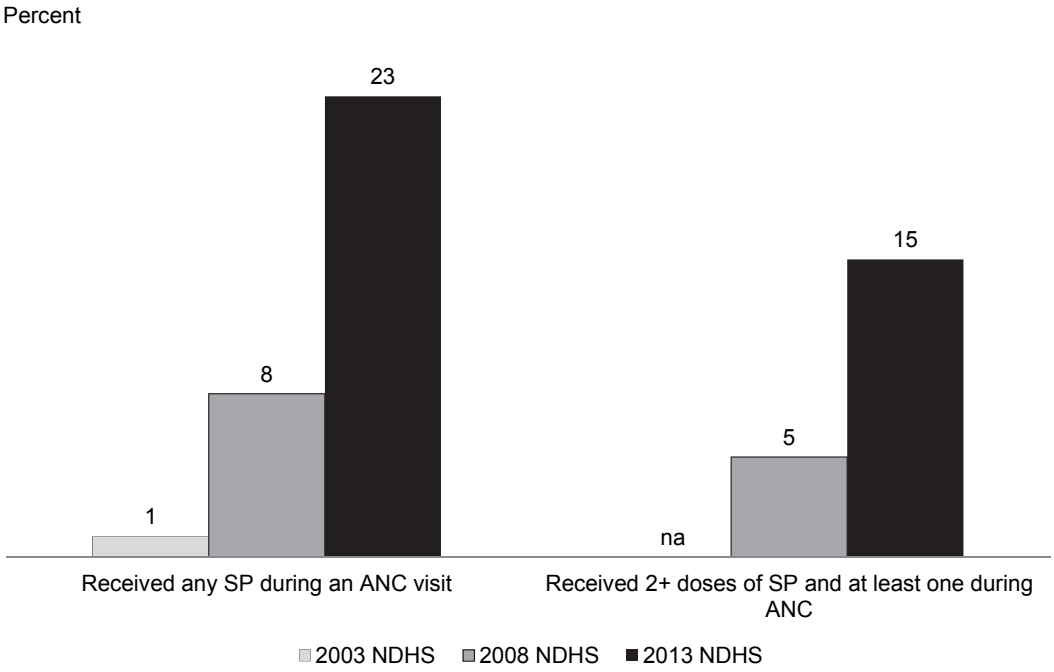
Percentage of women age 15-49 with a live birth in the two years preceding the survey who, during the pregnancy preceding the last birth, received any SP/Fansidar during an ANC visit and who took at least two doses of SP/Fansidar and received at least one dose during an ANC visit, by background characteristics, Nigeria 2013

Background characteristic	Percentage who received any SP/Fansidar during an ANC visit	Percentage who took 2+ doses of SP/Fansidar and received at least one during ANC visit	Percentage who took 3+ doses of SP/Fansidar and received at least one during ANC visit	Number of women with a live birth in the two years preceding the survey
Residence				
Urban	31.3	19.4	6.3	4,404
Rural	17.8	12.0	5.5	8,069
Zone				
North Central	20.8	16.9	10.7	1,692
North East	22.5	12.2	4.8	2,152
North West	24.7	16.7	4.5	4,554
South East	24.0	18.3	9.6	1,150
South South	15.3	10.1	3.8	1,191
South West	23.0	10.5	4.3	1,733
State				
North Central				
FCT-Abuja	28.1	16.6	1.9	75
Benue	0.8	0.6	0.4	374
Kogi	32.9	24.8	13.6	168
Kwara	24.3	11.4	1.8	161
Nasarawa	16.5	11.2	4.9	197
Niger	35.3	34.5	26.7	514
Plateau	9.7	5.5	2.5	204
North East				
Adamawa	27.0	22.3	11.5	289
Bauchi	32.7	14.3	5.5	573
Borno	13.9	6.7	1.9	408
Gombe	32.0	19.7	4.7	231
Taraba	10.2	6.0	2.0	300
Yobe	16.7	7.4	3.7	350
North West				
Jigawa	24.6	18.7	9.3	608
Kaduna	26.4	15.5	4.4	496
Kano	53.2	36.1	7.5	1,188
Katsina	13.2	8.4	1.9	688
Kebbi	5.0	3.8	1.7	479
Sokoto	7.4	4.7	0.7	444
Zamfara	9.7	6.6	2.2	652
South East				
Abia	27.8	21.7	17.8	135
Anambra	4.7	3.6	1.8	245
Ebonyi	39.4	32.1	11.7	313
Enugu	20.6	15.0	9.7	230
Imo	24.8	16.6	10.1	228
South South				
Akwa Ibom	11.6	7.3	2.9	202
Bayelsa	10.2	5.1	2.2	95
Cross River	23.9	18.2	12.5	221
Delta	29.0	19.7	2.2	220
Edo	3.2	1.6	1.2	168
Rivers	9.5	5.0	1.2	285
South West				
Ekiti	19.4	5.2	0.5	78
Lagos	26.2	10.0	3.0	519
Ogun	31.9	28.3	12.7	294
Ondo	10.7	4.1	2.7	225
Osun	43.9	10.8	3.9	189
Oyo	11.0	3.0	1.9	428
Education				
No education	17.6	11.7	4.7	5,940
Primary	24.5	15.5	6.6	2,253
Secondary	26.9	17.7	6.8	3,466
More than secondary	35.2	20.2	7.5	815
Wealth quintile				
Lowest	11.2	6.3	2.5	2,888
Second	18.2	11.9	4.4	2,842
Middle	24.8	17.7	9.1	2,360
Fourth	32.2	22.6	7.9	2,247
Highest	31.2	17.5	6.2	2,135
Total	22.6	14.6	5.8	12,473

The results by states show that only 1 percent of pregnant women in Benue received two or more doses of SP with at least one during an ANC visit, while approximately one-third of women in Kano (36 percent), Niger (35 percent), and Ebonyi (32 percent) received two or more doses.

Table 12.9 also includes information on the new malaria indicator for pregnant women, that is, three or more SP doses with at least one dose administered during an ANC visit. Six percent of women received three or more SP doses during pregnancy. There was no variation according to urban-rural residence; however, Niger had the highest proportion of women who received three or more doses (27 percent).

Figure 12.3 **Trends in the percentage of women taking 2+ doses of SP and at least one dose during ANC**



12.9 PREVALENCE AND PROMPT TREATMENT OF FEVER IN CHILDREN UNDER AGE 5

Following a period of continuous increases in the resistance of *Plasmodium falciparum* to the commonly used antimalarial medicines, the artemisinin-based combination therapy (ACT) was introduced in 2005 with artemether-lumefantrine as the first-line treatment for uncomplicated malaria and artesunate plus amodiaquine (co-packaged) as an alternative (FMoH, 2011b).

As programmatic deployment of ACT will be scaled up to include persons above age 5 over the period of the strategic plan, a policy to improve diagnosis of malaria cases through parasitological confirmation by microscopy or rapid diagnostic tests has been put in place (FMoH, 2011b). In recent years, considerable efforts have been undertaken to increase access to malaria treatment at the community level, including training of community health workers and role model caregivers in the treatment of febrile children with ACT.

The prevalence of fever measures the proportion of febrile children in the population. Because fever is the main symptom of malaria, the proportion of febrile children in the population is a proxy for assessing malaria prevalence. Any reduction in the malaria disease burden should lead to a reduction in the overall prevalence of fever. In the 2013 NDHS, mothers were asked whether their children under age 5 had had a fever in the two weeks preceding the survey. If fever was reported, the mother was asked whether treatment was sought at a health facility, whether the child was given any medication, and, if so, how soon the medication was taken after the fever began.

Table 12.10 shows the percentage of children under age 5 with a fever in the two weeks preceding the survey and, among children with fever, the percentage who took antimalarial drugs and the percentage who took them on the same day or next day following the onset of fever, by background characteristics.

The results of the 2013 NDHS indicate that 13 percent of children under age 5 had a fever during the two weeks preceding the interview. Children age 12-23 months were most likely to have had a fever in the past two weeks (18 percent), while children age 48-59 months were least likely (9 percent). There was little variation by sex or urban-rural residence in the prevalence of fever during the two weeks preceding the survey. The prevalence was lowest in the South West and North Central (7 percent each) and highest in the North East (21 percent). The prevalence of fever was similar among children of all women irrespective of education or wealth.

Table 12.10 Prevalence, diagnosis, and prompt treatment of children with fever

Percentage of children under age 5 with a fever in the two weeks preceding the survey, and among children under age 5 with fever, the percentage for whom advice or treatment was sought, the percentage who had blood taken from a finger or heel, the percentage who took any artemisinin-based combination therapy (ACT), the percentage who took ACT the same or next day following the onset of fever, the percentage who took antimalarial drugs, and the percentage who took the drugs the same or next day following the onset of fever, by background characteristics, Nigeria 2013

	Among children under age 5:		Among children under age 5 with fever:						
Background characteristic	Percentage with fever in the two weeks preceding the survey	Number of children	Percentage for whom advice or treatment was sought[1]	Percentage who had blood taken from a finger or heel for testing	Percentage who took any ACT	Percentage who took any ACT the same or next day	Percentage who took antimalarial drugs	Percentage who took antimalarial drugs the same or next day	Number of children
Age (in months)									
<12	12.1	6,252	71.3	8.1	6.3	4.1	30.4	20.6	759
12-23	17.5	5,900	70.8	12.6	6.4	4.5	33.3	21.6	1,034
24-35	13.4	5,490	71.1	10.4	5.6	4.9	33.6	24.5	736
36-47	10.3	5,722	68.2	12.2	5.7	3.7	35.5	26.1	591
48-59	9.2	5,586	68.1	12.4	5.6	3.7	30.4	23.0	512
Sex									
Male	12.9	14,509	71.3	11.4	6.9	4.5	33.2	22.2	1,867
Female	12.2	14,440	68.9	10.8	5.0	4.0	32.3	23.7	1,766
Residence									
Urban	12.1	10,403	71.9	11.9	7.6	5.9	39.9	29.7	1,262
Rural	12.8	18,547	69.2	10.7	5.1	3.4	28.9	19.3	2,370
Zone									
North Central	7.4	4,019	65.3	29.0	11.7	10.3	50.7	43.9	297
North East	20.8	5,034	74.0	8.7	3.7	2.0	25.0	14.9	1,045
North West	9.9	10,485	63.6	6.7	5.3	3.5	29.0	19.3	1,034
South East	19.3	2,585	71.0	9.3	4.9	3.7	29.9	21.1	498
South South	16.8	2,742	78.6	15.0	10.7	8.6	39.8	27.6	460
South West	7.3	4,084	69.6	13.9	5.3	3.0	48.6	38.3	297
State									
North Central									
FCT-Abuja	7.6	196	(73.7)	(9.6)	(16.2)	(16.2)	(29.0)	(27.3)	15
Benue	3.7	878	*	*	*	*	*	*	33
Kogi	3.4	378	*	*	*	*	*	*	13
Kwara	4.3	377	(78.2)	(28.0)	(6.0)	(3.0)	(58.9)	(48.6)	16
Nasarawa	9.8	421	83.9	32.7	27.4	23.7	65.0	56.0	41
Niger	9.3	1,303	66.3	35.3	14.7	14.0	69.5	64.5	121
Plateau	12.5	464	58.1	25.6	1.8	1.8	25.5	15.8	58
North East									
Adamawa	13.2	661	81.1	7.2	2.4	1.9	16.9	10.7	87
Bauchi	25.3	1,243	75.6	10.1	1.4	0.4	19.3	10.5	315
Borno	10.7	1,064	62.7	1.4	0.0	0.0	39.7	16.6	114
Gombe	18.5	529	83.9	10.0	4.3	3.1	38.4	35.4	98
Taraba	21.1	690	69.6	15.7	1.6	1.6	23.4	17.6	146
Yobe	33.7	848	73.4	6.5	8.9	4.3	24.1	11.8	286
North West									
Jigawa	18.9	1,380	65.7	13.1	6.6	4.9	31.6	22.7	260
Kaduna	12.2	1,375	48.7	4.2	1.9	1.1	17.4	16.2	168
Kano	9.1	2,717	70.3	3.3	2.1	1.4	29.2	18.9	248
Katsina	6.3	1,549	53.3	6.6	8.5	4.6	39.2	21.9	98
Kebbi	9.0	1,094	70.5	11.6	14.8	7.4	45.0	26.4	98
Sokoto	6.2	1,005	62.6	3.0	8.2	8.2	20.5	17.8	62
Zamfara	7.3	1,365	70.8	0.9	1.0	1.0	21.0	8.0	100

Continued…

Table 12.10—*Continued*

Background characteristic	Among children under age 5: Percentage with fever in the two weeks preceding the survey	Among children under age 5: Number of children	Among children under age 5 with fever: Percentage for whom advice or treatment was sought[1]	Percentage who had blood taken from a finger or heel for testing	Percentage who took any ACT	Percentage who took any ACT the same or next day	Percentage who took antimalarial drugs	Percentage who took antimalarial drugs the same or next day	Number of children
South East									
Abia	11.2	297	(69.2)	(15.4)	(0.0)	(0.0)	(28.1)	(2.6)	33
Anambra	11.4	608	54.6	16.5	10.4	7.4	18.9	14.8	69
Ebonyi	25.1	663	75.8	1.1	4.4	3.1	21.6	14.8	166
Enugu	24.3	514	69.4	14.1	2.8	2.8	25.8	16.8	125
Imo	20.7	502	77.0	10.0	6.0	4.6	56.2	46.6	104
South South									
Akwa Ibom	18.8	439	81.9	8.9	4.5	1.9	18.9	12.0	83
Bayelsa	3.9	220	(78.1)	(5.0)	(8.3)	(0.0)	(62.9)	(50.5)	9
Cross River	25.6	499	79.9	11.7	2.3	0.7	27.1	8.8	128
Delta	5.2	520	(46.2)	(2.7)	(8.5)	(8.5)	(33.7)	(33.7)	27
Edo	5.9	387	(77.4)	(37.7)	(7.3)	(7.3)	(52.0)	(31.6)	23
Rivers	28.3	676	81.1	19.3	19.7	17.2	55.5	44.6	192
South West									
Ekiti	6.4	188	(62.7)	(0.0)	(10.7)	(6.3)	(43.4)	(28.4)	12
Lagos	9.2	1,220	69.8	12.4	9.7	4.6	54.5	43.9	112
Ogun	2.1	689	*	*	*	*	*	*	15
Ondo	9.6	520	73.3	10.5	0.0	0.0	38.5	24.7	50
Osun	6.9	427	(72.7)	(8.2)	(12.6)	(9.6)	(83.7)	(72.9)	30
Oyo	7.6	1,040	76.1	23.9	0.0	0.0	36.9	28.3	79
Mother's education									
No education	12.3	13,945	66.6	8.2	4.1	2.4	26.3	16.4	1,718
Primary	12.8	5,563	70.6	10.7	6.0	3.8	31.8	21.1	714
Secondary	12.8	7,697	75.2	13.3	8.4	7.0	41.1	32.6	982
More than secondary	12.5	1,744	74.0	25.3	10.2	7.8	48.8	36.3	219
Wealth quintile									
Lowest	13.6	6,636	64.4	6.4	3.6	2.4	22.1	12.6	899
Second	12.9	6,483	69.3	10.0	3.9	1.9	26.4	16.5	837
Middle	13.7	5,534	73.5	12.3	6.0	4.9	35.0	26.5	756
Fourth	11.7	5,243	74.1	12.8	8.3	5.8	41.6	30.4	614
Highest	10.4	5,053	71.9	17.4	10.4	8.4	47.5	36.8	526
Total	12.5	28,950	70.1	11.1	6.0	4.2	32.7	22.9	3,632

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Excludes market and traditional practitioner

Prompt treatment of fever is one indicator used to measure the quality of case management. Advice or treatment was sought for 70 percent of children under age 5 with a fever, while 11 percent had blood taken from a finger or heel for testing. The proportion for whom advice or treatment was sought was highest among children less than age 1 and lowest among those age 48-59 months. Blood was less often taken from younger children (less than age 12 months) (8 percent). The proportion of children who had blood taken was highest in the North Central zone (29 percent).

Overall, only 6 percent of children under age 5 with a fever took any ACT, and only 4 percent took it on the same or next day. ACT was mostly given in the North Central and South South zones (12 percent and 11 percent, respectively). It was mostly taken by children whose mothers had more than a secondary education (10 percent) and those in the highest wealth quintile (10 percent). Thirty-three percent of children under age 5 with a fever took antimalarial drugs, and 23 percent of children took antimalarial drugs on the same or next day.

Treatment of malaria varies by zone, with children in the North Central zone (51 percent) more likely than children in other zones to receive antimalarial drugs. Use of antimalarial drugs increases with mother's level of education and wealth quintile, similar to the pattern reported in the 2008 NDHS.

12.10 SOURCE OF ADVICE OR TREATMENT FOR CHILDREN WITH FEVER

The 2013 NDHS included questions on source of advice or treatment for children with fever. Table 12.11 shows the proportion of children under age 5 with a fever in the two weeks preceding the survey for whom advice or treatment was sought from different sources. Advice or treatment was sought from the public sector for 26 percent of children, with government hospitals accounting for 12 percent of this total. Advice or treatment was sought from the private sector for 42 percent of children, primarily from a chemist/PMS (34 percent). For 8 percent of children, advice or treatment was sought from other sources such as shops, traditional practitioners, and markets.

Among children with fever for whom advice or treatment was sought, 35 percent received advice or treatment from any public sector source, including a government hospital (16 percent) or government health centre (14 percent). Fifty-seven percent received advice or treatment from any private sector source, with chemists/PMS playing an important role (46 percent).

Table 12.11 Source of advice or treatment for children with fever

Percentage of children under age 5 with a fever in the two weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with fever in the two weeks preceding the survey for whom advice or treatment was sought, the percentage for whom advice or treatment was sought from specific sources, by background characteristics, Nigeria 2013

Background characteristic	Percentage for whom advice or treatment was sought from each source:	
	Among children with fever	Among children with fever for whom advice or treatment was sought
Any public sector source	**25.7**	**34.8**
Government hospital	12.0	16.2
Government health centre	10.3	13.9
Government health post	2.7	3.7
Mobile clinic	0.3	0.4
Fieldworker	0.5	0.7
Other public	0.1	0.2
Any private sector source	**42.0**	**56.8**
Private hospital/clinic	4.8	6.6
Pharmacy	2.8	3.8
Private doctor	0.3	0.4
Mobile clinic	0.4	0.5
Fieldworker	0.2	0.3
Chemist/PMS	33.7	45.6
Other private medical sector	0.2	0.3
Any other source	**7.5**	**10.1**
Shop	2.4	3.2
Traditional practitioner	3.7	4.9
Market	1.0	1.4
Other	0.6	0.9
Number of children	3,632	2,685

12.11 TYPE AND TIMING OF ANTIMALARIAL DRUGS

In the 2013 NDHS, mothers with children under age 5 who had a fever in the two weeks preceding the survey and were treated with antimalarial drugs were asked about the types of drugs used to treat the fever. Table 12.12 shows specific types of antimalarial drugs given to children. The use of ACT is the recommended first-line treatment for uncomplicated malaria in Nigeria. Eighteen percent of children were reported to have received any ACT. Despite the fact that both chloroquine and SP are no longer recommended as first-line drugs for malaria treatment, they remain the most commonly reported antimalarial drugs given to children with fever (31 percent each). Six percent of children received amodiaquine, 2 percent received quinine, and 22 percent were reported to have received other antimalarial drugs. Although use of ACT for malaria treatment increased from 2 percent in 2008 to 18 percent in 2013, this figure remains below the national target (at least 80 percent by 2010, as specified in the national malaria strategic plan). Use of any antimalarial drug, including ACT, is similar in all age groups. However, more male than female children receive ACT. There is no marked variation in the pattern of use of antimalarial drugs between urban and rural areas.

Children in the South South (27 percent) and North Central (23 percent) zones were more likely to be treated with ACT than children in other zones. Mother's educational status and wealth influenced use of ACT for malaria treatment. For example, 21 percent of children whose mothers had more than a secondary education were treated with ACT, as compared with 16 percent of children whose mothers did not have any education. Twenty-two percent of children in the highest wealth quintile were given ACT for treatment of malaria, while 15 percent in the second quintile and 17 percent each in the lowest and middle quintiles were treated with ACT. Similarly, use of SP and chloroquine for treatment of malaria was associated with both educational status and wealth quintile. The results show that 37 percent and 36 percent of children whose mothers have no education were given SP and chloroquine, respectively, as compared with 29 percent and 21 percent of children whose mothers have more than a secondary education. Thirty-six

percent of children in the lowest wealth quintile received SP, compared with 28 percent in the highest wealth quintile while 36 percent of children in the lowest quintile and 21 percent in the highest quintile were given chloroquine.

Table 12.12 Type of antimalarial drugs used

Among children under age 5 with a fever in the two weeks preceding the survey who took any antimalarial medication, the percentage who took specific antimalarial drugs, by background characteristics, Nigeria 2013

Background characteristic	Percentage of children who took drug:						Number of children with fever who took antimalarial drug
	Any ACT	Quinine	SP/Fansidar	Chloroquine	Amodiaquine	Other anti-malarial	
Age (in months)							
<12	20.6	4.3	25.0	38.0	4.5	19.0	231
12-23	19.0	1.4	30.1	28.0	8.7	23.0	345
24-35	16.8	0.5	34.4	28.0	3.7	23.2	247
36-47	16.0	2.1	31.7	31.2	6.9	20.7	210
48-59	18.4	1.5	32.6	30.9	4.8	21.1	156
Sex							
Male	20.9	1.9	30.8	30.4	6.4	20.6	619
Female	15.4	2.0	30.4	31.4	5.6	22.7	570
Residence							
Urban	19.1	1.6	28.6	25.1	4.5	28.5	504
Rural	17.7	2.2	32.1	35.1	7.1	16.5	685
Zone							
North Central	23.1	1.7	34.1	31.1	27.0	8.0	151
North East	14.7	1.5	32.6	40.6	2.8	14.2	261
North West	18.2	2.3	40.4	36.5	4.0	11.9	300
South East	16.3	5.3	28.6	23.8	3.2	29.6	149
South South	26.8	1.0	21.0	18.9	0.5	33.6	183
South West	10.9	0.0	17.4	24.1	3.9	45.6	145
Mother's education							
No education	15.5	2.2	37.2	35.5	8.9	11.6	452
Primary	18.9	1.0	19.8	39.5	4.8	22.0	227
Secondary	20.3	1.8	29.6	23.6	4.4	28.4	404
More than secondary	20.8	3.0	29.4	20.5	2.7	37.6	107
Wealth quintile							
Lowest	16.5	0.8	35.5	35.8	2.9	14.8	199
Second	15.0	4.3	31.4	36.1	6.2	19.0	221
Middle	17.2	1.6	32.8	35.2	10.6	15.1	264
Fourth	20.1	1.9	26.7	28.0	6.3	22.9	255
Highest	21.9	1.1	27.8	20.7	3.2	34.9	250
Total	18.3	1.9	30.6	30.9	6.0	21.6	1,189

Note: State-level disaggregation is not shown due to the small number of cases.
ACT = Artemisinin-based combination therapy

HIV- AND AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOUR 13

Key Findings

- Ninety-three percent of women and 96 percent of men age 15-49 have heard of AIDS.
- HIV awareness is almost universal among urban women and men (97 percent and 98 percent, respectively), while awareness among rural women and men is lower (89 percent and 93 percent, respectively).
- Seventy-eight percent of women and 85 percent of men know that limiting sexual intercourse to one uninfected partner who has no other partners can reduce the chances of contracting HIV.
- Twenty-six percent of women and 37 percent of men have comprehensive knowledge about AIDS. That is, they know that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting HIV, they know that a healthy-looking person can have the AIDS virus, and they reject the two most common local misconceptions about HIV transmission or prevention.
- Overall, 49 percent of women and 45 percent of men know that HIV can be transmitted by breastfeeding and that the risk of mother-to-child transmission can be reduced if the mother takes special drugs during pregnancy.
- Twelve percent of women and 13 percent of men express accepting attitudes in four situations: they would care for a family member with HIV or AIDS in their own home, they would buy fresh vegetables from a shopkeeper with HIV, they would allow an HIV-positive female teacher to continue teaching, and they would not want to keep secret the HIV-positive status of a family member.
- One percent of women and 13 percent of men had two or more sexual partners during the 12 months preceding the survey. Among respondents who had two or more partners in the past 12 months, 29 percent of women and 20 percent of men reported that they used a condom during their most recent sexual intercourse.
- Eight percent of women and 4 percent of men reported that they had a sexually transmitted infection (STI) or symptoms of an STI in the 12 months preceding the survey.

Nigeria, with an estimated population of 160 million (National Population Commission, 2014), is second to South Africa in the number of people living with HIV/AIDS worldwide, representing 9 percent of the global burden of the disease. Since 1991, the country has employed a sentinel surveillance system among pregnant women age 15-49 attending antenatal care to track HIV prevalence. Surveillance results show that HIV prevalence has declined over the years, from 5.8 percent in 2001 to 4.6 percent in 2008 and 4.1 percent in 2010. In 2010, across the country's states, HIV prevalence ranged from 1.0 percent in Kebbi to 12.6 percent in Benue (Federal Ministry of Health [FMoH], 2011c).

New HIV infections in the country are fuelled by low perceptions of personal risk, multiple and concurrent sexual partnerships, intense transactional and intra-generational sex, ineffective and inefficient treatment services for sexually transmitted infections (STIs), and inadequate access to and poor quality of

health care services. Entrenched gender inequalities and inequities, chronic and debilitating poverty, and the persistence of HIV/AIDS-related stigma and discrimination are other contributing factors (National Agency for the Control of AIDS, 2010).

To further strengthen its coordination of the multisectoral response, the federal government transformed the National Action Committee on AIDS into an agency, the National Agency for the Control of AIDS, in July 2007. For the purpose of sustaining and improving the effectiveness and coordination of the national HIV response, states have taken the same step of transforming smaller committees and bodies into agencies.

Nationally, HIV and AIDS programmes have received a boost through the efforts of the government and the support of development partners, which has led to a scale up of prevention, care, and treatment programmes aimed at combating the disease. Also, the monitoring and evaluation system has been strengthened, and there have been increases in the amount of HIV research conducted. The fight against HIV will depend on well-articulated prevention programmes addressing issues such as HIV- and AIDS-related knowledge among the general population, social stigmatisation, risk behaviour modification, access to quality STI treatment services, provision and uptake of HIV counselling and testing, and access to care and antiretroviral therapy (ART), including prevention and treatment of opportunistic infections. The principal objective of this chapter is to present detailed information on these issues, as recorded in the 2013 NDHS, at the national, zonal, and state levels according to selected demographic and socioeconomic characteristics of the population.

13.1 HIV AND AIDS KNOWLEDGE, TRANSMISSION, AND PREVENTION METHODS

13.1.1 Awareness of HIV and AIDS

The 2013 NDHS respondents were asked whether they had heard of AIDS. Those who reported having heard of AIDS were asked a number of questions about whether and how HIV can be prevented.

Table 13.1 shows the percentage of women and men age 15-49 who have heard of AIDS, by background characteristics. In Nigeria, 93 percent of women and 96 percent of men have heard of AIDS. There are minor differences in awareness according to background characteristics. Women and men who have never been married but have had sex are more likely than those who have never had sex to have knowledge of AIDS.

Awareness about AIDS is almost universal among urban women and men (97 percent and 98 percent, respectively), while awareness among rural women and men is slightly lower (89 percent and 93 percent, respectively). Women and men in the South East show the highest level of AIDS awareness (99 percent each), while women in the North Central and North East zones exhibit the lowest awareness (84 percent and 88 percent, respectively).

Since 2008, the percentage of women and men age 15-49 who have heard of AIDS has increased by 4 and 2 percentage points, respectively. This increase in awareness can be attributed to the intensive HIV and AIDS prevention programmes administered through nongovernmental organisations (NGOs).

Table 13.1 Knowledge of AIDS

Percentage of women and men age 15-49 who have heard of AIDS, by background characteristics, Nigeria 2013

Background characteristic	Women		Men	
	Has heard of AIDS	Number of respondents	Has heard of AIDS	Number of respondents
Age				
15-24	91.4	14,576	92.1	6,511
15-19	89.5	7,820	89.3	3,619
20-24	93.5	6,757	95.5	2,892
25-29	92.6	7,145	97.3	2,757
30-39	94.2	10,185	97.5	4,589
40-49	92.8	7,042	97.7	3,501
Marital status				
Never married	94.3	9,326	93.7	8,378
Ever had sex	97.8	3,732	98.5	3,461
Never had sex	91.9	5,593	90.3	4,918
Married/living together	91.8	27,830	97.1	8,723
Divorced/separated/widowed	95.5	1,793	99.4	258
Residence				
Urban	97.3	16,414	98.3	7,611
Rural	89.2	22,534	93.3	9,748
Zone				
North Central	83.5	5,572	93.8	2,685
North East	88.1	5,766	94.1	2,515
North West	95.4	11,877	95.3	5,185
South East	99.0	4,476	98.7	1,686
South South	94.3	4,942	97.5	2,445
South West	93.6	6,314	95.1	2,843
State				
North Central				
FCT-Abuja	90.4	315	94.0	175
Benue	99.7	1,240	100.0	616
Kogi	88.0	704	96.1	333
Kwara	92.5	596	99.2	274
Nasarawa	82.5	594	86.6	282
Niger	64.0	1,462	90.0	701
Plateau	80.6	662	88.9	302
North East				
Adamawa	89.7	828	97.8	358
Bauchi	87.2	1,161	94.9	512
Borno	80.4	1,412	95.5	676
Gombe	79.4	550	93.9	255
Taraba	95.6	844	93.2	325
Yobe	97.1	971	88.3	390
North West				
Jigawa	93.5	1,353	97.2	510
Kaduna	95.8	2,136	97.5	1,033
Kano	99.7	3,189	96.0	1,592
Katsina	99.7	1,525	99.6	596
Kebbi	75.9	1,244	80.2	551
Sokoto	99.1	1,098	95.4	424
Zamfara	96.9	1,332	97.5	479
South East				
Abia	98.6	518	99.2	229
Anambra	99.6	1,052	99.2	446
Ebonyi	98.3	1,122	98.5	368
Enugu	99.5	951	98.7	320
Imo	98.9	833	98.1	323
South South				
Akwa Ibom	95.9	864	97.6	451
Bayelsa	90.0	364	100.0	187
Cross River	96.5	703	97.5	310
Delta	92.4	993	99.5	473
Edo	96.1	742	99.6	365
Rivers	93.6	1,276	93.9	658
South West				
Ekiti	99.4	326	100.0	148
Lagos	98.1	1,964	98.2	948
Ogun	97.1	883	90.6	358
Ondo	88.1	808	88.2	404
Osun	99.7	765	99.5	356
Oyo	84.6	1,568	93.7	629
Education				
No education	85.7	14,729	88.6	3,685
Primary	93.1	6,734	94.9	2,907
Secondary	97.8	13,927	97.5	8,281
More than secondary	99.6	3,558	99.5	2,486
Wealth quintile				
Lowest	85.3	7,132	88.6	2,862
Second	89.3	7,428	93.1	2,992
Middle	91.6	7,486	96.4	3,338
Fourth	96.2	7,992	97.8	3,835
Highest	98.8	8,910	98.9	4,332
Total	92.6	38,948	95.5	17,359

13.1.2 Knowledge of HIV Prevention Methods

HIV is mainly transmitted through heterosexual contact. Nigeria's national HIV prevention programme has sought to promote behaviour change strategies that focus on sexual abstinence, mutually faithful monogamy between HIV-negative partners, and condom use as the primary ways of avoiding HIV infection among sexually active women and men.

In the 2013 NDHS, to ascertain whether programmes have effectively communicated these prevention messages, women and men were asked if it is possible to reduce the risk of acquiring HIV through consistently using condoms, limiting sexual intercourse to one HIV-negative partner who has no other sex partners, and abstaining from sexual intercourse.

Table 13.2 shows that 58 percent of women and 74 percent of men know that consistent and correct use of condoms can reduce the spread of HIV. Seventy-eight percent of women and 85 percent of men know that limiting sexual intercourse to one uninfected partner who has no other partners can reduce the chances of contracting HIV, and 54 percent of women and 70 percent of men know that using condoms and limiting sexual intercourse to one uninfected partner can reduce the risk of HIV infection.

Table 13.2 Knowledge of HIV prevention methods

Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse and by having one sex partner who is not infected and has no other partners, by background characteristics, Nigeria 2013

	Women				Men			
Background characteristic	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1,2]	Number of women	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1,2]	Number of men
Age								
15-24	55.8	75.4	52.2	14,576	70.0	79.0	65.7	6,511
15-19	51.6	71.4	47.7	7,820	63.9	73.2	59.1	3,619
20-24	60.6	80.0	57.3	6,757	77.5	86.1	74.1	2,892
25-29	60.2	79.5	56.8	7,145	76.4	87.9	72.6	2,757
30-39	61.2	81.1	58.1	10,185	77.4	88.3	74.0	4,589
40-49	54.9	77.1	51.6	7,042	74.7	88.1	72.0	3,501
Marital status								
Never married	62.8	78.6	58.7	9,326	74.0	82.2	69.8	8,378
Ever had sex	75.4	87.0	71.2	3,732	85.3	90.9	80.7	3,461
Never had sex	54.4	73.1	50.4	5,593	66.0	76.1	62.1	4,918
Married/living together	55.7	77.5	52.5	27,830	73.7	86.9	70.6	8,723
Divorced/separated/ widowed	65.8	82.3	62.4	1,793	80.1	89.6	75.6	258
Residence								
Urban	67.9	85.2	64.1	16,414	81.2	89.1	77.2	7,611
Rural	50.5	72.7	47.4	22,534	68.2	81.3	64.8	9,748
Zone								
North Central	60.7	73.4	58.2	5,572	66.1	82.1	61.6	2,685
North East	48.6	71.8	45.8	5,766	71.5	83.8	68.8	2,515
North West	48.9	79.6	46.5	11,877	70.5	83.5	68.4	5,185
South East	61.2	82.7	56.4	4,476	79.4	90.3	75.7	1,686
South South	68.8	79.0	63.9	4,942	85.9	90.4	81.6	2,445
South West	69.6	80.4	65.2	6,314	76.0	81.9	70.2	2,843
State								
North Central								
FCT-Abuja	65.2	78.2	63.2	315	54.5	86.5	51.7	175
Benue	81.1	92.6	78.1	1,240	74.3	88.3	68.2	616
Kogi	65.9	82.9	64.7	704	80.3	91.9	77.3	333
Kwara	73.5	85.7	71.0	596	77.6	81.9	71.0	274
Nasarawa	52.0	63.7	49.0	594	70.7	78.5	66.4	282
Niger	42.1	54.6	40.9	1,462	52.0	76.0	49.8	701
Plateau	52.2	64.3	46.7	662	58.7	73.6	51.3	302

Continued…

Table 13.2—*Continued*

Background characteristic	Women				Men			
	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1,2]	Number of women	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1,2]	Number of men
North East								
Adamawa	62.3	84.6	60.5	828	88.5	96.2	87.4	358
Bauchi	37.5	69.8	35.7	1,161	77.0	94.6	77.0	512
Borno	44.9	68.2	43.5	1,412	63.5	70.2	57.5	676
Gombe	43.7	66.3	40.1	550	56.3	83.7	52.1	255
Taraba	72.8	80.2	71.2	844	86.6	91.0	85.2	325
Yobe	37.3	64.4	29.6	971	60.2	75.5	57.7	390
North West								
Jigawa	47.1	77.7	44.4	1,353	63.7	79.2	59.7	510
Kaduna	66.5	88.4	64.8	2,136	83.5	91.6	82.3	1,033
Kano	48.2	82.4	44.5	3,189	89.7	93.7	88.8	1,592
Katsina	56.2	91.6	53.2	1,525	69.8	89.5	68.3	596
Kebbi	28.1	50.9	25.1	1,244	27.9	64.9	26.5	551
Sokoto	62.6	92.7	61.5	1,098	77.4	88.6	75.7	424
Zamfara	24.3	63.0	23.8	1,332	29.5	46.0	21.2	479
South East								
Abia	48.4	55.7	40.1	518	89.7	91.2	84.6	229
Anambra	48.1	80.4	42.5	1,052	68.3	88.3	65.0	446
Ebonyi	61.7	87.6	58.4	1,122	85.4	90.3	81.4	368
Enugu	77.3	93.3	74.1	951	91.3	95.0	88.5	320
Imo	66.4	83.7	61.3	833	68.9	88.1	65.2	323
South South								
Akwa Ibom	52.7	69.6	48.4	864	87.7	94.2	85.8	451
Bayelsa	43.3	69.1	38.6	364	96.0	97.4	94.2	187
Cross River	77.1	88.9	74.5	703	77.5	90.2	75.1	310
Delta	70.7	70.2	60.8	993	84.9	96.4	82.3	473
Edo	73.0	81.3	67.2	742	86.0	89.2	79.2	365
Rivers	78.4	88.4	76.4	1,276	86.4	82.3	79.0	658
South West								
Ekiti	65.3	82.5	59.7	326	52.0	94.6	51.4	148
Lagos	76.1	86.8	71.8	1,964	83.0	84.3	78.3	948
Ogun	76.3	82.6	71.4	883	73.7	85.6	70.8	358
Ondo	39.7	59.2	33.2	808	53.3	59.2	39.8	404
Osun	91.1	94.5	89.1	765	89.9	86.7	82.2	356
Oyo	63.6	74.8	59.3	1,568	79.3	84.9	74.7	629
Education								
No education	40.3	68.2	37.5	14,729	55.1	71.7	52.0	3,685
Primary	60.1	78.9	56.8	6,734	72.8	84.6	69.2	2,907
Secondary	69.7	84.5	65.4	13,927	78.9	87.6	74.7	8,281
More than secondary	80.2	91.3	76.9	3,558	86.5	94.2	83.8	2,486
Wealth quintile								
Lowest	35.8	65.5	32.9	7,132	53.7	71.0	51.3	2,862
Second	49.0	73.2	46.1	7,428	67.7	80.4	63.5	2,992
Middle	59.2	77.3	55.9	7,486	76.8	87.2	72.8	3,338
Fourth	66.7	83.1	62.8	7,992	80.9	88.4	76.6	3,835
Highest	73.9	87.9	69.9	8,910	83.1	91.4	79.9	4,332
Total	57.8	78.0	54.4	38,948	73.9	84.7	70.3	17,359

[1] Using condoms every time they have sexual intercourse
[2] Partner who has no other partners

Table 13.2 also shows that women who are unmarried and never had sex and those who are currently married are least likely to know that using condoms and limiting sexual intercourse to one HIV-negative partner reduces the risk of HIV transmission (50 percent and 53 percent, respectively). On the other hand, women who have never been married but have had sexual intercourse are most likely to know that using condoms and limiting sexual intercourse to one HIV-negative partner reduces the risk of HIV transmission (71 percent). Men show the same pattern; awareness of HIV prevention is lowest among men who are unmarried and have never had sexual intercourse (62 percent) and highest among men who have never been married but have had sexual intercourse (81 percent).

As expected, women and men in urban areas are more likely to be knowledgeable about HIV prevention methods than their counterparts in rural areas. Knowledge of HIV prevention varies by zone. It is highest among women in the South West and South South (65 percent and 64 percent, respectively) and

highest among men in the South South and South East (82 percent and 76 percent, respectively). Knowledge of HIV prevention methods increases with increasing education and wealth.

13.1.3 Rejection of Misconceptions about HIV/AIDS

As part of the effort to assess HIV and AIDS knowledge, the 2013 NDHS collected information on common misconceptions about HIV transmission. Respondents were asked whether they think it is possible for a healthy-looking person to have HIV and whether they believe HIV can be transmitted through mosquito bites, touching someone who has AIDS, or sharing food with a person who has HIV or AIDS. Comprehensive knowledge is defined as knowing that consistent condom use during sexual intercourse and having just one HIV-negative and faithful partner can reduce the chances of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission and prevention: that HIV can be transmitted by mosquito bites and by supernatural means.

Tables 13.3.1 and 13.3.2 show that 67 percent of women and 75 percent of men agree that a healthy-looking person can have HIV, 67 percent of women and 66 percent of men know that the AIDS virus cannot be transmitted by mosquito bites, and 64 percent of women and 66 percent of men say that the AIDS virus cannot be transmitted by supernatural means. Seventy-five percent of women and 78 percent of men correctly believe that a person cannot contract HIV by sharing food with someone who has AIDS.

Table 13.3.1 Comprehensive knowledge about AIDS: Women

Percentage of women age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of the AIDS virus, and the percentage with a comprehensive knowledge about AIDS, by background characteristics, Nigeria 2013

Background characteristic	Percentage of respondents who say that:				Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local misconceptions[1]	Percentage with comprehensive knowledge about AIDS[2]	Number of women
	A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	The AIDS virus cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS			
Age							
15-24	64.4	64.9	62.2	74.1	36.5	24.2	14,576
15-19	61.8	63.5	60.4	72.0	35.3	22.4	7,820
20-24	67.5	66.7	64.3	76.4	37.8	26.4	6,757
25-29	68.1	67.8	64.9	76.1	39.8	28.4	7,145
30-39	69.8	68.3	64.8	77.0	39.9	28.4	10,185
40-49	65.3	66.6	63.5	74.4	37.2	24.6	7,042
Marital status							
Never married	67.7	69.2	63.2	79.5	38.3	27.0	9,326
Ever had sex	72.7	73.0	62.5	84.7	37.8	30.2	3,732
Never had sex	64.4	66.7	63.7	76.0	38.6	24.9	5,593
Married/living together	66.2	65.7	63.9	73.7	38.1	25.8	27,830
Divorced/separated/ widowed	69.2	67.0	62.0	77.4	37.3	27.5	1,793
Residence							
Urban	73.1	74.6	69.9	84.7	44.6	32.7	16,414
Rural	62.0	60.8	59.1	68.4	33.3	21.4	22,534
Zone							
North Central	66.7	53.9	51.6	63.5	32.0	25.8	5,572
North East	67.5	61.1	61.8	68.8	42.8	29.6	5,766
North West	66.3	75.4	71.9	78.0	44.0	25.9	11,877
South East	42.1	73.4	65.8	86.7	19.6	12.5	4,476
South South	77.3	65.2	50.6	76.5	37.0	27.9	4,942
South West	75.7	62.6	69.0	77.2	42.2	32.1	6,314
State							
North Central							
FCT-Abuja	78.6	73.5	63.5	77.5	51.2	41.9	315
Benue	75.2	51.8	51.4	75.0	26.5	24.5	1,240
Kogi	70.8	65.1	66.8	67.8	45.7	36.8	704
Kwara	76.2	69.2	81.9	76.3	54.8	48.1	596
Nasarawa	77.3	43.9	31.7	61.8	20.3	10.5	594
Niger	47.7	48.8	38.6	43.6	24.6	20.1	1,462
Plateau	64.5	43.3	49.5	64.7	25.0	15.4	662

Continued…

Table 13.3.1—*Continued*

Background characteristic	Percentage of respondents who say that: A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	The AIDS virus cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS	Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local misconceptions[1]	Percentage with comprehensive knowledge about AIDS[2]	Number of women
North East							
Adamawa	77.6	59.7	71.0	77.0	47.6	36.0	828
Bauchi	56.3	28.2	40.9	46.1	17.0	11.7	1,161
Borno	70.7	74.8	70.5	77.4	60.0	38.0	1,412
Gombe	64.5	55.5	58.6	68.9	42.4	26.9	550
Taraba	86.7	73.2	57.9	73.4	52.3	47.7	844
Yobe	52.6	74.3	71.7	72.5	36.1	19.2	971
North West							
Jigawa	63.8	60.6	63.6	65.9	36.0	20.4	1,353
Kaduna	66.3	81.1	42.9	77.0	27.2	23.2	2,136
Kano	70.9	83.5	84.2	85.9	56.8	29.2	3,189
Katsina	60.4	78.6	92.5	93.2	45.8	27.4	1,525
Kebbi	28.8	53.5	54.2	55.1	12.5	7.6	1,244
Sokoto	83.3	91.6	91.5	92.6	77.4	52.2	1,098
Zamfara	85.8	65.4	74.2	65.4	47.9	21.5	1,332
South East							
Abia	14.3	83.6	81.2	82.8	9.1	1.5	518
Anambra	40.1	82.2	57.2	90.9	18.6	10.9	1,052
Ebonyi	49.8	57.4	57.5	77.4	20.2	14.0	1,122
Enugu	45.2	76.8	76.3	93.4	23.6	16.3	951
Imo	47.9	73.9	66.4	88.9	21.8	15.0	833
South South							
Akwa Ibom	78.3	59.8	49.8	77.3	35.8	20.8	864
Bayelsa	84.8	77.1	55.1	82.3	46.6	19.1	364
Cross River	79.9	59.6	46.4	80.0	29.2	25.3	703
Delta	74.5	74.3	61.2	73.5	47.3	35.5	993
Edo	74.1	57.1	52.7	76.8	34.4	29.8	742
Rivers	77.2	66.2	42.8	74.6	32.9	29.6	1,276
South West							
Ekiti	82.0	70.9	69.9	81.2	51.4	33.4	326
Lagos	80.6	62.5	74.8	86.7	42.4	34.5	1,964
Ogun	82.9	77.8	72.1	77.9	53.8	45.1	883
Ondo	63.5	51.9	53.5	64.0	29.5	9.8	808
Osun	86.5	71.3	80.1	84.4	55.2	49.3	765
Oyo	65.2	53.9	62.2	67.2	33.8	24.4	1,568
Education							
No education	57.5	60.9	60.1	64.8	34.6	19.8	14,729
Primary	65.6	60.3	58.4	71.6	31.9	22.5	6,734
Secondary	72.7	71.1	66.0	83.2	39.8	29.2	13,927
More than secondary	83.1	84.8	78.8	94.0	58.0	47.7	3,558
Wealth quintile							
Lowest	54.1	57.6	59.0	62.2	31.1	16.1	7,132
Second	60.5	60.2	59.4	68.0	32.8	20.4	7,428
Middle	65.1	62.7	58.9	72.4	33.5	23.4	7,486
Fourth	71.5	71.5	67.1	81.1	41.9	30.7	7,992
Highest	79.0	78.0	71.7	88.9	48.5	37.3	8,910
Total	66.7	66.6	63.6	75.3	38.1	26.2	38,948

[1] Two most common local misconceptions: the AIDS virus can be transmitted by mosquito bites and the AIDS virus can be transmitted by supernatural means.
[2] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the 2 most common local misconceptions about AIDS transmission or prevention.

The results in Tables 13.3.1 and 13.3.2 show that 38 percent of women and 46 percent of men know about the two most common misconceptions regarding HIV and AIDS (i.e., HIV can be transmitted by mosquito bites and by supernatural means) and that a healthy-looking person can have HIV. The tables also show that 26 percent of women and 37 percent of men have comprehensive knowledge about AIDS; that is, they know that using condoms and limiting sexual intercourse to one HIV-negative partner are HIV prevention methods, they know that a healthy-looking person can have HIV, and they reject the two most common local misconceptions about HIV.

Comprehensive knowledge is highest among never-married women and men who are sexually active. Respondents in urban areas are more likely than those in rural areas to have comprehensive knowledge of HIV. Comprehensive knowledge among women is highest in the South West (32 percent), while comprehensive knowledge among men is highest in the North West (46 percent). Comprehensive knowledge about HIV increases with increasing education and wealth.

Table 13.3.2 Comprehensive knowledge about AIDS: Men

Percentage of men age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of the AIDS virus, and the percentage with a comprehensive knowledge about AIDS, by background characteristics, Nigeria 2013

Background characteristic	Percentage of respondents who say that:				Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local misconceptions[1]	Percentage with comprehensive knowledge about AIDS[2]	Number of men
	A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	The AIDS virus cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS			
Age							
15-24	69.8	61.6	61.6	73.4	40.8	33.5	6,511
15-19	65.3	58.7	56.4	68.9	36.8	29.3	3,619
20-24	75.6	65.3	68.3	79.2	45.9	38.6	2,892
25-29	77.1	68.4	67.2	81.1	46.7	38.6	2,757
30-39	80.0	68.2	68.4	79.5	48.0	39.9	4,589
40-49	77.8	69.3	71.9	80.7	49.7	40.4	3,501
Marital status							
Never married	74.0	65.8	63.9	77.3	44.6	37.3	8,378
Ever had sex	80.9	68.4	67.2	83.5	45.8	39.0	3,461
Never had sex	69.1	64.0	61.6	72.9	43.7	36.1	4,918
Married/living together	76.5	66.2	68.8	78.2	46.5	37.6	8,723
Divorced/separated/ widowed	75.7	62.1	63.3	76.9	39.2	31.4	258
Residence							
Urban	79.6	74.0	72.6	85.3	51.5	44.0	7,611
Rural	71.9	59.8	61.5	71.9	40.7	32.2	9,748
Zone							
North Central	62.9	52.4	49.2	71.1	25.1	19.6	2,685
North East	76.3	61.5	70.9	73.1	46.6	38.6	2,515
North West	77.3	77.7	70.0	81.7	57.8	46.1	5,185
South East	73.5	70.9	66.2	87.5	43.3	36.9	1,686
South South	84.9	67.9	63.6	76.8	47.2	43.0	2,445
South West	75.0	56.7	74.6	75.9	41.0	32.6	2,843
State							
North Central							
FCT-Abuja	49.8	82.7	76.8	88.6	32.9	26.1	175
Benue	70.5	50.7	51.9	77.4	25.4	18.6	616
Kogi	53.7	59.8	52.7	84.0	28.6	25.6	333
Kwara	85.7	45.3	56.5	70.6	27.4	21.4	274
Nasarawa	76.8	46.6	43.7	69.0	28.2	23.0	282
Niger	49.6	46.5	36.1	55.4	17.2	13.5	701
Plateau	62.9	55.4	52.5	72.8	29.5	20.1	302
North East							
Adamawa	83.4	50.9	78.7	74.7	43.6	40.8	358
Bauchi	88.4	47.4	68.7	70.9	42.0	35.5	512
Borno	71.6	74.2	73.2	79.6	53.8	42.4	676
Gombe	84.2	57.0	78.1	75.6	48.5	26.0	255
Taraba	84.3	76.6	70.0	78.4	61.5	59.2	325
Yobe	50.6	58.1	58.5	57.3	29.1	25.4	390
North West							
Jigawa	85.8	56.4	73.7	76.6	44.0	28.0	510
Kaduna	56.9	86.9	45.4	83.7	37.9	33.2	1,033
Kano	93.8	92.3	85.6	93.7	82.1	77.5	1,592
Katsina	78.1	81.0	82.8	80.6	65.7	52.7	596
Kebbi	62.9	66.6	55.8	70.5	48.9	11.6	551
Sokoto	75.9	68.4	78.2	77.5	63.0	58.5	424
Zamfara	74.8	49.3	60.0	60.5	30.8	9.1	479
South East							
Abia	90.3	84.6	81.9	94.0	69.4	59.8	229
Anambra	59.3	72.8	57.6	85.9	33.4	26.5	446
Ebonyi	69.9	72.4	74.5	86.0	44.3	40.9	368
Enugu	85.1	70.5	68.4	85.3	49.5	46.9	320
Imo	73.9	57.6	55.1	88.9	31.0	20.6	323

Continued…

Table 13.3.2—*Continued*

Background characteristic	Percentage of respondents who say that: A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	The AIDS virus cannot be transmitted by supernatural means	A person cannot become infected by sharing food with a person who has AIDS	Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local misconceptions[1]	Percentage with comprehensive knowledge about AIDS[2]	Number of men
South South							
Akwa Ibom	81.7	54.2	49.2	76.3	32.9	31.2	451
Bayelsa	95.8	85.5	66.7	80.3	61.6	58.6	187
Cross River	86.9	54.6	56.9	76.5	37.9	33.9	310
Delta	87.0	85.7	73.9	89.0	60.1	53.3	473
Edo	78.2	69.3	69.8	88.5	48.1	41.6	365
Rivers	85.2	65.0	64.8	61.2	47.7	44.4	658
South West							
Ekiti	92.0	75.0	84.4	92.4	63.7	25.5	148
Lagos	86.6	69.0	76.8	80.4	54.3	47.6	948
Ogun	50.3	63.1	71.3	73.8	31.4	26.6	358
Ondo	68.0	53.2	64.2	67.5	34.8	16.4	404
Osun	92.8	41.5	87.0	88.7	35.5	32.5	356
Oyo	62.1	41.3	70.5	64.5	28.1	25.5	629
Education							
No education	62.9	58.5	59.1	65.2	39.8	28.4	3,685
Primary	72.2	57.0	60.7	70.5	36.9	31.0	2,907
Secondary	77.6	66.3	67.2	81.4	44.4	37.0	8,281
More than secondary	89.4	86.4	81.1	92.7	67.6	59.1	2,486
Wealth quintile							
Lowest	65.2	54.1	60.1	63.0	38.3	26.9	2,862
Second	71.0	61.5	63.3	73.4	42.4	32.3	2,992
Middle	74.4	63.5	62.6	76.6	41.2	34.9	3,338
Fourth	79.5	67.2	68.9	82.2	46.8	40.4	3,835
Highest	81.7	77.8	73.3	87.4	54.5	47.0	4,332
Total	75.3	66.0	66.4	77.7	45.5	37.4	17,359

[1] Two most common local misconceptions: the AIDS virus can be transmitted by mosquito bites and the AIDS virus can be transmitted by supernatural means.
[2] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the 2 most common local misconceptions about AIDS transmission or prevention.

Despite the government's efforts to increase awareness of HIV prevention and treatment, overall awareness among women and men has not increased substantially since 2008. The proportion of women and men age 15-49 with comprehensive knowledge increased only 3 percentage points and 1 percentage point, respectively.

13.2 KNOWLEDGE OF MOTHER-TO-CHILD TRANSMISSION OF HIV

Increasing knowledge about prevention of mother-to-child transmission (PMTCT) of HIV and use of antiretroviral medication prior to delivery are critical in reducing mother-to-child transmission. The PMTCT programme in Nigeria was established in 2001 (FMoH, 2011d). To obtain information on knowledge of PMTCT, respondents were asked whether HIV can be transmitted from a mother to a child through breastfeeding and whether a mother with HIV can reduce the risk of transmission to her baby by taking certain drugs during pregnancy.

Table 13.4 shows that 65 percent of women and 62 percent of men know that HIV can be transmitted through breastfeeding. In addition, 52 percent of women and 53 percent of men know that the risk of mother-to-child transmission can be reduced if the mother takes special drugs during pregnancy. These figures are an improvement from the 2008 NDHS (28 percent of women and 39 percent of men). Overall, 49 percent of women and 45 percent of men know that HIV can be transmitted by breastfeeding and that the risk of mother-to-child transmission can be reduced by taking special drugs. Knowledge regarding PMTCT is higher in urban than in rural areas and increases with increasing education and wealth. More than half of women in the South East (54 percent), South South (52 percent), and North Central (51 percent) zones are knowledgeable about PMTCT. Men in the South West (29 percent) are least likely to have knowledge regarding PMTCT.

Table 13.4 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of women and men age 15-49 who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs during pregnancy, by background characteristics, Nigeria 2013

	Women				Men			
Background characteristic	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of women	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of men
Age								
15-24	59.9	47.5	44.6	14,576	56.8	45.8	39.5	6,511
15-19	54.5	41.6	38.8	7,820	53.1	39.8	34.7	3,619
20-24	66.2	54.4	51.3	6,757	61.6	53.3	45.5	2,892
25-29	67.7	55.4	52.2	7,145	64.5	57.3	49.4	2,757
30-39	70.3	57.6	54.6	10,185	64.0	58.0	49.0	4,589
40-49	65.3	50.5	48.0	7,042	65.9	55.4	47.7	3,501
Marital status								
Never married	65.8	50.8	47.3	9,326	60.1	49.9	42.9	8,378
Ever had sex	75.6	59.2	55.4	3,732	69.7	57.0	48.9	3,461
Never had sex	59.2	45.2	42.0	5,593	53.3	44.9	38.7	4,918
Married/living together	64.3	52.3	49.6	27,830	63.3	55.6	47.5	8,723
Divorced/separated/ widowed	71.9	56.6	53.1	1,793	63.8	52.9	45.2	258
Currently pregnant								
Pregnant	64.8	54.0	51.3	4,710	na	na	na	na
Not pregnant or not sure	65.1	51.9	48.9	34,238	na	na	na	na
Residence								
Urban	76.1	61.8	58.4	16,414	64.4	56.1	46.2	7,611
Rural	56.9	45.1	42.5	22,534	59.7	50.2	44.5	9,748
Zone								
North Central	63.6	54.9	50.8	5,572	58.5	50.7	43.6	2,685
North East	57.1	49.9	46.4	5,766	58.2	54.8	50.2	2,515
North West	56.3	49.1	47.0	11,877	58.5	58.8	50.1	5,185
South East	81.5	57.2	54.3	4,476	75.1	48.8	42.8	1,686
South South	72.9	54.8	52.1	4,942	76.5	56.2	51.8	2,445
South West	72.1	51.8	48.7	6,314	53.3	41.4	29.3	2,843
State								
North Central								
FCT-Abuja	62.1	55.3	49.7	315	55.4	48.8	45.6	175
Benue	89.3	73.4	72.4	1,240	86.5	62.9	59.0	616
Kogi	75.7	54.8	52.4	704	24.0	41.3	16.1	333
Kwara	53.3	44.6	31.8	596	64.8	48.3	44.7	274
Nasarawa	64.7	60.0	57.4	594	75.0	64.4	60.2	282
Niger	45.7	48.0	43.4	1,462	37.9	42.8	35.8	701
Plateau	51.5	39.7	37.2	662	68.0	44.8	42.5	302
North East								
Adamawa	59.3	73.7	56.7	828	56.5	56.0	52.0	358
Bauchi	46.1	28.8	27.9	1,161	74.5	70.8	64.7	512
Borno	58.6	50.1	48.8	1,412	46.6	45.4	39.4	676
Gombe	52.0	44.1	41.6	550	74.1	73.0	67.6	255
Taraba	74.0	61.4	61.3	844	86.6	70.0	68.9	325
Yobe	54.1	47.6	45.9	971	24.2	24.5	21.4	390
North West								
Jigawa	51.2	40.6	38.9	1,353	64.3	45.6	39.1	510
Kaduna	65.5	59.9	58.6	2,136	63.4	77.5	56.7	1,033
Kano	54.8	53.0	48.9	3,189	77.3	75.2	72.0	1,592
Katsina	66.1	60.8	57.9	1,525	49.4	55.2	44.2	596
Kebbi	47.3	30.0	28.2	1,244	23.8	18.5	17.4	551
Sokoto	55.5	52.1	51.3	1,098	45.9	50.3	38.6	424
Zamfara	48.0	33.6	33.3	1,332	42.4	36.3	30.1	479
South East								
Abia	85.5	51.2	49.3	518	79.5	66.9	59.2	229
Anambra	73.4	51.4	50.8	1,052	63.5	37.1	33.1	446
Ebonyi	78.2	45.7	42.2	1,122	81.3	46.1	39.3	368
Enugu	86.2	74.2	70.3	951	77.3	55.2	48.8	320
Imo	88.3	64.5	59.8	833	78.6	48.9	42.7	323
South South								
Akwa Ibom	66.6	53.1	48.5	864	78.5	67.7	62.8	451
Bayelsa	78.5	47.4	41.9	364	85.5	54.3	52.2	187
Cross River	81.1	66.6	64.2	703	91.0	78.4	76.0	310
Delta	73.4	59.9	58.7	993	76.8	61.8	57.7	473
Edo	65.1	45.0	42.8	742	79.3	57.3	51.2	365
Rivers	75.3	53.0	51.0	1,276	63.9	33.9	28.9	658

Continued…

Table 13.4—*Continued*

Background characteristic	Women				Men			
	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of women	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of men
South West								
Ekiti	55.6	50.5	42.9	326	67.6	41.5	36.1	148
Lagos	81.4	67.4	63.6	1,964	55.6	50.6	32.4	948
Ogun	58.8	40.0	38.5	883	37.5	32.1	27.6	358
Ondo	62.5	33.9	30.1	808	55.4	34.4	28.3	404
Osun	97.6	69.2	69.1	765	56.5	44.4	34.3	356
Oyo	64.1	39.9	36.8	1,568	52.6	35.5	21.8	629
Education								
No education	48.2	39.0	36.9	14,729	45.9	39.8	35.7	3,685
Primary	69.0	51.9	49.0	6,734	63.9	49.8	43.7	2,907
Secondary	75.4	59.0	55.6	13,927	64.6	52.9	45.1	8,281
More than secondary	87.0	79.8	75.3	3,558	73.3	75.0	61.7	2,486
Wealth quintile								
Lowest	42.8	32.9	31.3	7,132	45.1	38.3	33.9	2,862
Second	56.5	44.8	42.6	7,428	60.4	50.1	44.6	2,992
Middle	66.6	52.3	49.2	7,486	65.6	55.6	49.1	3,338
Fourth	74.0	58.1	54.6	7,992	66.3	54.5	46.2	3,835
Highest	80.6	68.1	64.3	8,910	66.7	60.5	49.4	4,332
Total	65.0	52.1	49.2	38,948	61.8	52.8	45.2	17,359

na = Not applicable

13.3 ACCEPTING ATTITUDES TOWARD THOSE LIVING WITH HIV AND AIDS

The HIV/AIDS epidemic has generated fear, anxiety, and prejudice against people living with HIV and AIDS, and people who are HIV positive face widespread stigma and discrimination. These societal attitudes can adversely affect both people's willingness to be tested for HIV and their adherence to antiretroviral therapy. Reducing stigma and discrimination is therefore an important factor in the prevention, management, and control of the HIV epidemic.

In the 2013 NDHS, women and men who had heard of AIDS were asked a series of questions to assess the level of stigma associated with HIV and AIDS. These questions referred to attitudes regarding four situations: whether they would care for a family member with HIV in their own home, whether they would buy fresh vegetables from a shopkeeper with HIV, whether they would allow an HIV-positive teacher to continue teaching, and whether they would not want to keep secret the HIV-positive status of a family member.

Tables 13.5.1 and 13.5.2 present results for women and men age 15-49, respectively. Seven in 10 women and men (69 percent and 68 percent, respectively) reported that they would be willing to take care of a family member with HIV at home. Men were slightly more likely than women to say that they would buy fresh vegetables from a shopkeeper who has HIV (54 percent versus 49 percent). More than half of women and men believed that a female teacher with HIV should be allowed to continue teaching (58 percent and 55 percent, respectively). Thirty-six percent of women and 47 percent of men reported that they would not want to keep secret the fact that a family member was infected with HIV.

Accepting attitudes were more common among respondents in urban areas, those with more than a secondary education, and those in the highest wealth quintile. The proportion of women expressing accepting attitudes regarding all four situations was highest in the North East (18 percent); the proportion for men was highest in the South South (22 percent). Less than 1 percent of men in Kano and Kebbi expressed accepting attitudes regarding all four situations.

Overall, 12 percent of women and 13 percent of men expressed accepting attitudes regarding all four situations. These figures were lower than those recorded in the 2008 NDHS (13 percent and 22 percent, respectively).

Table 13.5.1 Accepting attitudes toward those living with HIV/AIDS: Women

Among women age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Nigeria 2013

Background characteristic	Percentage of respondents who: Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing acceptance attitudes on all four indicators	Number of respondents who have heard of AIDS
Age						
15-24	68.5	47.1	57.6	34.5	10.7	13,319
15-19	65.5	44.0	56.1	34.9	10.0	7,001
20-24	71.8	50.5	59.3	34.1	11.6	6,318
25-29	71.3	51.1	60.4	35.1	11.7	6,615
30-39	70.4	50.4	59.7	36.6	12.4	9,595
40-49	67.9	47.0	55.4	38.8	11.5	6,534
Marital status						
Never married	71.1	52.0	63.2	36.2	12.0	8,793
Ever had sex	76.9	56.3	66.7	34.7	12.6	3,650
Never had sex	67.0	49.0	60.7	37.3	11.6	5,143
Married/living together	68.6	47.3	56.4	35.6	11.2	25,559
Divorced/separated/ widowed	72.5	52.0	60.9	39.9	13.9	1,712
Residence						
Urban	71.6	55.2	63.6	37.0	13.2	15,971
Rural	67.6	43.5	54.0	35.1	10.2	20,093
Zone						
North Central	84.2	55.1	69.3	36.8	15.8	4,651
North East	72.9	53.2	66.0	48.2	17.9	5,078
North West	68.7	50.9	55.9	25.9	11.4	11,331
South East	81.0	44.6	54.6	37.9	8.8	4,432
South South	69.3	47.8	63.1	35.0	9.9	4,660
South West	47.4	39.3	46.5	43.4	6.2	5,911
State						
North Central						
FCT-Abuja	87.8	68.5	73.2	19.9	9.2	285
Benue	89.5	42.6	66.0	33.7	11.8	1,237
Kogi	86.3	52.7	66.0	39.3	20.5	619
Kwara	69.8	55.1	64.0	13.6	4.9	552
Nasarawa	83.2	62.7	88.4	63.5	34.5	490
Niger	85.0	58.0	64.8	33.7	11.3	935
Plateau	82.0	67.5	74.9	54.8	25.5	533
North East						
Adamawa	69.8	56.7	75.1	29.9	9.7	743
Bauchi	79.8	37.8	54.5	54.6	16.5	1,013
Borno	85.5	67.8	85.6	45.8	27.7	1,136
Gombe	81.8	74.1	76.1	48.0	26.4	437
Taraba	69.8	48.4	74.9	36.4	12.8	807
Yobe	51.0	43.8	35.4	68.8	14.4	943
North West						
Jigawa	52.6	32.5	46.0	21.4	2.8	1,265
Kaduna	85.8	65.9	71.7	12.4	8.7	2,046
Kano	60.1	55.7	51.8	25.6	15.4	3,179
Katsina	88.5	41.7	68.9	29.8	16.8	1,520
Kebbi	70.5	55.7	55.7	27.4	4.4	944
Sokoto	72.2	57.4	60.4	18.9	12.6	1,088
Zamfara	50.8	34.9	31.2	52.8	11.6	1,291
South East						
Abia	81.5	53.5	68.0	21.0	5.9	511
Anambra	78.2	46.0	40.9	30.6	5.7	1,047
Ebonyi	74.9	37.2	51.2	67.5	15.1	1,103
Enugu	92.4	52.2	68.6	34.3	10.7	946
Imo	79.3	38.8	52.0	22.0	3.9	824
South South						
Akwa Ibom	64.0	45.8	56.2	38.4	7.9	829
Bayelsa	68.1	38.2	50.5	66.6	21.7	328
Cross River	91.8	57.1	82.0	17.4	4.8	678
Delta	65.8	39.0	72.7	38.2	16.2	918
Edo	59.8	40.7	55.0	26.0	2.2	713
Rivers	68.9	57.5	58.0	36.7	10.5	1,194
South West						
Ekiti	62.0	48.9	62.4	38.7	11.2	325
Lagos	70.1	51.6	59.8	26.2	8.6	1,928
Ogun	18.1	23.4	26.9	58.5	1.6	858
Ondo	40.9	35.7	41.8	34.5	5.4	712
Osun	24.4	28.8	37.4	83.4	9.2	763
Oyo	46.6	37.5	43.6	41.6	3.1	1,327

Continued…

Table 13.5.1—*Continued*

Background characteristic	Percentage of respondents who: Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing acceptance attitudes on all four indicators	Number of respondents who have heard of AIDS
Education						
No education	66.2	42.2	50.5	34.6	10.9	12,629
Primary	67.0	41.9	54.2	39.5	9.7	6,266
Secondary	70.4	51.4	62.0	36.2	11.5	13,622
More than secondary	81.0	73.0	78.5	33.6	16.7	3,546
Wealth quintile						
Lowest	60.5	36.4	43.7	37.8	9.6	6,080
Second	69.3	42.2	53.6	34.8	10.6	6,632
Middle	72.4	49.3	61.3	38.4	12.6	6,860
Fourth	68.7	51.5	60.5	36.9	11.7	7,692
Highest	73.8	59.1	67.5	32.9	12.5	8,800
Total	69.4	48.7	58.3	36.0	11.5	36,064

Table 13.5.2 Accepting attitudes toward those living with HIV/AIDS: Men

Among men age 15-49 who have heard of HIV/AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Nigeria 2013

Background characteristic	Percentage of respondents who: Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing acceptance attitudes on all four indicators	Number of respondents who have heard of AIDS
Age						
15-24	65.7	49.4	51.5	41.8	10.0	5,996
15-19	62.0	44.1	47.1	40.3	7.5	3,233
20-24	70.1	55.6	56.5	43.6	13.0	2,762
25-29	69.8	56.4	55.8	47.0	13.5	2,683
30-39	69.5	56.6	57.1	49.5	15.4	4,475
40-49	69.9	56.9	57.3	50.8	15.9	3,421
Marital status						
Never married	67.7	53.7	55.2	43.6	12.2	7,850
Ever had sex	73.4	56.3	61.9	47.6	17.1	3,408
Never had sex	63.4	51.8	50.0	40.5	8.5	4,442
Married/living together	69.0	54.5	54.8	49.1	14.2	8,468
Divorced/separated/ widowed	61.7	48.8	51.1	53.8	16.4	257
Residence						
Urban	66.7	60.9	60.2	46.9	14.8	7,479
Rural	69.5	48.4	50.5	46.3	12.0	9,096
Zone						
North Central	75.3	46.5	54.6	49.6	15.6	2,517
North East	78.4	58.2	60.3	36.3	11.9	2,367
North West	60.9	62.1	49.6	43.9	7.4	4,939
South East	83.0	41.6	47.1	58.0	17.7	1,665
South South	76.3	56.3	70.2	53.7	22.3	2,383
South West	50.2	48.4	51.5	44.5	12.4	2,704
State						
North Central						
FCT-Abuja	89.4	63.2	72.9	14.6	8.8	165
Benue	73.6	48.4	55.8	48.0	14.7	616
Kogi	87.4	38.9	49.8	48.9	10.2	320
Kwara	48.5	39.9	55.2	36.3	4.6	272
Nasarawa	83.5	66.2	66.3	70.9	30.9	245
Niger	77.2	34.7	40.2	54.2	17.6	631
Plateau	71.8	57.4	69.1	58.6	21.1	268
North East						
Adamawa	77.9	52.9	66.4	50.7	19.3	350
Bauchi	73.3	50.0	56.0	39.8	11.0	486
Borno	77.9	75.9	59.0	23.2	10.8	645
Gombe	84.3	60.4	74.0	53.9	24.2	240
Taraba	85.0	52.7	58.7	46.3	8.8	303
Yobe	76.8	45.0	54.3	20.2	2.0	345

Continued…

Table 13.5.2—*Continued*

Background characteristic	Percentage of respondents who: Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing acceptance attitudes on all four indicators	Number of respondents who have heard of AIDS
North West						
Jigawa	64.3	45.0	43.6	31.6	6.0	496
Kaduna	50.7	66.8	44.6	57.7	6.8	1,008
Kano	47.1	86.5	48.6	45.8	0.1	1,529
Katsina	81.2	39.3	44.1	12.9	2.4	593
Kebbi	53.4	51.9	67.1	32.3	0.2	442
Sokoto	90.9	72.7	74.2	68.9	55.0	404
Zamfara	79.8	19.4	38.7	49.3	6.0	467
South East						
Abia	87.7	42.1	54.3	68.9	22.5	227
Anambra	69.3	36.3	39.5	55.2	17.2	442
Ebonyi	86.6	45.0	50.3	54.0	18.2	363
Enugu	96.0	51.0	63.8	52.5	19.5	316
Imo	81.7	35.3	32.3	63.9	12.5	317
South South						
Akwa Ibom	84.0	61.6	72.0	61.9	33.6	440
Bayelsa	79.5	52.2	79.0	38.9	16.3	187
Cross River	90.9	60.4	79.2	35.8	11.6	303
Delta	77.2	46.9	71.3	76.9	33.6	470
Edo	78.6	41.7	66.2	49.3	17.9	364
Rivers	60.9	67.4	63.3	46.0	15.3	618
South West						
Ekiti	79.2	66.8	69.1	73.8	40.6	148
Lagos	63.3	54.5	56.7	42.5	15.0	931
Ogun	25.8	29.8	27.6	50.7	10.5	325
Ondo	50.2	41.4	43.7	40.6	5.3	356
Osun	43.2	65.4	58.8	18.3	4.0	355
Oyo	39.9	38.5	52.2	55.3	11.6	589
Education						
No education	66.1	46.3	42.7	41.5	7.8	3,265
Primary	66.8	44.0	45.5	50.3	10.8	2,758
Secondary	66.8	53.1	55.7	47.0	12.8	8,077
More than secondary	77.5	78.4	78.9	47.7	24.9	2,474
Wealth quintile						
Lowest	67.5	42.5	43.9	39.9	7.1	2,536
Second	69.4	51.3	48.3	44.1	9.0	2,786
Middle	69.0	50.2	50.5	48.5	12.5	3,217
Fourth	67.4	55.9	57.3	50.0	15.2	3,751
Highest	68.3	63.9	66.9	47.7	18.6	4,284
Total	68.3	54.0	54.9	46.6	13.3	16,575

13.4 ATTITUDES TOWARDS NEGOTIATING SAFER SEX

The high levels of HIV transmission through sexual intercourse make negotiating safer sex indispensable. This is especially the case in marital unions where women's status is compromised by societal expectations, thereby increasing their vulnerability to HIV transmission.

Table 13.6 shows that 68 percent of women and 74 percent of men in Nigeria believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women. Urban women (69 percent) are more likely than rural women (66 percent) to express this sentiment. However, men show the opposite pattern; rural men are slightly more likely than urban men to believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women (75 percent and 72 percent, respectively).

Seventy-five percent of women and 88 percent of men believe that it would be justified for women to ask their husband or partner to use a condom if they know that he has an STI. Women age 30-39 and men age 40-49, never-married men and women who have ever had sex, urban respondents, those with more than a secondary education, and those in the highest wealth quintile are more likely to agree that a woman is justified in asking her husband or partner to use a condom if she knows that he has an STI.

Women and men in the South West are most likely to say that a woman is justified in asking her husband or partner to use a condom if she knows that he has an STI (84 percent and 92 percent, respectively). Among both women and men, this proportion decreases with increasing education and wealth. However, there is no clear pattern by education or wealth in the proportion of respondents agreeing that a woman is justified in refusing to have sex with her husband if she knows that he has sex with other women.

The proportion of women who believe that a woman is justified in asking her husband to use a condom if she knows that he has an STI is slightly higher than the figure reported in the 2008 NDHS (75 percent and 70 percent, respectively).

Table 13.6 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women, and percentage who believe that a woman is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection (STI), by background characteristics, Nigeria 2013

Background characteristic	Women			Men		
	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of women	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of men
Age						
15-24	65.7	71.0	14,576	71.4	83.2	6,511
15-19	62.8	66.0	7,820	70.0	78.8	3,619
20-24	69.2	76.8	6,757	73.1	88.6	2,892
25-29	68.1	77.3	7,145	75.9	89.7	2,757
30-39	69.3	79.6	10,185	73.7	90.1	4,589
40-49	68.1	75.1	7,042	75.5	91.2	3,501
Marital status						
Never married	62.7	73.1	9,326	71.1	85.4	8,378
Ever had sex	66.5	85.9	3,732	66.3	92.9	3,461
Never had sex	60.2	64.5	5,593	74.4	80.2	4,918
Married/living together	69.1	75.5	27,830	76.1	89.8	8,723
Divorced/separated/ widowed	68.6	79.9	1,793	68.1	88.7	258
Residence						
Urban	69.1	82.3	16,414	71.8	92.4	7,611
Rural	66.4	69.9	22,534	74.9	83.9	9,748
Zone						
North Central	48.3	62.7	5,572	66.7	85.2	2,685
North East	68.9	61.1	5,766	87.1	85.8	2,515
North West	83.6	81.1	11,877	86.3	85.9	5,185
South East	59.5	69.8	4,476	61.9	89.2	1,686
South South	58.6	83.0	4,942	62.5	89.5	2,445
South West	65.6	85.4	6,314	61.1	92.2	2,843
State						
North Central						
FCT-Abuja	43.6	73.7	315	42.4	62.7	175
Benue	57.0	64.3	1,240	75.9	89.0	616
Kogi	49.6	59.1	704	62.9	97.5	333
Kwara	50.1	85.7	596	51.3	98.4	274
Nasarawa	57.9	66.5	594	73.4	88.1	282
Niger	39.4	50.2	1,462	70.1	79.7	701
Plateau	42.8	61.4	662	66.2	75.2	302
North East						
Adamawa	62.7	63.6	828	88.0	89.7	358
Bauchi	74.1	63.1	1,161	95.7	91.9	512
Borno	75.2	58.9	1,412	81.8	85.5	676
Gombe	54.6	62.9	550	93.7	88.6	255
Taraba	75.2	85.1	844	87.8	97.1	325
Yobe	61.1	37.6	971	79.4	63.8	390
North West						
Jigawa	73.4	71.6	1,353	82.3	76.5	510
Kaduna	83.5	79.5	2,136	86.3	91.6	1,033
Kano	89.9	91.0	3,189	96.4	94.4	1,592
Katsina	89.0	92.2	1,525	89.2	91.3	596
Kebbi	86.3	82.9	1,244	58.8	50.7	551
Sokoto	87.1	88.9	1,098	80.6	94.2	424
Zamfara	67.5	49.3	1,332	90.3	81.8	479

Continued…

Table 13.6—*Continued*

Background characteristic	Women			Men		
	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of women	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of men
South East						
Abia	43.9	56.9	518	49.3	92.4	229
Anambra	70.7	75.2	1,052	59.1	90.1	446
Ebonyi	60.7	53.6	1,122	72.2	91.4	368
Enugu	53.6	80.1	951	69.2	87.3	320
Imo	60.0	81.1	833	55.6	85.1	323
South South						
Akwa Ibom	41.1	65.8	864	58.7	75.5	451
Bayelsa	46.4	93.7	364	38.3	97.8	187
Cross River	73.3	89.1	703	68.2	86.0	310
Delta	59.9	80.7	993	64.2	96.9	473
Edo	59.5	84.0	742	69.6	94.6	365
Rivers	64.5	89.6	1,276	64.1	90.2	658
South West						
Ekiti	64.2	78.9	326	46.5	98.1	148
Lagos	73.2	92.0	1,964	53.1	91.7	948
Ogun	69.4	87.1	883	72.2	88.9	358
Ondo	43.6	78.7	808	59.9	82.8	404
Osun	65.9	94.5	765	40.5	98.4	356
Oyo	65.6	76.7	1,568	82.6	96.0	629
Education						
No education	70.2	66.1	14,729	79.1	77.7	3,685
Primary	63.9	75.6	6,734	74.0	87.2	2,907
Secondary	66.3	80.8	13,927	70.8	89.9	8,281
More than secondary	68.5	89.6	3,558	74.0	95.5	2,486
Wealth quintile						
Lowest	70.1	62.9	7,132	80.0	76.6	2,862
Second	69.1	68.5	7,428	80.0	84.0	2,992
Middle	64.1	73.1	7,486	74.6	89.6	3,338
Fourth	65.8	81.1	7,992	69.7	90.9	3,835
Highest	68.5	86.9	8,910	67.4	93.1	4,332
Total	67.5	75.2	38,948	73.5	87.6	17,359

13.5 ATTITUDES TOWARD CONDOM EDUCATION FOR YOUTH

Condom use is one of the most effective strategies for combating the spread of HIV. However, educating youths about condoms is sometimes controversial, with some people believing that it promotes early sexual initiation. To gauge attitudes toward condom education for youth, the 2013 NDHS asked respondents if they thought that young people age 12-14 should be taught about using a condom to avoid HIV infection. Because the data focus on adult opinions, results are tabulated for respondents age 18-49.

Table 13.7 shows that 35 percent of women and 44 percent of men support teaching young people age 12-14 about condoms for HIV prevention. Support of condom education for youth is highest among women and men who have never been married (50 percent each) and lowest among women and men who are married or living together (32 percent and 41 percent, respectively). Support for educating youth on the use of condoms for HIV prevention is higher in urban than in rural areas. Among women, support of condom education for youth is highest in the South East (49 percent); among men, it is highest in the South South (59 percent). In contrast, support is lowest among women in Bauchi (15 percent) and men in Oyo (13 percent). The proportion of men and women who support condom education for youth increases with increasing education and wealth.

Table 13.7 Adult support of education about condom use to prevent AIDS

Percentage of women and men age 18-49 who agree that children age 12-14 should be taught about using a condom to avoid AIDS, by background characteristics, Nigeria 2013

Background characteristic	Women		Men	
	Percentage who agree	Number	Percentage who agree	Number
Age				
18-24	37.6	9,709	46.1	4,227
18-19	37.6	2,952	44.8	1,335
20-24	37.7	6,757	46.7	2,892
25-29	37.0	7,145	47.0	2,757
30-39	35.0	10,185	43.5	4,589
40-49	30.7	7,042	41.1	3,501
Marital status				
Never married	50.3	5,497	49.5	6,098
Married or living together	31.8	26,815	40.7	8,719
Divorced/separated/ widowed	41.3	1,769	44.0	258
Residence				
Urban	39.1	14,345	46.5	6,612
Rural	32.6	19,736	42.6	8,463
Zone				
North Central	37.6	4,866	46.9	2,394
North East	25.3	5,036	33.1	2,209
North West	30.3	10,358	42.0	4,412
South East	48.8	3,937	54.1	1,417
South South	48.0	4,293	58.9	2,142
South West	32.2	5,591	37.8	2,502
State				
North Central				
FCT-Abuja	33.7	286	23.2	163
Benue	56.4	1,078	58.7	537
Kogi	38.5	583	43.3	297
Kwara	20.0	504	50.9	239
Nasarawa	54.9	541	54.4	248
Niger	24.6	1,283	38.8	629
Plateau	31.9	590	49.9	281
North East				
Adamawa	34.9	725	54.5	306
Bauchi	15.3	1,024	27.7	450
Borno	19.9	1,230	22.0	614
Gombe	24.2	486	44.3	217
Taraba	45.7	738	40.6	283
Yobe	19.5	833	27.6	339
North West				
Jigawa	39.6	1,210	27.7	437
Kaduna	46.8	1,857	56.4	907
Kano	23.6	2,710	46.5	1,332
Katsina	36.7	1,359	33.4	514
Kebbi	18.4	1,111	47.2	475
Sokoto	25.2	953	25.7	345
Zamfara	18.2	1,156	28.6	402
South East				
Abia	52.9	475	67.0	200
Anambra	44.1	927	36.2	391
Ebonyi	53.2	960	57.0	297
Enugu	52.8	845	69.5	251
Imo	41.8	731	53.0	277
South South				
Akwa Ibom	41.7	740	62.1	402
Bayelsa	63.1	296	75.7	155
Cross River	65.0	649	71.0	266
Delta	54.9	839	45.6	416
Edo	29.1	619	55.0	300
Rivers	43.7	1,149	58.1	603
South West				
Ekiti	43.0	275	54.9	123
Lagos	35.4	1,770	49.7	857
Ogun	50.5	800	36.0	333
Ondo	29.2	704	42.9	352
Osun	24.0	659	36.4	306
Oyo	20.9	1,383	13.3	532

Continued…

Table 13.7—*Continued*

Background characteristic	Women		Men	
	Percentage who agree	Number	Percentage who agree	Number
Education				
No education	23.8	13,430	29.3	3,283
Primary	36.1	6,123	39.9	2,556
Secondary	43.4	10,996	49.5	6,758
More than secondary	52.2	3,531	54.6	2,477
Wealth quintile				
Lowest	22.9	6,275	30.0	2,415
Second	31.1	6,477	40.8	2,578
Middle	37.9	6,480	47.0	2,857
Fourth	37.7	6,954	48.3	3,363
Highest	44.4	7,895	50.1	3,862
Total	35.3	34,081	44.3	15,075

13.6 HIGHER-RISK SEX

Information on multiple sexual partners and the practice of protected sex is vital in preventing sexually transmitted infections, including HIV, and monitoring intervention programmes to control the spread of the epidemic. The 2013 NDHS included questions on respondents' sexual partners in the past 12 months and during their lifetime.

Respondents were asked detailed questions about their sexual behaviour, including the number of partners they had in the 12 months preceding the survey. Women and men who had multiple sexual partners were asked about condom use during the last time they had sexual intercourse and the total number of lifetime sexual partners they had. The results are shown in Tables 13.8.1 and 13.8.2 for women and men age 15-49, respectively.

13.6.1 Multiple Sexual Partners

A much larger proportion of men than women reported having two or more sexual partners in the 12 months preceding the survey (13 percent versus 1 percent). Two percent each of never-married women and women who were divorced, separated, or widowed reported having two or more sexual partners, as compared with 1 percent of married women.

Women who had two or more partners in the 12 months preceding the survey were more likely than men to report using a condom during their last sexual intercourse (29 percent and 20 percent, respectively). Never-married women and men were most likely to report condom use during their last sexual intercourse (64 percent and 58 percent, respectively).

Men have a mean of 4.1 lifetime sexual partners, as compared with 1.5 partners among women. The mean number of lifetime sexual partners for women and men is highest in the South South (2.0 and 6.9, respectively). Mean number of lifetime sexual partners increases with increasing education and wealth.

Table 13.8.1 Multiple sexual partners: Women

Among all women age 15-49, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months; among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and the mean number of sexual partners during their lifetime for women who ever had sexual intercourse, by background characteristics, Nigeria 2013

	All women		Among women who had 2+ partners in the past 12 months:		Among women who ever had sexual intercourse[1]:	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Number of women	Percentage who reported using a condom during last sexual intercourse	Number of women	Mean number of sexual partners in lifetime	Number of women
Age						
15-24	1.1	14,576	40.6	158	1.4	9,266
15-19	0.7	7,820	38.1	53	1.2	3,403
20-24	1.6	6,757	41.9	105	1.4	5,863
25-29	1.2	7,145	36.1	87	1.6	6,902
30-39	1.0	10,185	22.8	106	1.7	10,042
40-49	1.1	7,042	7.1	76	1.6	6,981
Marital status						
Never married	1.9	9,326	63.5	174	1.9	3,719
Married or living together	0.8	27,830	3.6	223	1.5	27,696
Divorced/separated/ widowed	1.6	1,793	(21.8)	29	2.0	1,776
Residence						
Urban	1.3	16,414	43.7	210	1.7	13,122
Rural	1.0	22,534	15.3	217	1.4	20,069
Zone						
North Central	1.9	5,572	17.2	105	1.5	4,550
North East	0.7	5,766	(26.9)	40	1.4	5,076
North West	1.0	11,877	27.8	113	1.3	10,597
South East	1.0	4,476	(45.5)	45	1.7	3,527
South South	1.3	4,942	38.7	66	2.0	4,153
South West	0.9	6,314	32.5	58	1.8	5,288
State						
North Central						
FCT-Abuja	3.6	315	*	11	1.9	257
Benue	5.6	1,240	(10.9)	70	2.2	1,041
Kogi	0.0	704	*	0	1.1	535
Kwara	0.1	596	*	1	1.5	460
Nasarawa	0.9	594	*	5	1.4	508
Niger	0.6	1,462	*	8	1.1	1,223
Plateau	1.5	662	*	10	1.5	526
North East						
Adamawa	0.2	828	*	1	1.4	689
Bauchi	1.5	1,161	*	18	1.4	1,074
Borno	0.9	1,412	*	13	1.1	1,206
Gombe	0.5	550	*	3	1.2	493
Taraba	0.5	844	*	5	2.0	760
Yobe	0.0	971	*	0	1.1	853
North West						
Jigawa	1.5	1,353	*	20	1.3	1,294
Kaduna	2.1	2,136	*	44	1.6	1,895
Kano	1.3	3,189	(0.0)	42	1.1	2,632
Katsina	0.2	1,525	*	3	1.2	1,433
Kebbi	0.1	1,244	*	1	1.1	1,112
Sokoto	0.1	1,098	*	1	1.2	982
Zamfara	0.3	1,332	*	3	1.2	1,250
South East						
Abia	1.4	518	*	7	1.6	428
Anambra	0.9	1,052	*	9	1.8	829
Ebonyi	0.2	1,122	*	3	1.7	899
Enugu	0.7	951	*	7	1.5	704
Imo	2.2	833	*	18	2.1	667
South South						
Akwa Ibom	0.8	864	*	7	2.1	734
Bayelsa	3.2	364	(37.9)	12	2.5	306
Cross River	0.2	703	*	1	1.7	625
Delta	1.2	993	*	12	2.0	817
Edo	0.6	742	*	4	1.7	575
Rivers	2.3	1,276	*	30	2.3	1,096
South West						
Ekiti	2.0	326	*	6	2.1	270
Lagos	1.3	1,964	*	26	2.1	1,645
Ogun	0.8	883	*	7	1.7	771
Ondo	1.1	808	*	9	1.7	693
Osun	0.5	765	*	4	1.7	586
Oyo	0.3	1,568	*	5	1.5	1,322

Continued…

Table 13.8.1—*Continued*

Background characteristic	All women: Percentage who had 2+ partners in the past 12 months	All women: Number of women	Among women who had 2+ partners in the past 12 months: Percentage who reported using a condom during last sexual intercourse	Among women who had 2+ partners in the past 12 months: Number of women	Among women who ever had sexual intercourse[1]: Mean number of sexual partners in lifetime	Among women who ever had sexual intercourse[1]: Number of women
Education						
No education	0.7	14,729	8.6	101	1.3	14,045
Primary	1.2	6,734	9.0	80	1.6	6,150
Secondary	1.3	13,927	37.8	182	1.8	9,896
More than secondary	1.8	3,558	63.7	63	2.0	3,100
Wealth quintile						
Lowest	0.6	7,132	(8.0)	46	1.2	6,635
Second	1.0	7,428	7.0	78	1.4	6,668
Middle	1.0	7,486	17.1	76	1.5	6,237
Fourth	1.2	7,992	34.6	93	1.7	6,501
Highest	1.5	8,910	52.6	135	1.9	7,150
Total	1.1	38,948	29.3	427	1.5	33,191

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Means are calculated excluding respondents who gave non-numeric responses.

Table 13.8.2 Multiple sexual partners: Men

Among all men age 15-49, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months; among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse; and the mean number of sexual partners during their lifetime for men who ever had sexual intercourse, by background characteristics, Nigeria 2013

Background characteristic	All men: Percentage who had 2+ partners in the past 12 months	All men: Number of men	Among men who had 2+ partners in the past 12 months: Percentage who reported using a condom during last sexual intercourse	Among men who had 2+ partners in the past 12 months: Number of men	Among men who ever had sexual intercourse[1]: Mean number of sexual partners in lifetime	Among men who ever had sexual intercourse[1]: Number of men
Age						
15-24	3.9	6,511	50.5	257	3.2	2,185
15-19	1.1	3,619	(46.1)	40	2.3	558
20-24	7.5	2,892	51.3	217	3.6	1,627
25-29	13.0	2,757	38.9	359	4.0	2,281
30-39	17.3	4,589	17.1	792	4.3	4,299
40-49	23.2	3,501	4.4	811	4.6	3,389
Marital status						
Never married	6.7	8,378	57.6	559	4.5	3,391
Married or living together	18.7	8,723	6.4	1,633	4.0	8,519
Divorced/separated/ widowed	10.2	258	(53.4)	26	4.8	244
Type of union						
In polygynous union	80.8	1,469	1.5	1,186	3.8	1,457
In non-polygynous union	6.2	7,254	19.1	447	4.0	7,062
Not currently in union	6.8	8,636	57.4	586	4.5	3,635
Residence						
Urban	10.8	7,611	35.6	825	4.7	5,087
Rural	14.3	9,748	10.5	1,393	3.7	7,067
Zone						
North Central	10.3	2,685	24.6	275	4.2	2,083
North East	13.3	2,515	9.6	334	2.5	1,715
North West	13.5	5,185	3.2	698	2.0	3,080
South East	5.4	1,686	46.1	92	5.2	1,190
South South	14.6	2,445	29.7	356	6.9	1,957
South West	16.3	2,843	36.7	463	5.2	2,129
State						
North Central						
FCT-Abuja	13.8	175	55.5	24	2.9	128
Benue	11.2	616	(18.2)	69	7.1	496
Kogi	6.5	333	*	22	2.8	239
Kwara	14.2	274	32.8	39	3.5	211
Nasarawa	8.9	282	(29.7)	25	5.0	224
Niger	8.5	701	(15.9)	60	2.5	560
Plateau	12.1	302	(21.4)	36	4.6	225

Continued…

Table 13.8.2—*Continued*

Background characteristic	All men		Among men who had 2+ partners in the past 12 months:		Among men who ever had sexual intercourse[1]:	
	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Mean number of sexual partners in lifetime	Number of men
North East						
Adamawa	5.2	358	*	19	2.7	251
Bauchi	19.6	512	2.3	100	1.9	347
Borno	12.8	676	22.7	86	2.5	461
Gombe	14.2	255	9.3	36	2.3	164
Taraba	14.6	325	6.2	47	4.4	256
Yobe	11.5	390	(0.0)	45	1.3	236
North West						
Jigawa	15.7	510	0.0	80	1.8	349
Kaduna	8.4	1,033	8.7	87	2.4	713
Kano	10.8	1,592	0.0	172	1.4	698
Katsina	23.2	596	8.8	138	2.1	421
Kebbi	12.9	551	1.9	71	3.6	331
Sokoto	8.9	424	(0.0)	38	1.5	249
Zamfara	23.5	479	1.0	113	1.7	320
South East						
Abia	11.1	229	(38.1)	25	5.1	171
Anambra	2.1	446	*	10	5.3	297
Ebonyi	6.6	368	*	24	4.2	269
Enugu	4.0	320	*	13	4.5	203
Imo	6.2	323	*	20	6.8	250
South South						
Akwa Ibom	9.9	451	54.7	45	4.4	369
Bayelsa	18.4	187	31.4	35	10.4	152
Cross River	9.6	310	(31.8)	30	6.3	225
Delta	29.4	473	15.2	139	8.9	382
Edo	13.5	365	56.4	49	6.9	276
Rivers	9.0	658	(20.8)	59	6.6	552
South West						
Ekiti	13.5	148	54.6	20	5.3	112
Lagos	14.4	948	43.1	136	5.1	734
Ogun	16.3	358	(34.9)	58	6.3	281
Ondo	17.9	404	26.8	72	5.8	266
Osun	15.5	356	52.5	55	5.1	262
Oyo	19.3	629	26.0	121	4.4	475
Education						
No education	17.7	3,685	2.4	654	2.1	2,741
Primary	15.2	2,907	8.6	441	4.2	2,247
Secondary	9.7	8,281	30.1	804	4.8	5,087
More than secondary	12.9	2,486	45.2	320	5.2	2,079
Wealth quintile						
Lowest	16.5	2,862	1.2	471	2.1	1,942
Second	13.9	2,992	4.8	417	3.0	2,096
Middle	11.0	3,338	14.0	367	4.2	2,271
Fourth	11.9	3,835	30.8	457	5.1	2,673
Highest	11.7	4,332	44.0	506	5.3	3,173
Total	12.8	17,359	19.8	2,219	4.1	12,154

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Means are calculated excluding respondents who gave non-numeric responses.

13.6.2 Point Prevalence and Cumulative Prevalence of Concurrent Sexual Partners

The point prevalence and cumulative prevalence of concurrent sexual partners are new concepts incorporated for the first time in the 2013 NDHS. The point prevalence of concurrent sexual partners is defined as the percentage of respondents who had two (or more) sexual partners concurrently at the point in time six months before the survey. The cumulative prevalence of concurrent sexual partners is the percentage of respondents who had two (or more) sexual partners concurrently at any time during the 12 months preceding the survey. Table 13.9 shows the point prevalence and cumulative prevalence of concurrent sexual partners among all respondents during the 12 months before the survey. It also shows the percentage of respondents who had concurrent sexual partners among those who had multiple sexual partners during the 12 months before the survey.

Both the point prevalence and the cumulative prevalence are less than 1 percent among women. Among men, the point prevalence is 7 percent and the cumulative prevalence is 9 percent. The point prevalence and cumulative prevalence for women are similar in urban and rural areas. For men, however, they are higher in rural than in urban areas. Not surprisingly, men in a polygynous union have the highest point and cumulative prevalence (49 percent and 57 percent), while men who are not currently in a union have the lowest cumulative prevalence (5 percent).

Table 13.9 Point prevalence and cumulative prevalence of concurrent sexual partners

Percentage of all women and men age 15-49 who had concurrent sexual partners six months before the survey (point prevalence[1]), percentage of all women and all men age 15-49 who had any concurrent sexual partners during the 12 months before the survey (cumulative prevalence[2]), and among women and men age 15-49 who had multiple sexual partners during the 12 months before the survey, percentage who had concurrent sexual partners, by background characteristics, Nigeria 2013

	Among all respondents:			Among all respondents who had multiple partners during the 12 months before the survey:	
Background characteristic	Point prevalence of concurrent sexual partners[1]	Cumulative prevalence of concurrent sexual partners[2]	Number of respondents	Percentage who had concurrent sexual partners[2]	Number of respondents
		WOMEN			
Age					
15-24	0.4	0.7	14,576	68.6	158
15-19	0.2	0.5	7,820	77.2	53
20-24	0.6	1.0	6,757	64.4	105
25-29	0.5	0.9	7,145	75.1	87
30-39	0.3	0.8	10,185	72.7	106
40-49	0.4	0.8	7,042	76.5	76
Marital status					
Never married	0.7	1.4	9,326	74.7	174
Married or living together	0.3	0.6	27,830	72.1	223
Divorced/separated/ widowed	0.2	1.0	1,793	(60.9)	29
Residence					
Urban	0.4	0.9	16,414	69.8	210
Rural	0.4	0.7	22,534	74.9	217
Total 15-49	0.4	0.8	38,948	72.4	427
		MEN			
Age					
15-24	1.3	2.6	6,511	65.1	257
15-19	0.2	0.6	3,619	(59.0)	40
20-24	2.8	5.0	2,892	66.2	217
25-29	5.3	9.2	2,757	70.9	359
30-39	9.3	12.5	4,589	72.3	792
40-49	14.6	17.3	3,501	74.8	811
Marital status					
Never married	2.5	4.4	8,378	66.5	559
Married or living together	11.0	14.0	8,723	74.5	1,633
Divorced/separated/ widowed	2.3	4.7	258	(46.3)	26
Type of union					
In polygynous union	49.4	57.3	1,469	70.9	1,186
In non-polygynous union	3.2	5.2	7,254	84.0	447
Not currently in union	2.5	4.5	8,636	65.6	586
Residence					
Urban	5.7	8.1	7,611	74.6	825
Rural	7.6	10.1	9,748	70.7	1,393
Total 15-49	6.8	9.2	17,359	72.2	2,219

Note: Two sexual partners are considered to be concurrent if the date of the most recent sexual intercourse with the earlier partner is after the date of the first sexual intercourse with the later partner. Figures in parentheses are based on 25-49 unweighted cases.

[1] The percentage of respondents who had 2 (or more) sexual partners that were concurrent at the point in time 6 months before the survey

[2] The percentage of respondents who had 2 (or more) sexual partners that were concurrent any time during the 12 months preceding the survey

Seven in 10 respondents who had multiple partners in the 12 months preceding the survey had concurrent sexual partners. Among respondents who have never been married, the proportion who had concurrent sexual partners was higher among women (75 percent) than among men (67 percent); however, among married respondents, the proportion was higher among men (75 percent) than women (72 percent). The proportion of women who had multiple partners during the 12 months preceding the survey and had concurrent partners is higher in rural areas than in urban areas (75 percent and 70 percent, respectively). The opposite is true for men (75 percent in urban areas and 71 percent in rural areas).

13.7 TRANSACTIONAL SEX

Transactional sex involves the exchange of money, favours, or gifts for sexual intercourse. This type of sexual intercourse is associated with a greater risk of contracting HIV and other STIs because of compromised power relations between women and men and the tendency of those involved to have multiple sexual relationships.

In the 2013 NDHS, men who had sexual intercourse in the 12 months preceding the survey were asked if they had paid anyone for sexual intercourse during that time. Those who had engaged in paid sexual intercourse in the past 12 months were asked if they used a condom the last time they paid for sexual intercourse.

Table 13.10 shows that 5 percent of men reported ever paying for sexual intercourse and 2 percent reported having paid sex in the 12 months preceding the survey. The practice of paid sex in the 12 months preceding the survey was most common among men who were divorced, widowed, or separated (5 percent) and men in the South South (3 percent). Two in three men who reported engaging in paid sex used a condom the last time they paid for sex.

Condom use by men who paid for sexual intercourse is highest among those age 20-24 (77 percent), those who have never been married (70 percent), and those living in urban areas (75 percent). The proportion of men reporting that they used a condom the last time they paid for sex increases with increasing wealth.

Table 13.10 Payment for sexual intercourse and condom use at last paid sexual intercourse

Percentage of men age 15-49 who ever paid for sexual intercourse and percentage reporting payment for sexual intercourse in the past 12 months, and among them, the percentage reporting that a condom was used the last time they paid for sexual intercourse, by background characteristics, Nigeria 2013

	Among all men:			Among men who paid for sex in the past 12 months:	
Background characteristic	Percentage who ever paid for sexual intercourse	Percentage who paid for sexual intercourse in the past 12 months	Number of men	Percentage reporting condom use at last paid sexual intercourse	Number of men
Age					
15-24	2.4	1.4	6,511	72.4	88
15-19	0.9	0.6	3,619	*	21
20-24	4.2	2.3	2,892	77.2	67
25-29	5.7	2.7	2,757	63.3	75
30-39	6.8	2.1	4,589	68.3	95
40-49	5.3	1.1	3,501	(51.5)	40
Marital status					
Never married	4.4	2.3	8,378	70.2	191
Married or living together	4.7	1.1	8,723	56.8	95
Divorced/separated/ widowed	10.8	4.8	258	*	12
Residence					
Urban	6.2	1.9	7,611	75.1	147
Rural	3.5	1.5	9,748	57.1	151
Zone					
North Central	3.8	1.3	2,685	(75.9)	34
North East	3.3	1.7	2,515	(44.7)	44
North West	1.4	0.9	5,185	(46.6)	46
South East	4.2	2.4	1,686	(64.4)	40
South South	10.0	3.4	2,445	78.8	82
South West	8.3	1.8	2,843	(75.5)	52

Continued…

Table 13.10—*Continued*

Background characteristic	Among all men: Percentage who ever paid for sexual intercourse	Among all men: Percentage who paid for sexual intercourse in the past 12 months	Among all men: Number of men	Among men who paid for sex in the past 12 months: Percentage reporting condom use at last paid sexual intercourse	Among men who paid for sex in the past 12 months: Number of men
State					
North Central					
FCT-Abuja	1.3	1.0	175	*	2
Benue	8.6	1.8	616	*	11
Kogi	3.8	0.6	333	*	2
Kwara	0.5	0.5	274	*	1
Nasarawa	3.2	2.5	282	*	7
Niger	3.2	1.4	701	*	10
Plateau	0.8	0.4	302	*	1
North East					
Adamawa	1.6	0.7	358	*	2
Bauchi	2.0	1.0	512	*	5
Borno	4.3	3.2	676	*	21
Gombe	3.5	2.4	255	*	6
Taraba	8.7	2.3	325	*	7
Yobe	0.3	0.3	390	*	1
North West					
Jigawa	1.1	1.0	510	*	5
Kaduna	2.7	1.4	1,033	*	14
Kano	0.3	0.0	1,592	na	0
Katsina	4.1	3.1	596	*	19
Kebbi	1.3	1.3	551	*	7
Sokoto	0.2	0.1	424	na	0
Zamfara	0.2	0.2	479	*	1
South East					
Abia	9.7	4.0	229	*	9
Anambra	3.2	3.2	446	*	14
Ebonyi	2.2	0.9	368	*	3
Enugu	3.6	0.4	320	*	1
Imo	4.5	3.6	323	*	12
South South					
Akwa Ibom	6.2	4.7	451	*	21
Bayelsa	4.7	3.7	187	*	7
Cross River	6.0	5.2	310	*	16
Delta	15.2	3.1	473	*	15
Edo	10.3	3.1	365	*	11
Rivers	11.9	1.8	658	*	12
South West					
Ekiti	2.5	0.5	148	*	1
Lagos	17.5	2.8	948	*	27
Ogun	6.0	2.3	358	*	8
Ondo	7.1	2.6	404	*	10
Osun	2.8	1.0	356	*	3
Oyo	0.8	0.4	629	*	2
Education					
No education	1.6	1.0	3,685	(43.4)	37
Primary	5.0	2.0	2,907	63.8	59
Secondary	5.4	2.1	8,281	68.4	172
More than secondary	6.4	1.2	2,486	(85.1)	29
Wealth quintile					
Lowest	1.2	0.5	2,862	*	13
Second	2.5	1.3	2,992	(48.6)	38
Middle	4.1	2.1	3,338	65.2	69
Fourth	5.3	2.2	3,835	66.0	83
Highest	8.2	2.2	4,332	78.4	94
Total	4.7	1.7	17,359	66.0	298

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

13.8 TESTING FOR HIV

13.8.1 General HIV Testing

Knowledge of HIV status is important for helping individuals make specific decisions about adopting safer sex practices to reduce their risk of contracting or transmitting HIV. For those who are HIV positive, knowledge of their HIV status allows them to take actions to protect their sexual partners and to access treatment services.

To assess awareness of HIV testing services, respondents were asked whether they knew where to get an HIV test and whether they had ever been tested for HIV. Respondents who reported that they had been tested for HIV were asked whether they received the results of their last test. The findings for women and men age 15-49 are presented in Tables 13.11.1 and 13.11.2, respectively.

Overall, 60 percent of women and 71 percent of men know a place where they can get an HIV test, an improvement since the 2008 NDHS (when the figures were 49 percent and 65 percent, respectively). Knowledge of a place for HIV testing is highest among sexually active women and men who have never been married (83 percent and 86 percent, respectively) and among urban women and men (77 percent and 81 percent, respectively). Knowledge of where to get HIV testing increases with increasing education and wealth. Across age groups, the youngest female and male respondents (age 15-19) are least likely to know a place where they can go to be tested for HIV (51 percent and 56 percent, respectively). By marital status, never-married women and men who have not yet initiated sexual activity are least likely to know a place to obtain an HIV test (57 percent each).

Among the zones, women's and men's knowledge of a place to get tested for HIV is lowest in the North West (39 percent and 55 percent, respectively).

Tables 13.11.1 and 13.11.2 also show respondents' experience with prior HIV testing and whether they received their results. Overall, one in four women have been tested for HIV and received the result of the last test. Among men, the corresponding proportion is 20 percent. Seven in 10 women and 78 percent of men have never been tested for HIV. Among women and men tested for HIV in the past 12 months, only 10 percent each received their test results. However, this is an improvement of 3 percentage points from the figure recorded in the 2008 NDHS (7 percent each).

Urban women are more likely than rural women to have been tested for HIV in the past 12 months and to have received the test results (14 percent and 7 percent, respectively). The proportion of women and men who had been tested in the past 12 months and had received the results of their last test was lowest in the North West and highest in the South South. Coverage ranged from 4 percent in the North West to 17 percent in the South South among women and from 2 percent in the North West to 17 percent in the South South among men. Among the states, the percentage of women who had been tested for HIV in the past 12 months and received the results of their last test was highest in Cross River (33 percent) and lowest in Kebbi (1 percent). Among men, the corresponding proportions were 30 percent in Cross River and 1 percent in Kebbi and Zamfara.

It is noteworthy that the prevalence of HIV testing is very low in Kano, especially among men. Less than 1 percent of men know their status, and none of them reported having been tested in the past 12 months and receiving the results of their last test.

Table 13.11.1 Coverage of prior HIV testing: Women

Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women age 15-49 by testing status and by whether they received the results of the last test, the percentage of women ever tested, and the percentage of women age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Nigeria 2013

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of women by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women
		Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
Age								
15-24	56.2	15.8	3.3	80.8	100.0	19.2	7.9	14,576
15-19	50.5	7.6	1.6	90.8	100.0	9.2	4.2	7,820
20-24	62.8	25.3	5.4	69.3	100.0	30.7	12.3	6,757
25-29	64.4	33.9	6.1	60.1	100.0	39.9	15.3	7,145
30-39	65.1	34.6	6.2	59.1	100.0	40.9	12.3	10,185
40-49	57.6	22.8	3.9	73.3	100.0	26.7	6.3	7,042
Marital status								
Never married	67.4	18.8	3.2	78.0	100.0	22.0	9.5	9,326
Ever had sex	82.8	35.2	5.9	58.9	100.0	41.1	18.0	3,732
Never had sex	57.1	7.9	1.4	90.7	100.0	9.3	3.8	5,593
Married/living together	57.3	27.0	5.2	67.9	100.0	32.1	10.3	27,830
Divorced/separated/ widowed	69.6	33.6	5.0	61.4	100.0	38.6	10.5	1,793
Residence								
Urban	77.4	37.5	7.1	55.4	100.0	44.6	14.3	16,414
Rural	47.9	16.4	3.0	80.6	100.0	19.4	7.1	22,534
Zone								
North Central	63.1	27.7	4.7	67.5	100.0	32.5	13.0	5,572
North East	52.2	18.0	2.9	79.1	100.0	20.9	8.1	5,766
North West	38.7	12.9	1.9	85.2	100.0	14.8	3.9	11,877
South East	82.1	41.0	6.5	52.5	100.0	47.5	15.4	4,476
South South	73.2	35.5	5.7	58.8	100.0	41.2	17.0	4,942
South West	80.4	34.2	9.3	56.5	100.0	43.5	12.1	6,314
State								
North Central								
FCT-Abuja	81.3	53.6	3.9	42.4	100.0	57.6	23.8	315
Benue	89.3	35.4	7.4	57.2	100.0	42.8	19.5	1,240
Kogi	62.1	37.0	2.4	60.6	100.0	39.4	14.3	704
Kwara	64.0	14.7	17.8	67.6	100.0	32.4	5.9	596
Nasarawa	61.8	31.3	1.8	66.9	100.0	33.1	14.5	594
Niger	39.3	11.4	0.8	87.8	100.0	12.2	6.5	1,462
Plateau	58.9	35.8	2.3	61.9	100.0	38.1	13.4	662
North East								
Adamawa	67.0	35.4	1.4	63.2	100.0	36.8	14.3	828
Bauchi	33.8	10.4	1.5	88.0	100.0	12.0	4.2	1,161
Borno	45.3	7.2	2.8	90.0	100.0	10.0	3.7	1,412
Gombe	47.9	27.9	4.5	67.6	100.0	32.4	12.9	550
Taraba	70.9	33.0	5.1	61.9	100.0	38.1	16.6	844
Yobe	57.5	9.5	2.9	87.6	100.0	12.4	3.6	971
North West								
Jigawa	25.8	5.5	3.5	91.1	100.0	8.9	2.5	1,353
Kaduna	82.3	34.3	3.6	62.1	100.0	37.9	9.2	2,136
Kano	41.2	17.4	1.8	80.8	100.0	19.2	5.3	3,189
Katsina	32.8	3.5	0.4	96.2	100.0	3.8	1.2	1,525
Kebbi	6.2	2.2	0.8	96.9	100.0	3.1	0.9	1,244
Sokoto	10.9	3.7	0.3	96.0	100.0	4.0	1.1	1,098
Zamfara	36.0	3.2	2.3	94.4	100.0	5.6	1.1	1,332
South East								
Abia	80.5	38.3	1.9	59.7	100.0	40.3	18.8	518
Anambra	81.5	37.6	15.9	46.5	100.0	53.5	6.7	1,052
Ebonyi	75.2	33.2	4.6	62.2	100.0	37.8	15.4	1,122
Enugu	85.1	44.3	1.6	54.1	100.0	45.9	17.4	951
Imo	89.8	53.5	5.7	40.8	100.0	59.2	22.1	833
South South								
Akwa Ibom	77.6	30.5	8.2	61.3	100.0	38.7	17.2	864
Bayelsa	82.0	26.3	3.3	70.4	100.0	29.6	6.9	364
Cross River	85.5	51.2	6.3	42.4	100.0	57.6	32.6	703
Delta	66.4	24.7	8.5	66.9	100.0	33.1	10.8	993
Edo	65.3	28.8	4.3	66.9	100.0	33.1	11.5	742
Rivers	70.8	45.1	3.1	51.8	100.0	48.2	19.0	1,276
South West								
Ekiti	65.5	18.9	16.6	64.5	100.0	35.5	7.6	326
Lagos	89.5	43.5	11.7	44.7	100.0	55.3	16.9	1,964
Ogun	81.7	30.2	1.6	68.1	100.0	31.9	8.0	883
Ondo	70.4	35.0	6.5	58.5	100.0	41.5	14.9	808
Osun	88.4	26.7	15.3	58.1	100.0	41.9	8.2	765
Oyo	72.5	31.3	7.6	61.0	100.0	39.0	9.9	1,568

Continued…

Table 13.11.1—*Continued*

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of women by testing status and by whether they received the results of the last test: Ever tested and received results	Ever tested, did not receive results	Never tested[1]	Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women
Education								
No education	33.7	7.5	1.8	90.8	100.0	9.2	2.6	14,729
Primary	63.6	25.2	5.2	69.6	100.0	30.4	9.0	6,734
Secondary	77.8	34.4	6.0	59.6	100.0	40.4	13.7	13,927
More than secondary	95.5	64.0	10.4	25.6	100.0	74.4	29.3	3,558
Wealth quintile								
Lowest	26.7	3.9	1.1	94.9	100.0	5.1	1.8	7,132
Second	43.5	12.1	2.4	85.6	100.0	14.4	5.2	7,428
Middle	61.9	23.2	4.0	72.8	100.0	27.2	9.2	7,486
Fourth	74.2	33.1	6.4	60.6	100.0	39.4	13.0	7,992
Highest	87.4	48.3	8.5	43.1	100.0	56.9	19.0	8,910
Total	60.3	25.3	4.7	70.0	100.0	30.0	10.1	38,948

[1] Includes "don't know/missing"

Table 13.11.2 Coverage of prior HIV testing: Men

Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men age 15-49 by testing status and by whether they received the results of the last test, the percentage of men ever tested, and the percentage of men age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Nigeria 2013

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of men by testing status and by whether they received the results of the last test: Ever tested and received results	Ever tested, did not receive results	Never tested[1]	Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
Age								
15-24	62.9	9.1	0.8	90.1	100.0	9.9	5.4	6,511
15-19	56.1	4.1	0.5	95.4	100.0	4.6	2.3	3,619
20-24	71.5	15.4	1.3	83.4	100.0	16.6	9.4	2,892
25-29	77.1	23.5	2.0	74.5	100.0	25.5	13.0	2,757
30-39	77.3	29.1	1.9	69.0	100.0	31.0	13.5	4,589
40-49	74.2	27.9	1.7	70.4	100.0	29.6	10.9	3,501
Marital status								
Never married	69.1	15.4	1.0	83.5	100.0	16.5	8.8	8,378
Ever had sex	85.9	30.2	1.7	68.1	100.0	31.9	17.5	3,461
Never had sex	57.4	5.0	0.6	94.4	100.0	5.6	2.7	4,918
Married/living together	73.1	25.0	1.9	73.1	100.0	26.9	10.8	8,723
Divorced/separated/ widowed	79.1	27.7	2.8	69.5	100.0	30.5	11.5	258
Residence								
Urban	81.0	27.1	1.7	71.2	100.0	28.8	11.9	7,611
Rural	63.7	15.3	1.3	83.4	100.0	16.6	8.3	9,748
Zone								
North Central	76.0	28.2	1.8	70.0	100.0	30.0	16.3	2,685
North East	71.3	15.6	0.9	83.5	100.0	16.5	9.6	2,515
North West	55.1	5.7	1.2	93.1	100.0	6.9	1.7	5,185
South East	83.5	36.0	2.5	61.5	100.0	38.5	14.0	1,686
South South	85.1	31.8	1.3	66.9	100.0	33.1	17.3	2,445
South West	77.0	25.4	1.7	72.9	100.0	27.1	10.1	2,843
State								
North Central								
FCT-Abuja	83.8	40.1	2.6	57.3	100.0	42.7	24.5	175
Benue	81.3	34.9	1.8	63.3	100.0	36.7	23.7	616
Kogi	88.4	26.7	1.8	71.5	100.0	28.5	11.2	333
Kwara	80.4	26.1	4.6	69.4	100.0	30.6	11.8	274
Nasarawa	69.7	27.8	0.7	71.5	100.0	28.5	14.8	282
Niger	68.2	15.5	1.1	83.4	100.0	16.6	8.9	701
Plateau	66.9	40.7	1.7	57.6	100.0	42.4	25.0	302
North East								
Adamawa	79.4	29.2	0.6	70.2	100.0	29.8	15.2	358
Bauchi	59.3	10.2	0.4	89.4	100.0	10.6	6.1	512
Borno	74.9	8.1	0.7	91.2	100.0	8.8	6.9	676
Gombe	71.4	25.1	3.0	71.9	100.0	28.1	11.4	255
Taraba	75.8	33.2	2.1	64.7	100.0	35.3	22.6	325
Yobe	69.6	2.2	0.1	97.7	100.0	2.3	2.0	390

Continued…

Table 13.11.2—*Continued*

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of men by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
		Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
North West								
Jigawa	67.0	4.7	1.4	93.9	100.0	6.1	3.6	510
Kaduna	81.3	15.4	1.2	83.5	100.0	16.5	2.4	1,033
Kano	55.3	0.5	0.0	99.5	100.0	0.5	0.0	1,592
Katsina	58.5	9.2	0.2	90.7	100.0	9.3	4.8	596
Kebbi	12.7	3.1	0.0	96.9	100.0	3.1	1.5	551
Sokoto	36.5	2.1	0.1	97.8	100.0	2.2	1.1	424
Zamfara	46.7	4.6	8.8	86.6	100.0	13.4	0.9	479
South East								
Abia	83.7	30.4	0.7	69.0	100.0	31.0	14.2	229
Anambra	85.4	26.7	5.8	67.5	100.0	32.5	8.6	446
Ebonyi	82.5	37.6	0.4	62.1	100.0	37.9	18.1	368
Enugu	80.9	42.1	1.7	56.3	100.0	43.7	12.9	320
Imo	84.4	45.2	2.5	52.2	100.0	47.8	17.7	323
South South								
Akwa Ibom	86.4	33.5	1.3	65.2	100.0	34.8	21.6	451
Bayelsa	80.4	16.5	1.7	81.8	100.0	18.2	7.9	187
Cross River	86.5	37.9	4.1	58.0	100.0	42.0	29.7	310
Delta	85.1	16.7	0.2	83.1	100.0	16.9	6.0	473
Edo	90.3	27.2	2.1	70.7	100.0	29.3	14.0	365
Rivers	82.1	45.4	0.4	54.2	100.0	45.8	21.1	658
South West								
Ekiti	86.2	24.6	2.6	72.8	100.0	27.2	8.5	148
Lagos	87.3	36.7	1.6	61.7	100.0	38.3	13.4	948
Ogun	51.8	13.8	2.6	83.6	100.0	16.4	4.6	358
Ondo	68.5	25.0	2.2	72.7	100.0	27.3	11.6	404
Osun	83.8	20.1	0.3	79.5	100.0	20.5	9.8	356
Oyo	75.3	18.5	1.4	80.1	100.0	19.9	7.7	629
Education								
No education	46.4	2.5	1.0	96.6	100.0	3.4	1.0	3,685
Primary	66.1	14.1	1.2	84.7	100.0	15.3	6.3	2,907
Secondary	77.3	20.9	1.5	77.6	100.0	22.4	10.0	8,281
More than secondary	93.9	53.0	2.5	44.5	100.0	55.5	26.9	2,486
Wealth quintile								
Lowest	44.3	3.2	1.3	95.5	100.0	4.5	1.7	2,862
Second	61.6	10.2	1.0	88.8	100.0	11.2	5.5	2,992
Middle	72.8	18.2	1.2	80.6	100.0	19.4	9.2	3,338
Fourth	78.4	23.6	1.5	74.9	100.0	25.1	11.5	3,835
Highest	88.3	37.9	2.1	60.0	100.0	40.0	17.4	4,332
Total	71.3	20.4	1.5	78.1	100.0	21.9	9.9	17,359

[1] Includes “don’t know/missing”

13.8.2 HIV Counselling and Testing during Pregnancy

HIV screening is a key tool in the prevention of HIV transmission from mother to child. Table 13.12 shows that 36 percent of women who gave birth during the two years prior to the survey received HIV counselling during antenatal care (ANC). The proportion of women who received counselling varies across area of residence, education, and wealth status; as expected, it is higher in urban than in rural areas and increases with increasing education and wealth. Overall, 20 percent of women were offered and accepted an HIV test during antenatal care and received the test results and post-test counselling, 8 percent were tested and received the results but did not receive post-test counselling, and 5 percent did not receive the results. Twenty-three percent of women received counselling on HIV and HIV test results during ANC were received by.

Close to 3 in 10 women (28 percent) who had an HIV test during ANC or labour received their results. Five percent did not receive their results.

Table 13.12 Pregnant women counselled and tested for HIV

Among all women age 15-49 who gave birth in the two years preceding the survey, the percentage who received HIV pretest counselling, the percentage who received an HIV test during antenatal care for their most recent birth by whether they received their results and post-test counselling, and percentage who received an HIV test at the time of ANC or labour for their most recent birth by whether they received their test results, according to background characteristics, Nigeria 2013

Background characteristic	Percentage who received counselling on HIV during antenatal care[1]	Percentage who were tested for HIV during antenatal care and who:			Percentage who received counselling on HIV and an HIV test during ANC, and the results	Percentage who had an HIV test during ANC or labour and who:[2]		Number of women who gave birth in the past two years[3]
		Received results and received post-test counselling	Received results and did not receive post-test counselling	Did not receive results		Received results	Did not receive results	
Age								
15-24	28.9	16.0	5.3	4.0	17.4	21.8	4.2	3,900
15-19	19.1	9.9	4.0	2.3	10.7	14.4	2.6	1,064
20-24	32.5	18.2	5.8	4.6	19.9	24.6	4.8	2,836
25-29	39.3	22.2	9.1	5.7	25.9	32.0	5.9	3,490
30-39	40.5	22.9	9.2	5.5	27.5	32.3	5.8	4,171
40-49	30.7	15.2	5.2	5.2	17.6	20.5	5.8	911
Marital status								
Never married	47.0	26.6	9.2	6.9	30.7	37.1	8.5	288
Married or living together	35.3	19.7	7.6	5.0	22.8	27.6	5.3	11,924
Divorced/separated/ widowed	45.4	26.2	10.8	3.7	31.0	37.5	4.5	261
Residence								
Urban	60.2	36.0	13.4	8.7	42.5	49.9	9.2	4,404
Rural	22.5	11.2	4.5	3.0	12.7	16.1	3.2	8,069
Zone								
North Central	37.5	19.6	8.8	4.9	23.4	29.5	5.2	1,692
North East	26.3	17.5	3.9	2.7	16.9	21.8	2.8	2,152
North West	18.6	9.9	4.0	2.3	11.4	13.9	2.3	4,554
South East	58.7	45.9	11.2	5.6	45.7	58.1	6.8	1,150
South South	49.0	23.6	17.5	7.9	34.8	41.7	8.7	1,191
South West	66.9	30.0	11.9	12.9	39.0	42.3	13.2	1,733
State								
North Central								
FCT-Abuja	56.7	32.0	29.1	3.8	47.7	61.4	3.8	75
Benue	36.1	19.7	10.8	5.9	24.5	34.5	6.8	374
Kogi	56.1	31.8	19.2	3.7	44.2	51.1	3.7	168
Kwara	56.9	13.8	9.2	26.2	19.2	23.1	26.4	161
Nasarawa	42.4	28.6	5.8	1.5	29.7	34.6	1.5	197
Niger	25.2	8.9	3.0	0.6	9.9	12.4	0.6	514
Plateau	28.7	28.0	6.0	2.0	26.1	34.1	2.0	204
North East								
Adamawa	55.6	36.7	4.2	0.8	38.8	41.7	1.0	289
Bauchi	16.2	11.3	0.6	1.5	9.7	11.8	1.5	573
Borno	11.6	9.5	1.0	1.9	6.6	10.5	2.2	408
Gombe	47.2	30.6	8.4	4.6	31.2	39.0	4.8	231
Taraba	25.3	18.1	13.4	3.4	18.4	32.3	3.5	300
Yobe	22.9	12.3	1.4	5.2	11.6	14.2	5.2	350
North West								
Jigawa	17.2	6.7	1.5	3.5	5.2	8.6	3.6	608
Kaduna	31.5	32.0	2.0	4.7	27.6	34.1	4.7	496
Kano	30.0	14.3	11.7	3.0	22.8	26.0	3.0	1,188
Katsina	15.2	4.7	0.0	0.4	3.0	4.7	0.4	688
Kebbi	9.8	2.8	0.8	1.4	2.6	3.6	1.4	479
Sokoto	6.6	4.1	0.9	0.2	4.6	5.0	0.2	444
Zamfara	7.5	2.6	2.5	2.0	3.8	5.2	2.0	652
South East								
Abia	74.1	51.3	1.0	1.5	50.3	52.6	1.5	135
Anambra	62.7	55.2	4.2	9.4	47.9	61.8	13.3	245
Ebonyi	46.7	36.7	6.5	5.7	34.5	43.5	6.2	313
Enugu	55.6	44.8	17.7	3.8	45.9	63.6	4.0	230
Imo	64.9	46.2	24.4	5.6	55.7	72.1	6.7	228
South South								
Akwa Ibom	51.0	24.9	10.3	13.2	30.0	36.0	15.8	202
Bayelsa	35.2	20.5	7.8	6.1	24.5	28.3	7.2	95
Cross River	58.6	44.4	5.5	6.0	44.3	49.9	6.0	221
Delta	43.0	17.8	11.7	12.8	22.9	29.8	13.9	220
Edo	50.3	11.9	32.7	10.2	38.5	46.0	10.8	168
Rivers	48.6	19.1	30.6	1.2	41.3	50.4	1.2	285
South West								
Ekiti	66.9	21.0	7.7	25.2	26.4	29.4	26.3	78
Lagos	79.5	35.6	21.2	16.3	55.5	56.8	16.7	519
Ogun	59.4	20.1	11.1	0.5	25.7	31.2	0.5	294
Ondo	40.0	29.5	9.0	6.9	32.9	38.8	6.9	225
Osun	92.7	40.4	0.2	27.4	40.4	42.0	28.0	189
Oyo	59.5	27.3	8.6	11.9	33.1	36.5	11.9	428

Continued…

Table 13.12—*Continued*

Background characteristic	Percentage who received counselling on HIV during antenatal care[1]	Percentage who were tested for HIV during antenatal care and who: Received results and received post-test counselling	Received results and did not receive post-test counselling	Did not receive results	Percentage who received counselling on HIV and an HIV test during ANC, and the results	Percentage who had an HIV test during ANC or labour and who:[2] Received results	Did not receive results	Number of women who gave birth in the past two years[3]
Education								
No education	14.1	5.7	2.9	1.8	6.8	8.7	1.9	5,940
Primary	37.3	19.6	6.5	5.2	21.2	26.5	5.6	2,253
Secondary	60.6	37.0	13.0	8.7	42.1	51.0	9.1	3,466
More than secondary	84.3	52.5	23.0	12.1	67.6	76.1	13.2	815
Wealth quintile								
Lowest	7.3	2.8	1.8	0.9	3.3	4.8	1.0	2,888
Second	18.5	8.5	3.2	2.6	8.6	12.1	2.7	2,842
Middle	35.7	19.7	6.8	4.8	21.7	26.9	5.2	2,360
Fourth	56.3	32.8	10.9	8.3	36.5	44.1	8.6	2,247
Highest	76.0	45.2	19.2	10.7	57.2	65.2	11.4	2,135
Total 15-49	35.8	20.0	7.7	5.0	23.2	28.1	5.3	12,473

[1] In this context, "pretest counselling" means that someone talked with the respondent about all 3 of the following topics: (1) babies getting the AIDS virus from their mother, (2) preventing the virus, and (3) getting tested for the virus.
[2] Women were asked whether they received an HIV test during labour only if they were not tested for HIV during ANC.
[3] The denominator for percentages includes women who did not receive antenatal care for their last birth in the past 2 years.

13.9 MALE CIRCUMCISION

Circumcision is a common practice in many parts of Nigeria for traditional, health, and other reasons and often serves as a rite of passage to adulthood. Recently, male circumcision has been shown to be associated with lower rates of STI transmission, including transmission of HIV (WHO and UNAIDS, 2007). To examine this practice, men interviewed in the 2013 NDHS were asked whether they were circumcised. The results are presented in Table 13.13.

Table 13.13 Male circumcision

Percentage of men age 15-49 who report having been circumcised, by background characteristics, Nigeria 2013

Background characteristic	Percentage circumcised	Number of men	Among circumcised men: age at circumcision During infancy/ before 5 years	5-13 years	14-19 years	20 or more years	Don't know/ missing	Total	Number of men circumcised
Age									
15-24	98.6	6,511	62.6	31.0	0.1	0.0	6.3	100.0	6,419
15-19	98.5	3,619	62.1	31.1	0.0	0.0	6.8	100.0	3,563
20-24	98.7	2,892	63.3	30.9	0.2	0.0	5.7	100.0	2,855
25-29	99.3	2,757	64.4	30.2	0.4	0.0	5.0	100.0	2,737
30-39	99.3	4,589	62.2	31.7	0.5	0.1	5.4	100.0	4,558
40-49	98.6	3,501	59.2	34.6	0.5	0.2	5.4	100.0	3,450
Residence									
Urban	99.0	7,611	69.6	23.5	0.2	0.0	6.7	100.0	7,533
Rural	98.8	9,748	56.3	38.3	0.5	0.1	4.9	100.0	9,630
Zone									
North Central	99.4	2,685	84.1	8.9	0.6	0.0	6.4	100.0	2,669
North East	99.6	2,515	44.7	49.3	1.0	0.2	4.7	100.0	2,505
North West	99.1	5,185	22.8	75.8	0.0	0.0	1.3	100.0	5,138
South East	98.7	1,686	96.9	0.4	0.1	0.2	2.4	100.0	1,664
South South	97.6	2,445	85.1	0.6	0.1	0.0	14.2	100.0	2,386
South West	98.6	2,843	88.4	2.5	0.4	0.0	8.7	100.0	2,802
State									
North Central									
FCT-Abuja	97.8	175	79.7	12.6	0.6	0.2	6.9	100.0	171
Benue	99.1	616	91.1	7.3	1.0	0.0	0.6	100.0	611
Kogi	99.7	333	95.7	3.6	0.1	0.0	0.6	100.0	332
Kwara	99.5	274	91.7	4.9	0.2	0.0	3.2	100.0	273
Nasarawa	99.3	282	73.3	20.9	0.3	0.0	5.5	100.0	280
Niger	99.9	701	86.2	6.7	0.4	0.0	6.7	100.0	701
Plateau	99.6	302	58.1	13.0	1.8	0.0	27.1	100.0	301

Continued…

Table 13.13—*Continued*

Background characteristic	Percentage circumcised	Number of men	Among circumcised men: age at circumcision						Number of men circumcised
			During infancy/ before 5 years	5-13 years	14-19 years	20 or more years	Don't know/ missing	Total	
North East									
Adamawa	98.1	358	37.1	55.7	5.2	1.8	0.3	100.0	351
Bauchi	99.8	512	8.2	84.9	0.6	0.0	6.2	100.0	511
Borno	100.0	676	68.2	30.7	0.0	0.0	1.2	100.0	676
Gombe	99.2	255	24.2	72.2	0.9	0.0	2.7	100.0	253
Taraba	100.0	325	89.9	8.3	0.5	0.0	1.2	100.0	325
Yobe	99.8	390	34.7	48.5	0.0	0.0	16.9	100.0	390
North West									
Jigawa	100.0	510	2.8	96.0	0.0	0.0	1.2	100.0	510
Kaduna	99.8	1,033	57.3	41.2	0.0	0.0	1.4	100.0	1,031
Kano	99.9	1,592	3.1	96.9	0.0	0.0	0.0	100.0	1,590
Katsina	100.0	596	58.1	41.1	0.0	0.2	0.6	100.0	596
Kebbi	93.0	551	19.2	79.8	0.4	0.0	0.5	100.0	512
Sokoto	100.0	424	4.0	95.2	0.0	0.0	0.9	100.0	424
Zamfara	99.3	479	11.9	80.5	0.0	0.2	7.4	100.0	475
South East									
Abia	98.1	229	99.4	0.0	0.0	0.0	0.6	100.0	224
Anambra	98.5	446	97.0	0.5	0.0	0.0	2.5	100.0	439
Ebonyi	99.4	368	95.7	1.3	0.2	0.8	1.9	100.0	366
Enugu	98.7	320	99.9	0.1	0.0	0.0	0.0	100.0	316
Imo	98.5	323	93.4	0.0	0.0	0.0	6.6	100.0	318
South South									
Akwa Ibom	98.4	451	92.9	0.0	0.0	0.0	7.1	100.0	444
Bayelsa	99.6	187	97.6	1.8	0.3	0.0	0.2	100.0	187
Cross River	89.4	310	97.4	0.0	0.0	0.0	2.6	100.0	278
Delta	99.6	473	94.8	1.4	0.3	0.0	3.5	100.0	471
Edo	97.5	365	82.8	0.9	0.2	0.0	16.1	100.0	356
Rivers	98.9	658	65.4	0.0	0.0	0.0	34.6	100.0	651
South West									
Ekiti	99.6	148	96.7	0.2	0.2	0.0	2.9	100.0	147
Lagos	98.6	948	91.5	2.9	0.3	0.0	5.4	100.0	935
Ogun	99.8	358	92.5	4.5	1.1	0.0	1.8	100.0	357
Ondo	96.7	404	66.2	3.5	0.9	0.0	29.4	100.0	391
Osun	97.1	356	86.1	0.6	0.0	0.3	13.0	100.0	346
Oyo	99.5	629	94.7	1.8	0.0	0.0	3.5	100.0	626
Religion									
Catholic	98.7	2,014	91.9	2.5	0.2	0.1	5.3	100.0	1,988
Other Christian	98.4	6,181	87.0	3.2	0.6	0.1	9.2	100.0	6,081
Islam	99.3	8,907	38.1	58.3	0.2	0.0	3.4	100.0	8,842
Traditionalist	97.1	161	72.5	18.7	2.5	0.8	5.4	100.0	157
Missing	100.0	79	64.5	32.8	0.0	0.0	2.8	100.0	79
Ethnic group									
Ekoi	(97.7)	20	100.0	0.0	0.0	0.0	0.0	100.0	20
Fulani	98.9	953	31.9	63.0	0.3	0.0	4.8	100.0	943
Hausa	99.3	4,719	17.2	80.5	0.1	0.0	2.2	100.0	4,685
Ibibio	97.6	419	88.7	0.9	0.0	0.0	10.3	100.0	409
Igala	99.8	196	93.6	4.1	0.0	0.0	2.4	100.0	195
Igbo	99.0	2,330	93.9	0.7	0.2	0.1	5.1	100.0	2,308
Ijaw/Izon	99.1	346	88.6	2.6	0.1	0.0	8.8	100.0	343
Kanuri/Beriberi	100.0	292	55.8	39.3	0.1	0.0	4.8	100.0	292
Tiv	98.6	448	94.3	4.2	0.5	0.0	1.0	100.0	442
Yoruba	98.9	2,341	89.4	2.4	0.1	0.0	8.1	100.0	2,316
Other	98.4	5,247	74.2	16.7	0.8	0.1	8.2	100.0	5,164
Education									
No education	98.5	3,685	33.4	62.1	0.3	0.2	4.0	100.0	3,631
Primary	99.2	2,907	59.0	34.4	0.7	0.1	5.8	100.0	2,883
Secondary	98.9	8,281	72.3	21.1	0.3	0.0	6.3	100.0	8,186
More than secondary	99.1	2,486	74.0	19.7	0.3	0.0	5.9	100.0	2,463
Wealth quintile									
Lowest	99.1	2,862	31.8	63.2	0.4	0.2	4.4	100.0	2,836
Second	98.9	2,992	47.2	47.9	0.6	0.2	4.1	100.0	2,961
Middle	99.0	3,338	65.4	28.7	0.6	0.1	5.3	100.0	3,303
Fourth	98.8	3,835	71.2	22.6	0.2	0.0	5.9	100.0	3,788
Highest	98.7	4,332	81.9	10.3	0.1	0.0	7.7	100.0	4,276
Total	98.9	17,359	62.1	31.8	0.3	0.1	5.7	100.0	17,164

Note: Total includes 48 cases with missing information on ethnicity. Figures in parentheses are based on 25-49 unweighted cases.

Overall, 99 percent of male respondents reported that they were circumcised. The practice is almost universal and shows little variation across age groups, urban-rural residence, zones, states, religion, or ethnicity. Among men who are circumcised, urban men are more likely than rural men to be circumcised during infancy or before age 5 (70 percent and 56 percent, respectively). The practice of circumcision before age 5 is less prevalent in the North West and North East zones (23 percent and 45 percent, respectively), while in the South East zone 97 percent of circumcisions occur during infancy or before age 5. The practice of circumcising men during infancy or before age 5 is not common in Jigawa and Kano (3 percent each). Among the religious groups, Islam has the lowest percentage of men circumcised during infancy or before age 5 (38 percent). Almost 6 in 10 (58 percent) Muslim men were circumcised between age 5 and age 13.

Table 13.14 shows that one in five men were circumcised at a health facility, 55 percent were circumcised at home, and 7 percent were circumcised at the home of a health worker or health professional. Thirteen percent of men did not know the place where they were circumcised. The practice of circumcision at ritual sites is uncommon (1 percent).

Sixty-one percent of circumcisions were performed by a traditional practitioner, family member, or friend. Only 24 percent of men were circumcised by a health worker or professional. Fourteen percent of men did not know who performed the circumcision. Urban men were almost twice as likely as rural men to be circumcised at a health facility (27 percent and 15 percent, respectively) and by a health worker or professional (33 percent and 17 percent, respectively).

Table 13.14 Place and provider for male circumcision

Percent distribution of circumcised men by place and provider of circumcision, according to background characteristics, Nigeria 2013

	Place where circumcised							Provider of circumcision					
Background characteristic	Health facility	Home of a health worker/ profes-sional	Circum-cision done at home	Ritual site	Other home/ place	Don't know/ missing	Total	Traditional practi-tioner/ family/ friend	Health worker/ profes-sional	Other	Don't know/ missing	Total	Number of men circum-cised
Age													
15-24	24.2	8.1	51.2	0.4	2.9	13.2	100.0	56.2	28.9	0.9	14.0	100.0	6,419
15-19	24.2	8.3	50.7	0.4	2.2	14.1	100.0	54.9	29.4	1.0	14.7	100.0	3,563
20-24	24.1	7.8	51.8	0.4	3.7	12.1	100.0	57.7	28.4	0.8	13.1	100.0	2,855
25-29	23.4	7.4	53.6	0.5	4.0	11.1	100.0	60.2	26.6	0.8	12.4	100.0	2,737
30-39	18.3	7.1	54.7	0.5	5.0	14.3	100.0	62.2	21.3	1.0	15.4	100.0	4,558
40-49	13.9	6.1	63.5	1.0	4.7	10.9	100.0	70.8	16.1	1.0	12.1	100.0	3,450
Residence													
Urban	27.1	8.1	42.9	0.5	3.0	18.5	100.0	47.3	32.6	0.9	19.2	100.0	7,533
Rural	15.2	6.7	64.5	0.6	4.8	8.2	100.0	72.3	17.3	0.9	9.5	100.0	9,630
Zone													
North Central	22.3	4.2	60.3	1.3	3.5	8.5	100.0	63.0	24.7	0.5	11.9	100.0	2,669
North East	10.4	3.4	67.4	0.8	16.7	1.4	100.0	79.9	14.8	3.6	1.7	100.0	2,505
North West	10.3	10.8	77.4	0.1	0.5	0.9	100.0	88.4	10.9	0.2	0.6	100.0	5,138
South East	38.6	16.6	22.7	0.4	2.2	19.4	100.0	23.9	53.8	2.0	20.3	100.0	1,664
South South	28.7	3.0	35.2	0.9	1.7	30.5	100.0	35.3	31.5	0.2	33.0	100.0	2,386
South West	28.4	5.6	33.9	0.3	2.6	29.2	100.0	38.1	31.3	0.4	30.2	100.0	2,802
State													
North Central													
FCT-Abuja	36.0	30.4	4.1	0.0	21.0	8.5	100.0	26.5	63.0	0.0	10.6	100.0	171
Benue	43.2	2.1	38.9	2.4	7.4	6.0	100.0	41.9	38.9	1.6	17.6	100.0	611
Kogi	28.5	2.5	64.9	0.0	0.7	3.4	100.0	66.8	30.0	0.5	2.7	100.0	332
Kwara	15.0	3.8	60.9	7.4	0.5	12.3	100.0	72.2	20.1	0.0	7.7	100.0	273
Nasarawa	10.7	3.0	80.5	0.0	1.3	4.6	100.0	80.4	13.3	0.2	6.1	100.0	280
Niger	10.6	2.4	85.5	0.0	0.4	1.2	100.0	84.6	13.9	0.0	1.5	100.0	701
Plateau	10.0	0.7	52.4	0.0	0.6	36.4	100.0	47.1	8.5	0.0	44.4	100.0	301
North East													
Adamawa	37.1	0.9	56.9	4.9	0.2	0.0	100.0	53.3	46.7	0.0	0.0	100.0	351
Bauchi	4.6	0.5	94.1	0.3	0.2	0.4	100.0	94.4	4.5	0.7	0.4	100.0	511
Borno	6.2	8.2	40.1	0.0	41.1	4.4	100.0	67.6	15.2	12.3	4.8	100.0	676
Gombe	8.7	1.9	84.9	0.2	3.9	0.4	100.0	88.7	9.4	0.9	1.1	100.0	253
Taraba	5.0	5.3	49.6	0.0	39.5	0.6	100.0	89.6	9.1	0.3	1.0	100.0	325
Yobe	6.6	0.4	92.7	0.0	0.0	0.2	100.0	92.3	7.4	0.1	0.2	100.0	390

Continued…

Table 13.14—*Continued*

Background characteristic	Place where circumcised							Provider of circumcision					Number of men circumcised
	Health facility	Home of a health worker/ profes-sional	Circum-cision done at home	Ritual site	Other home/ place	Don't know/ missing	Total	Traditional practi-tioner/ family/ friend	Health worker/ profes-sional	Other	Don't know/ missing	Total	
North West													
Jigawa	1.4	9.5	84.3	0.0	4.6	0.2	100.0	97.3	2.4	0.0	0.4	100.0	510
Kaduna	41.8	0.7	53.9	0.2	0.2	3.3	100.0	55.3	42.8	0.3	1.6	100.0	1,031
Kano	0.1	0.6	99.3	0.0	0.0	0.0	100.0	99.7	0.1	0.1	0.1	100.0	1,590
Katsina	11.0	3.1	85.3	0.0	0.2	0.3	100.0	86.2	13.6	0.0	0.2	100.0	596
Kebbi	3.3	92.4	2.9	0.2	0.0	1.3	100.0	95.1	3.6	0.0	1.3	100.0	512
Sokoto	0.6	0.0	99.3	0.0	0.1	0.0	100.0	98.6	0.6	0.8	0.0	100.0	424
Zamfara	0.8	0.0	98.2	0.3	0.0	0.7	100.0	99.1	0.3	0.0	0.5	100.0	475
South East													
Abia	58.3	8.8	14.4	0.0	11.8	6.6	100.0	13.6	68.8	11.0	6.6	100.0	224
Anambra	10.6	25.9	9.1	0.6	0.4	53.5	100.0	9.4	36.4	0.3	53.8	100.0	439
Ebonyi	27.9	28.3	41.7	0.4	0.2	1.7	100.0	44.8	52.9	0.5	1.8	100.0	366
Enugu	59.1	8.1	30.2	0.6	0.6	1.4	100.0	32.6	66.0	0.0	1.4	100.0	316
Imo	55.4	4.4	18.1	0.3	2.0	19.8	100.0	18.3	56.1	1.8	23.7	100.0	318
South South													
Akwa Ibom	50.9	2.0	30.5	0.0	1.4	15.2	100.0	30.6	52.3	0.0	17.1	100.0	444
Bayelsa	22.2	1.8	57.9	11.1	0.1	6.8	100.0	67.3	25.6	0.3	6.8	100.0	187
Cross River	21.6	3.3	58.2	0.0	0.9	16.0	100.0	53.4	27.0	0.0	19.7	100.0	278
Delta	36.4	8.9	46.8	0.0	3.5	4.5	100.0	51.5	43.3	0.3	4.9	100.0	471
Edo	35.4	0.7	39.0	0.2	1.3	23.4	100.0	34.8	34.8	0.1	30.3	100.0	356
Rivers	9.2	1.0	11.6	0.0	1.7	76.5	100.0	10.2	10.7	0.4	78.8	100.0	651
South West													
Ekiti	45.3	1.9	25.3	0.0	0.7	26.9	100.0	25.5	45.9	0.0	28.6	100.0	147
Lagos	35.4	5.4	36.3	0.0	3.2	19.7	100.0	42.3	36.0	0.8	20.9	100.0	935
Ogun	33.2	3.4	53.8	0.4	4.4	4.8	100.0	59.2	36.1	0.2	4.5	100.0	357
Ondo	26.4	3.5	34.9	2.1	1.0	32.0	100.0	38.7	25.7	0.5	35.1	100.0	391
Osun	47.7	2.7	28.5	0.0	5.0	16.1	100.0	34.8	48.5	0.0	16.7	100.0	346
Oyo	1.9	10.7	23.1	0.0	0.7	63.6	100.0	24.4	12.2	0.0	63.4	100.0	626
Religion													
Catholic	41.2	9.5	32.1	0.6	1.7	14.9	100.0	32.8	47.7	1.0	18.6	100.0	1,988
Other Christian	34.0	5.6	33.7	1.0	3.8	21.9	100.0	36.8	38.8	0.7	23.7	100.0	6,081
Islam	6.7	7.9	74.7	0.3	4.6	5.7	100.0	84.5	8.7	1.1	5.6	100.0	8,842
Traditionalist	9.2	12.0	58.1	2.1	4.6	14.0	100.0	74.7	10.5	0.3	14.5	100.0	157
Missing	11.9	7.6	59.8	0.0	1.1	19.6	100.0	60.9	19.5	0.0	19.6	100.0	79
Ethnic group													
Ekoi	15.2	0.0	62.1	0.0	0.0	22.8	100.0	55.3	22.0	0.0	22.8	100.0	20
Fulani	3.6	3.5	83.3	0.2	4.7	4.6	100.0	89.4	5.0	0.9	4.7	100.0	943
Hausa	3.3	11.0	83.0	0.1	1.4	1.2	100.0	94.1	4.6	0.3	1.0	100.0	4,685
Ibibio	42.3	2.7	33.7	0.0	1.6	19.8	100.0	32.4	44.8	0.3	22.5	100.0	409
Igala	32.0	2.9	57.7	0.0	2.3	5.0	100.0	63.0	31.8	1.1	4.1	100.0	195
Igbo	40.8	13.7	23.4	0.2	2.4	19.6	100.0	24.8	52.8	1.5	20.9	100.0	2,308
Ijaw/Izon	20.5	3.6	52.2	5.0	1.8	17.0	100.0	57.0	25.0	0.1	17.9	100.0	343
Kanuri/Beriberi	7.3	2.9	53.7	0.2	30.5	5.4	100.0	77.0	9.9	8.9	4.2	100.0	292
Tiv	39.3	3.2	34.6	1.8	12.5	8.7	100.0	46.5	35.4	0.8	17.2	100.0	442
Yoruba	28.7	5.6	33.3	1.0	2.2	29.2	100.0	37.8	32.2	0.4	29.6	100.0	2,316
Other	23.2	4.1	51.8	0.7	6.0	14.3	100.0	56.4	26.3	1.1	16.2	100.0	5,164
Education													
No education	1.6	8.9	79.4	0.4	6.7	3.1	100.0	93.0	2.4	1.5	3.1	100.0	3,631
Primary	12.2	5.5	66.1	0.9	4.6	10.6	100.0	72.2	14.8	0.8	12.1	100.0	2,883
Secondary	27.5	7.0	45.4	0.5	2.9	16.7	100.0	49.1	32.1	0.8	18.0	100.0	8,186
More than secondary	34.4	8.2	37.8	0.5	3.2	15.9	100.0	42.7	39.4	0.6	17.3	100.0	2,463
Wealth quintile													
Lowest	2.5	8.3	80.2	0.3	5.7	2.9	100.0	91.6	3.5	1.2	3.7	100.0	2,836
Second	10.0	7.6	69.4	1.0	5.7	6.4	100.0	79.4	11.8	1.2	7.6	100.0	2,961
Middle	18.5	5.8	61.5	0.6	3.8	9.9	100.0	66.5	21.2	1.0	11.2	100.0	3,303
Fourth	27.1	7.1	47.5	0.6	3.4	14.3	100.0	52.4	31.8	0.6	15.2	100.0	3,788
Highest	35.2	7.8	29.9	0.4	2.4	24.3	100.0	32.8	41.2	0.7	25.3	100.0	4,276
Total	20.4	7.3	55.0	0.6	4.0	12.7	100.0	61.4	24.0	0.9	13.7	100.0	17,164

Note: Total includes 48 cases with missing information on ethnicity.

13.10 SELF-REPORTING OF SEXUALLY TRANSMITTED INFECTIONS

In the 2013 NDHS, respondents who had ever had sexual intercourse were asked if in the past 12 months they experienced a disease acquired through sexual contact or if they experienced either of two symptoms associated with STIs: a bad-smelling, abnormal discharge from the vagina or penis or a genital sore or ulcer. Table 13.15 shows the self-reported prevalence of STIs and STI symptoms among women and men. Overall, 8 percent of women and 4 percent of men reported having had an STI or experiencing STI symptoms during the 12 months preceding the survey.

Four percent of women reported having an STI; 6 percent had a bad-smelling, abnormal discharge, and 3 percent had a genital sore or ulcer. The prevalence of STIs and STI symptoms is highest among never-married women (15 percent). Women in urban areas are slightly more likely than women in rural areas to have had an STI or STI symptoms. The prevalence of STIs or STI symptoms among women is higher in the South East (15 percent) than in other zones. It is of interest that one in three women (32 percent) in Kaduna reported having an STI or STI symptoms. Women who have attended school are more than twice as likely to report STIs or STI symptoms as women with no education.

Among men, 2 percent reported having an STI in the past 12 months; 2 percent had a bad-smelling, abnormal discharge, and 1 percent had a genital sore or ulcer. The highest prevalence of self-reported STIs or STI symptoms among men (14 percent) was recorded in Zamfara and Imo.

Table 13.15 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Among women and men age 15-49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Nigeria 2013

	Percentage of women who reported having in the past 12 months:					Percentage of men who reported having in the past 12 months:				
Background characteristic	STI	Bad-smelling/ abnormal genital discharge	Genital sore/ulcer	STI/genital discharge/ sore or ulcer	Number of women who ever had sexual intercourse	STI	Bad-smelling/ abnormal discharge from penis	Genital sore/ulcer	STI/ abnormal discharge from penis/ sore or ulcer	Number of men who ever had sexual intercourse
Age										
15-24	3.2	6.1	3.7	8.0	9,268	1.8	2.8	1.5	4.2	2,201
15-19	2.2	6.0	3.5	7.3	3,404	0.9	3.3	1.3	4.4	559
20-24	3.8	6.1	3.9	8.4	5,864	2.0	2.7	1.6	4.1	1,642
25-29	4.2	7.1	3.6	9.0	6,913	2.3	3.1	1.9	4.6	2,318
30-39	4.5	6.5	3.2	8.6	10,071	1.5	2.0	1.2	3.0	4,415
40-49	3.6	4.9	2.7	6.7	7,015	1.3	2.3	0.7	3.0	3,475
Marital status										
Never married	6.4	11.1	6.2	14.7	3,732	2.5	3.1	1.7	4.8	3,461
Married/living together	3.5	5.5	2.9	7.2	27,749	1.2	2.1	1.0	3.0	8,693
Divorced/separated/ widowed	4.0	6.3	3.9	8.3	1,786	3.3	3.0	2.6	5.1	256
Male circumcision[1]										
Circumcised	na	na	na	na	na	1.6	2.4	1.3	3.5	12,296
Not circumcised	na	na	na	na	na	4.0	3.6	0.0	5.1	93
Residence										
Urban	5.6	7.1	3.4	9.8	13,175	1.9	1.9	1.0	3.0	5,252
Rural	2.7	5.5	3.3	7.0	20,092	1.5	2.8	1.4	3.9	7,157
Zone										
North Central	3.4	7.0	3.9	8.9	4,576	2.1	3.6	1.9	4.6	2,099
North East	2.2	6.3	4.2	7.6	5,072	1.6	3.3	2.1	4.2	1,728
North West	5.0	5.6	2.8	7.4	10,615	0.6	2.4	0.7	2.7	3,101
South East	8.2	9.8	5.0	14.5	3,537	4.6	2.3	1.6	6.2	1,264
South South	2.0	5.9	3.3	7.6	4,175	1.3	1.3	1.1	2.5	2,001
South West	2.2	4.3	1.9	5.3	5,293	1.4	1.7	0.7	2.4	2,216
State										
North Central										
FCT-Abuja	2.8	5.3	0.9	6.8	257	1.1	0.9	0.2	1.1	131
Benue	6.4	19.2	9.2	23.5	1,043	1.9	4.4	4.5	6.6	500
Kogi	1.9	2.1	0.6	2.5	536	3.7	3.9	0.4	3.9	240
Kwara	0.2	0.5	0.0	0.7	461	0.6	0.6	0.3	0.9	211
Nasarawa	6.8	8.9	7.2	12.8	510	1.9	3.6	1.6	5.2	224
Niger	0.9	1.2	0.9	1.7	1,232	1.2	2.6	0.5	2.9	562
Plateau	4.7	6.5	5.1	7.7	537	5.3	8.4	4.2	10.2	230

Continued…

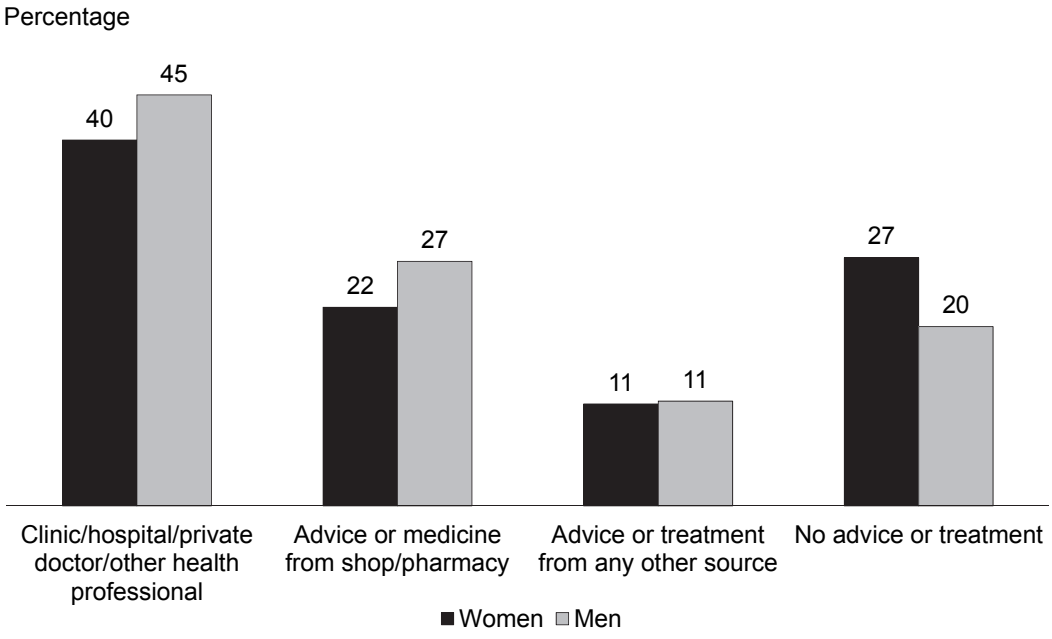
Table 13.15—*Continued*

Background characteristic	Percentage of women who reported having in the past 12 months: STI	Bad smelling/ abnormal genital discharge	Genital sore/ulcer	STI/genital discharge/ sore or ulcer	Number of women who ever had sexual intercourse	Percentage of men who reported having in the past 12 months: STI	Bad smelling/ abnormal discharge from penis	Genital sore/ulcer	STI/ abnormal discharge from penis/ sore or ulcer	Number of men who ever had sexual intercourse
North East										
Adamawa	1.5	15.6	13.8	18.6	691	1.5	5.3	0.9	6.3	251
Bauchi	0.6	0.9	1.3	2.2	1,068	0.3	0.5	0.5	1.0	354
Borno	1.0	0.9	0.9	1.3	1,203	3.7	3.9	4.2	4.8	464
Gombe	1.0	2.7	2.2	4.3	494	1.0	5.7	3.0	7.7	167
Taraba	7.0	14.0	5.8	16.0	760	0.6	2.6	1.2	3.2	257
Yobe	3.0	8.1	4.7	9.1	856	0.7	2.9	1.9	4.4	236
North West										
Jigawa	0.9	2.4	1.5	3.4	1,297	0.6	2.7	1.3	3.3	352
Kaduna	23.2	24.9	12.3	32.1	1,900	1.4	1.6	0.7	2.2	738
Kano	1.8	1.2	0.6	2.1	2,633	0.1	0.1	0.0	0.1	696
Katsina	0.6	0.4	0.6	1.0	1,441	0.6	0.6	0.6	0.6	419
Kebbi	0.4	2.9	0.9	3.0	1,113	0.3	0.5	0.0	0.5	334
Sokoto	0.5	0.7	0.2	1.0	983	0.4	2.4	0.4	2.4	245
Zamfara	0.9	1.0	0.8	1.4	1,248	0.0	13.6	2.3	14.2	316
South East										
Abia	2.3	2.0	0.7	3.3	427	2.1	0.5	0.0	2.1	171
Anambra	9.4	6.6	8.3	11.9	837	3.7	2.9	1.9	5.3	358
Ebonyi	7.7	17.0	5.4	23.9	900	1.3	0.7	0.6	2.3	269
Enugu	14.5	12.0	3.4	18.5	705	3.0	4.7	4.8	6.5	208
Imo	4.5	6.7	4.9	8.2	668	12.2	2.5	0.6	13.9	259
South South										
Akwa Ibom	2.6	8.9	8.4	10.3	738	2.0	2.8	1.8	4.1	379
Bayelsa	0.7	5.0	7.7	9.5	305	3.2	3.1	1.6	4.2	154
Cross River	1.6	4.4	3.3	6.8	625	3.3	3.2	1.0	4.4	248
Delta	1.1	0.6	0.6	2.0	819	0.3	0.3	1.9	2.2	387
Edo	3.2	7.8	1.9	9.3	576	1.1	0.6	1.3	2.8	280
Rivers	2.1	7.7	1.6	9.2	1,112	0.1	0.1	0.0	0.1	554
South West										
Ekiti	1.8	10.8	4.9	12.0	270	0.3	0.0	0.4	0.7	113
Lagos	3.6	4.0	2.6	6.3	1,648	1.4	1.4	0.7	2.1	753
Ogun	3.4	3.5	1.0	3.6	771	1.4	1.9	0.6	2.5	285
Ondo	1.0	0.9	1.2	1.7	694	3.9	2.8	2.2	4.5	318
Osun	0.0	2.7	0.5	2.7	586	1.5	4.4	0.3	5.7	262
Oyo	1.3	6.2	1.9	6.8	1,323	0.0	0.0	0.0	0.0	485
Education										
No education	2.2	3.8	2.3	4.9	14,072	0.7	2.5	1.4	3.0	2,747
Primary	4.0	7.6	4.2	9.6	6,151	1.9	2.8	0.9	3.7	2,294
Secondary	5.6	8.2	4.1	10.9	9,926	2.2	2.6	1.5	4.1	5,220
More than secondary	5.4	7.7	3.7	10.3	3,119	1.3	1.5	0.7	2.5	2,149
Wealth quintile										
Lowest	1.6	3.1	1.8	4.3	6,652	1.0	3.2	1.2	3.9	1,944
Second	3.5	6.9	3.6	8.5	6,665	1.0	3.2	1.5	3.7	2,112
Middle	4.0	7.3	4.6	9.6	6,240	1.9	3.3	2.2	4.6	2,317
Fourth	5.1	6.6	3.2	8.7	6,526	1.9	1.6	0.7	2.9	2,735
Highest	5.0	6.9	3.5	9.4	7,185	2.0	1.6	0.8	2.9	3,302
Total	3.9	6.2	3.3	8.1	33,267	1.6	2.4	1.2	3.5	12,410

na = Not applicable
[1] Excludes 20 cases with missing information on status of male circumcision.

Women and men who reported having an STI and/or STI symptoms in the past 12 months were asked whether they sought any advice or treatment. Figure 13.1 shows that 40 percent of women sought advice or treatment from a clinic, hospital, private doctor, or other health professional; 22 percent sought advice or medicine from a shop or pharmacy; and 27 percent sought no advice or treatment. Men were more likely than women to seek advice or treatment for STIs or STI symptoms, with 45 percent seeking advice or treatment from a health facility or health professional and 27 percent from a shop or pharmacy. Twenty percent of men did not seek advice or treatment.

Figure 13.1 **Women and men seeking treatment for STIs**



NDHS 2013

13.11 PREVALENCE OF MEDICAL INJECTIONS

Use of non-sterile injections in a health care setting can contribute to the transmission of blood-borne pathogens because it amplifies the effects of unsafe practices such as reuse of injection equipment. As a result, the proportion of injections given with reused injection equipment is an important indicator. To obtain information for this indicator, respondents in the 2013 NDHS were asked if they received any injections from a health worker in the 12 months preceding the survey and, if so, whether their last injection was given with a syringe from a new, unopened package. It should be noted that while medical injections can also be self-administered (e.g., insulin for diabetes), these injections are not included in the calculation.

Table 13.16 shows the reported prevalence of injections and safe injection practices. Twenty-six percent of women and 23 percent of men reported receiving an injection from a health worker during the 12 months preceding the survey. The average number of medical injections received over the 12-month period was one per person for both women and men. The prevalence of safe medical injection practices is universal among women and men (97 percent and 98 percent, respectively).

Looking at differentials across subgroups of women, the prevalence of medical injections is highest among women age 25-29 (31 percent), those living in urban areas (30 percent) and the South East (36 percent), those with more than a secondary education (38 percent), and those in the highest wealth quintile (34 percent). Among men, the prevalence is highest among those age 25-29 and age 30-39 (25 percent each), those in the North Central zone (28 percent), and those with more than a secondary education (27 percent).

Table 13.16 Prevalence of medical injections

Percentage of women and men age 15-49 who received at least one medical injection in the last 12 months, the average number of medical injections per person in the last 12 months, and among those who received a medical injection, the percentage of last medical injections for which the syringe and needle were taken from a new, unopened package, by background characteristics, Nigeria 2013

	Women					Men				
Background characteristic	Percentage who received a medical injection in the last 12 months	Average number of medical injections per person in the last 12 months	Number of respondents	For last injection, syringe and needle taken from a new, unopened package	Number of respondents receiving medical injections in the last 12 months	Percentage who received a medical injection in the last 12 months	Average number of medical injections per person in the last 12 months	Number of respondents	For last injection, syringe and needle taken from a new, unopened package	Number of respondents receiving medical injections in the last 12 months
Age										
15-24	23.1	0.9	14,576	96.3	3,363	19.7	0.8	6,511	97.9	1,282
15-19	17.9	0.7	7,820	96.0	1,399	19.4	0.7	3,619	97.6	702
20-24	29.1	1.2	6,757	96.5	1,963	20.1	0.9	2,892	98.2	580
25-29	30.9	1.3	7,145	97.1	2,206	25.2	1.1	2,757	97.3	695
30-39	29.2	1.3	10,185	97.2	2,979	24.5	1.3	4,589	98.0	1,124
40-49	22.8	1.1	7,042	96.7	1,603	24.2	1.4	3,501	97.6	847
Marital status										
Never married	21.5	1.0	9,326	96.2	2,002	20.9	0.9	8,378	98.0	1,747
Ever had sex	28.7	1.4	3,732	95.3	1,071	25.3	1.2	3,461	98.3	877
Never had sex	16.6	0.7	5,593	97.3	931	17.7	0.7	4,918	97.8	871
Married/living together	27.6	1.2	27,830	96.9	7,692	24.5	1.3	8,723	97.5	2,133
Divorced/separated/ widowed	25.5	1.2	1,793	96.9	457	25.9	1.6	258	96.8	67
Residence										
Urban	29.9	1.3	16,414	97.4	4,904	22.2	1.1	7,611	97.5	1,692
Rural	23.3	1.0	22,534	96.2	5,246	23.1	1.1	9,748	97.9	2,255
Zone										
North Central	26.7	1.4	5,572	96.6	1,488	27.7	1.4	2,685	97.4	743
North East	22.0	0.7	5,766	97.0	1,271	24.6	1.0	2,515	96.7	618
North West	20.1	0.8	11,877	97.5	2,390	16.1	0.6	5,185	98.8	836
South East	35.6	1.7	4,476	95.8	1,596	27.3	1.4	1,686	98.6	460
South South	28.4	1.2	4,942	95.1	1,405	25.0	1.2	2,445	97.0	611
South West	31.7	1.4	6,314	97.9	2,000	23.9	1.4	2,843	97.8	679
State										
North Central										
FCT-Abuja	32.1	1.6	315	96.1	101	9.5	0.4	175	(96.9)	17
Benue	25.1	1.4	1,240	96.7	311	28.1	1.6	616	98.7	173
Kogi	30.9	2.0	704	98.5	218	35.6	1.5	333	97.9	119
Kwara	28.7	1.1	596	99.9	171	29.3	1.5	274	96.8	80
Nasarawa	27.6	1.1	594	96.9	164	28.8	1.9	282	100.0	81
Niger	26.4	1.5	1,462	94.4	386	29.5	1.4	701	94.9	207
Plateau	20.7	0.9	662	95.7	137	21.9	1.2	302	99.1	66
North East										
Adamawa	29.6	1.0	828	97.7	245	38.8	1.4	358	99.2	139
Bauchi	25.3	0.9	1,161	98.0	293	43.3	2.3	512	95.2	221
Borno	11.3	0.3	1,412	100.0	160	9.6	0.3	676	(92.6)	65
Gombe	27.2	0.7	550	98.3	149	29.4	1.3	255	97.8	75
Taraba	26.3	1.1	844	93.8	222	16.3	0.7	325	95.6	53
Yobe	20.7	0.5	971	94.7	201	16.5	0.6	390	100.0	64
North West										
Jigawa	20.2	0.6	1,353	96.0	274	26.0	0.8	510	98.4	133
Kaduna	23.9	0.7	2,136	98.5	510	4.5	0.1	1,033	(92.7)	47
Kano	12.4	0.4	3,189	99.6	396	3.1	0.1	1,592	(98.2)	49
Katsina	20.4	0.6	1,525	97.4	312	13.4	0.4	596	100.0	80
Kebbi	36.6	2.5	1,244	95.4	455	36.6	1.2	551	99.6	202
Sokoto	8.8	0.3	1,098	92.1	97	26.3	1.0	424	98.7	112
Zamfara	26.0	0.9	1,332	99.3	347	44.8	2.4	479	99.2	215
South East										
Abia	32.0	1.4	518	99.2	165	34.3	1.6	229	99.4	78
Anambra	40.0	2.2	1,052	90.7	420	15.0	1.0	446	100.0	67
Ebonyi	30.3	1.5	1,122	96.4	340	27.1	1.2	368	98.2	100
Enugu	32.5	1.6	951	97.7	309	31.5	1.4	320	95.8	101
Imo	43.3	1.9	833	97.9	361	35.3	1.9	323	100.0	114
South South										
Akwa Ibom	32.7	1.5	864	88.4	283	31.7	1.9	451	97.6	143
Bayelsa	23.3	1.3	364	97.5	85	24.0	1.4	187	97.4	45
Cross River	36.7	2.0	703	96.6	258	27.8	1.2	310	99.1	86
Delta	10.7	0.4	993	97.4	107	28.1	1.3	473	97.7	133
Edo	36.7	1.6	742	96.2	272	23.8	1.1	365	93.7	87
Rivers	31.4	1.1	1,276	96.9	400	17.9	0.7	658	96.4	118

Continued…

Table 13.16—*Continued*

Background characteristic	Women					Men				
	Percentage who received a medical injection in the last 12 months	Average number of medical injections per person in the last 12 months	Number of respondents	For last injection, syringe and needle taken from a new, unopened package	Number of respondents receiving medical injections in the last 12 months	Percentage who received a medical injection in the last 12 months	Average number of medical injections per person in the last 12 months	Number of respondents	For last injection, syringe and needle taken from a new, unopened package	Number of respondents receiving medical injections in the last 12 months
South West										
Ekiti	30.5	1.4	326	98.5	100	22.2	1.2	148	91.9	33
Lagos	37.7	1.9	1,964	97.5	739	24.5	1.2	948	97.2	233
Ogun	25.5	1.3	883	97.1	226	13.6	2.2	358	(97.9)	49
Ondo	28.8	1.3	808	97.6	233	25.2	1.1	404	98.3	102
Osun	31.3	1.1	765	100.0	240	18.9	0.8	356	98.9	67
Oyo	29.5	1.3	1,568	98.0	463	31.1	1.5	629	98.8	196
Education										
No education	18.3	0.7	14,729	96.0	2,696	18.0	0.8	3,685	96.5	664
Primary	28.0	1.3	6,734	96.2	1,883	22.9	1.3	2,907	97.2	665
Secondary	30.4	1.3	13,927	97.3	4,232	23.7	1.1	8,281	98.0	1,959
More than secondary	37.6	1.7	3,558	97.4	1,339	26.5	1.2	2,486	98.6	659
Wealth quintile										
Lowest	16.3	0.6	7,132	96.6	1,164	19.3	0.9	2,862	96.1	552
Second	21.2	0.9	7,428	96.2	1,574	21.2	0.9	2,992	97.8	634
Middle	26.6	1.2	7,486	96.3	1,994	25.4	1.3	3,338	98.8	847
Fourth	30.2	1.3	7,992	96.7	2,416	23.5	1.2	3,835	97.0	901
Highest	33.7	1.5	8,910	97.5	3,003	23.4	1.1	4,332	98.3	1,013
Total	26.1	1.1	38,948	96.8	10,150	22.7	1.1	17,359	97.7	3,947

Note: Medical injections are those given by a doctor, nurse, pharmacist, dentist, or other health worker. Figures in parentheses are based on 25-49 unweighted cases.

13.12 HIV- AND AIDS-RELATED KNOWLEDGE AND BEHAVIOUR AMONG YOUTH

This section addresses HIV- and AIDS-related knowledge among Nigerian youth age 15-24 and assesses the extent to which Nigerian youth are engaged in behaviours that may place them at risk of contracting HIV. The period between the initiation of sexual activity and marriage is often a time of sexual experimentation and may involve risky behaviours. This section examines comprehensive knowledge among youth of HIV/AIDS transmission and prevention as well as knowledge of where to obtain condoms. Issues such as age at first sex, age difference between partners, sex related to alcohol use, and voluntary counselling and testing for HIV also are covered.

13.12.1 Knowledge about HIV and AIDS and of Sources for Condoms

Knowledge of how HIV is transmitted is crucial to enable people to avoid contracting HIV, especially young people, who are often at greater risk because they may have shorter relationships with more partners or engage in other risky behaviours. Table 13.17 shows the level of comprehensive knowledge about HIV and AIDS among youth and the percentage of youth who know a source where they can obtain condoms.

Twenty-four percent of young women age 15-24 and 34 percent of young men have comprehensive knowledge about HIV. Comprehensive knowledge is higher among youth in urban areas than those in rural areas. Among young women, the level of comprehensive knowledge about HIV is highest in the South West (28 percent) and lowest in the South East (12 percent). Among young men, the level of knowledge is highest in the North West (45 percent) and lowest in the North Central zone (17 percent). The proportion of both young women and young men with comprehensive knowledge increases with increasing education and wealth.

Less than half (46 percent) of young women and two in three young men (68 percent) know where to obtain a condom. Knowledge of a source for condoms is higher in urban areas than rural areas among both young women (61 percent and 34 percent, respectively) and young men (77 percent and 60 percent,

respectively). At the zonal level, young women in the South South (73 percent) are most likely and those in the North West (20 percent) least likely to know a condom source. Young men show the same pattern; knowledge is highest in the South South (88 percent) and lowest in the North West (47 percent). Knowledge of where to obtain a condom increases with increasing education and wealth.

Table 13.17 Comprehensive knowledge about AIDS and of a source of condoms among youth

Percentage of young women and young men age 15-24 with comprehensive knowledge about AIDS and percentage with knowledge of a source of condoms, by background characteristics, Nigeria 2013

	Women			Men		
Background characteristic	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of respondents	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of respondents
Age						
15-19	22.4	39.3	7,820	29.3	59.5	3,619
15-17	20.6	34.5	4,867	26.4	53.8	2,284
18-19	25.3	47.1	2,952	34.4	69.2	1,335
20-24	26.4	52.6	6,757	38.6	78.1	2,892
20-22	25.9	49.3	4,677	37.3	74.6	1,997
23-24	27.6	60.1	2,080	41.6	86.1	895
Marital status						
Never married	25.5	56.9	7,744	34.2	68.1	6,027
Ever had sex	27.6	83.3	2,466	35.9	95.0	1,719
Never had sex	24.5	44.6	5,277	33.5	57.4	4,308
Ever married	22.8	32.5	6,833	24.7	63.5	485
Residence						
Urban	29.5	61.3	6,098	41.1	77.3	2,899
Rural	20.4	34.1	8,478	27.4	60.2	3,612
Zone						
North Central	24.8	51.4	2,197	16.6	75.7	997
North East	26.8	28.3	2,258	27.3	58.3	941
North West	24.9	19.8	4,470	45.2	46.5	1,971
South East	11.8	65.7	1,695	30.1	80.1	700
South South	25.6	72.6	1,901	38.2	88.2	896
South West	28.4	72.0	2,056	31.2	83.8	1,005
State						
North Central						
FCT-Abuja	38.8	62.0	106	18.9	80.7	40
Benue	24.4	70.0	523	16.1	88.2	291
Kogi	36.5	55.4	303	21.1	83.6	137
Kwara	43.7	51.0	236	12.5	78.4	101
Nasarawa	10.5	52.4	226	18.2	76.2	114
Niger	18.7	34.6	576	14.6	57.6	226
Plateau	13.8	40.2	227	18.0	62.0	88
North East						
Adamawa	26.7	31.8	335	30.8	82.5	138
Bauchi	12.2	12.4	446	29.6	31.6	176
Borno	34.2	28.5	601	22.7	68.7	245
Gombe	24.4	22.4	210	18.7	47.7	110
Taraba	46.7	50.7	305	46.2	72.9	120
Yobe	17.3	29.0	362	20.0	46.8	152
North West						
Jigawa	18.5	7.9	471	23.9	43.4	182
Kaduna	19.5	65.8	870	28.8	57.0	350
Kano	27.8	12.9	1,229	75.6	49.6	723
Katsina	27.6	14.5	548	51.0	57.6	194
Kebbi	9.2	1.3	454	4.5	38.6	199
Sokoto	49.1	2.9	413	49.0	37.6	166
Zamfara	24.2	3.8	485	6.5	17.9	158
South East						
Abia	1.1	61.2	155	48.9	83.9	84
Anambra	9.8	69.1	390	15.1	85.8	161
Ebonyi	13.3	60.7	455	28.9	70.3	179
Enugu	12.1	64.6	394	48.4	87.9	157
Imo	17.4	72.5	301	14.6	74.2	119
South South						
Akwa Ibom	20.4	69.1	365	27.3	83.6	175
Bayelsa	18.0	92.1	157	52.9	99.7	73
Cross River	23.6	83.3	229	37.5	82.4	121
Delta	32.5	79.2	426	51.0	92.7	184
Edo	31.4	63.6	313	35.0	96.9	158
Rivers	22.6	62.4	411	33.1	79.9	185

Continued…

Table 13.17—*Continued*

Background characteristic	Women			Men		
	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of respondents	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of respondents
South West						
Ekiti	25.7	59.0	120	25.4	94.9	56
Lagos	31.6	81.7	581	48.5	90.9	306
Ogun	42.7	86.8	238	23.7	65.7	107
Ondo	8.7	51.5	294	19.0	70.4	161
Osun	47.1	70.9	276	30.2	97.8	136
Oyo	20.5	69.6	547	22.4	81.3	238
Education						
No education	17.5	11.9	4,448	20.6	30.2	1,082
Primary	19.3	39.2	1,805	26.1	54.8	765
Secondary	27.3	62.3	7,529	35.5	77.0	4,200
More than secondary	44.2	87.8	794	56.9	93.1	464
Wealth quintile						
Lowest	14.6	8.8	2,413	22.5	35.0	1,103
Second	19.0	27.1	2,916	28.3	57.4	1,103
Middle	23.8	48.1	3,048	32.9	74.2	1,393
Fourth	28.6	61.3	3,135	36.8	78.7	1,495
Highest	32.8	73.0	3,064	43.1	83.6	1,416
Total	24.2	45.5	14,576	33.5	67.8	6,511

[1] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the 2 most common local misconceptions about AIDS transmission or prevention of the AIDS virus. The components of comprehensive knowledge are presented in Tables 13.2, 13.3.1, and 13.3.2.
[2] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

13.12.2 Age at First Sexual Intercourse among Youth

Age at first sex is an important indicator of both exposure to risk of pregnancy and exposure to STIs. Young people who initiate sex at an early age are considered to be at a higher risk of becoming pregnant or contracting an STI than young people who delay initiation of sexual activity. Consistent use of condoms can also reduce these risks.

Table 13.18 shows that 17 percent of young women and 3 percent of young men age 15-24 initiated sexual activity before age 15, and 52 percent of young women and 19 percent of young men age 18-24 had their first sexual intercourse before age 18. As expected, the proportion of youth who initiated sexual activity early is higher among ever-married youth than among those who have not yet married. The likelihood of early sexual debut generally decreases with increasing education.

Young women in rural areas are more likely than their urban counterparts to have initiated sex before age 15 (24 percent versus 7 percent) and before age 18 (64 percent versus 34 percent). Analysis by zone shows that the proportion of young women who had their first sexual intercourse before age 15 is highest in the North West (29 percent) and lowest in the South East and South West (7 percent each).

There is no difference in initiation of sex among young men before age 15 by urban-rural residence. However, rural young men are slightly more likely than urban young men to have initiated sex before age 18 (21 percent and 18 percent, respectively). The proportion of young men initiating sexual intercourse by age 18 is highest in the South South (33 percent). The North West has the lowest proportion of young men who initiated sex by age 15 and age 18.

Table 13.18 Age at first sexual intercourse among young people

Percentage of young women and young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and young men age 18-24 who had sexual intercourse before age 18, by background characteristics, Nigeria 2013

	Women				Men			
Background characteristic	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)
Age								
15-19	15.6	7,820	na	na	2.9	3,619	na	na
15-17	15.3	4,867	na	na	2.6	2,284	na	na
18-19	16.2	2,952	53.4	2,952	3.4	1,335	21.2	1,335
20-24	18.7	6,757	51.1	6,757	4.0	2,892	18.6	2,892
20-22	19.7	4,677	53.9	4,677	4.4	1,997	19.3	1,997
23-24	16.4	2,080	44.8	2,080	3.0	895	16.9	895
Marital status								
Never married	4.8	7,744	23.4	3,915	3.3	6,027	18.2	3,746
Ever married	30.9	6,833	71.0	5,794	4.7	485	28.7	481
Knows condom source[1]								
Yes	10.2	6,627	41.2	4,947	4.7	4,413	23.6	3,184
No	22.8	7,950	62.8	4,762	0.6	2,098	6.6	1,043
Residence								
Urban	7.4	6,098	34.4	4,028	3.4	2,899	17.7	1,900
Rural	24.0	8,478	64.1	5,681	3.4	3,612	20.8	2,327
Zone								
North Central	9.7	2,197	41.3	1,490	5.9	997	26.4	706
North East	22.8	2,258	63.0	1,528	1.9	941	13.7	635
North West	28.9	4,470	71.6	2,952	0.2	1,971	4.5	1,199
South East	6.6	1,695	27.4	1,156	4.6	700	29.7	431
South South	10.8	1,901	45.7	1,251	5.7	896	32.7	593
South West	7.1	2,056	33.7	1,332	5.7	1,005	25.9	664
State								
North Central								
FCT-Abuja	4.8	106	28.5	77	0.9	40	10.4	28
Benue	16.2	523	53.9	361	11.8	291	37.9	211
Kogi	7.4	303	34.7	183	1.0	137	10.6	100
Kwara	2.4	236	28.2	144	4.8	101	24.0	66
Nasarawa	6.9	226	41.6	173	9.9	114	37.3	79
Niger	11.9	576	46.6	397	0.6	226	22.5	154
Plateau	5.3	227	24.2	155	6.3	88	18.7	67
North East								
Adamawa	11.7	335	48.5	233	7.1	138	26.7	86
Bauchi	39.9	446	79.7	308	2.7	176	13.0	114
Borno	23.0	601	53.7	418	1.1	245	13.7	183
Gombe	19.3	210	67.7	146	0.4	110	10.5	72
Taraba	14.9	305	70.5	199	0.6	120	20.9	78
Yobe	20.6	362	62.7	224	0.0	152	0.0	101
North West								
Jigawa	39.3	471	85.6	328	1.0	182	7.0	108
Kaduna	22.7	870	68.2	592	0.3	350	10.9	224
Kano	18.5	1,229	60.5	750	0.0	723	0.5	463
Katsina	35.2	548	78.2	383	0.0	194	6.8	113
Kebbi	28.8	454	63.3	322	0.0	199	5.8	123
Sokoto	32.9	413	80.0	268	0.4	166	3.8	86
Zamfara	45.7	485	82.8	310	0.0	158	1.3	81
South East								
Abia	8.3	155	26.3	112	5.9	84	32.6	56
Anambra	5.5	390	21.7	265	3.9	161	14.6	106
Ebonyi	8.7	455	36.7	292	0.0	179	35.7	108
Enugu	4.0	394	23.0	287	4.2	157	17.9	88
Imo	7.5	301	28.2	199	11.9	119	54.8	73
South South								
Akwa Ibom	16.0	365	53.6	241	8.7	175	35.2	127
Bayelsa	13.6	157	75.4	90	7.5	73	57.2	41
Cross River	7.8	229	47.9	176	7.0	121	30.0	76
Delta	10.4	426	46.5	272	2.2	184	32.0	127
Edo	1.8	313	26.3	190	4.5	158	26.9	92
Rivers	14.0	411	40.4	283	5.8	185	28.7	130
South West								
Ekiti	8.4	120	39.0	69	1.3	56	33.5	32
Lagos	4.9	581	24.2	387	6.5	306	21.7	216
Ogun	10.5	238	36.3	155	11.3	107	20.8	81
Ondo	8.7	294	41.4	190	6.6	161	28.8	108
Osun	0.9	276	24.5	170	3.2	136	21.4	86
Oyo	10.0	547	41.8	362	4.1	238	34.2	141

Continued…

Table 13.18—*Continued*

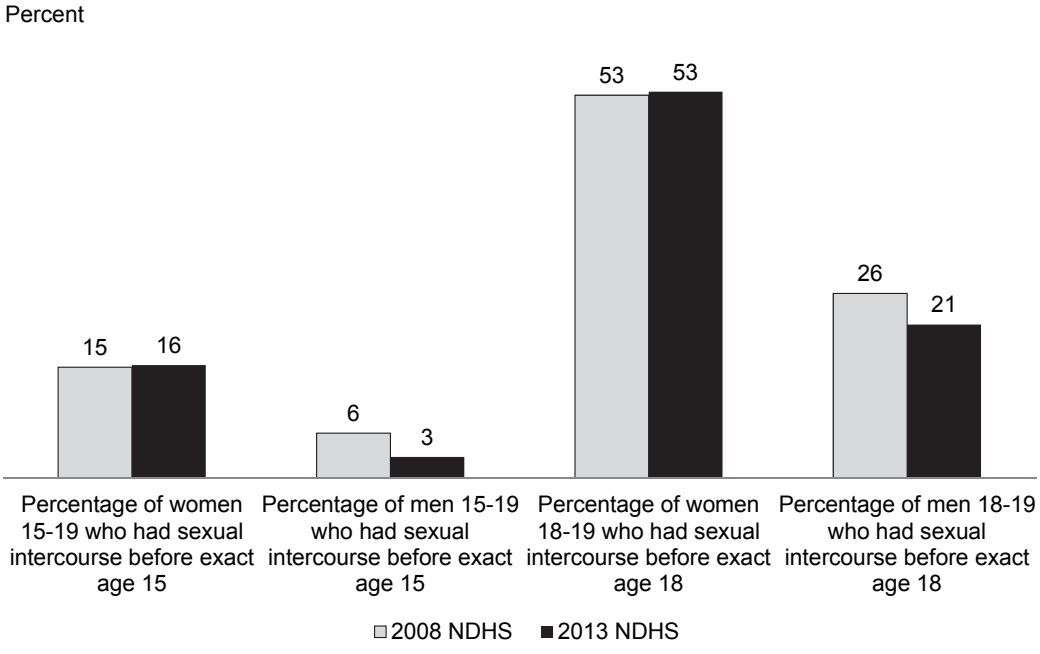
Background characteristic	Women				Men			
	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)	Percentage who had sexual intercourse before age 15	Number of respondents (15-24)	Percentage who had sexual intercourse before age 18	Number of respondents (18-24)
Education								
No education	35.7	4,448	79.0	3,150	0.3	1,082	10.5	680
Primary	19.6	1,805	65.0	1,194	5.0	765	23.4	415
Secondary	6.9	7,529	36.0	4,598	4.0	4,200	21.6	2,677
More than secondary	2.2	794	14.1	767	3.0	464	16.5	455
Wealth quintile								
Lowest	37.5	2,413	80.3	1,557	2.0	1,103	13.9	657
Second	26.0	2,916	69.2	1,965	2.2	1,103	16.1	689
Middle	13.4	3,048	50.7	2,041	3.9	1,393	22.4	912
Fourth	7.8	3,135	39.2	2,097	4.4	1,495	24.0	1,024
Highest	5.5	3,064	27.4	2,049	3.9	1,416	17.9	946
Total	17.0	14,576	51.8	9,709	3.4	6,511	19.4	4,227

na = Not available
[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

13.12.3 Trends in Age at First Sexual Intercourse among Youth

Figure 13.2 shows the percentage of young women and men age 15-19 who had sexual intercourse before exact age 15 and age 18 in the 2008 and 2013 NDHS surveys. Among young women, there was practically no change in the proportion who had sexual intercourse before age 15 or age 18 in the five-year period between the two surveys. Among young men age 15-19, the proportion who had their first sexual intercourse by age 15 declined from 6 percent in 2008 to 3 percent in 2013. The proportion of young men age 18-19 who had sexual intercourse before age 18 declined from 26 percent to 21 percent over the same period.

Figure 13.2 **Trends in age of first sexual intercourse**



13.12.4 Abstinence and Premarital Sex

The period between initiation of sexual intercourse and marriage is often a time of sexual experimentation. Table 13.19 presents information on premarital sexual intercourse and condom use among never-married youth age 15-24 in Nigeria.

Table 13.19 Premarital sexual intercourse and condom use during premarital sexual intercourse among youth

Among never-married women and men age 15-24, the percentage who have never had sexual intercourse, the percentage who had sexual intercourse in the past 12 months, and, among those who had premarital sexual intercourse in the past 12 months, the percentage who used a condom at the last sexual intercourse, by background characteristics, Nigeria 2013

	Women					Men				
Background characteristic	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never-married respondents	Percentage who used a condom at last sexual intercourse	Number of respondents	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never-married respondents	Percentage who used a condom at last sexual intercourse	Number of respondents
Age										
15-19	79.8	15.9	5,508	37.2	876	85.6	10.7	3,573	49.5	381
15-17	87.4	9.8	3,829	30.7	374	92.9	4.6	2,280	42.8	105
18-19	62.5	29.9	1,679	42.0	502	72.8	21.3	1,293	52.0	275
20-24	39.4	49.2	2,236	48.7	1,099	50.9	39.1	2,453	61.2	958
20-22	44.2	44.4	1,603	45.9	712	56.4	33.5	1,739	60.1	583
23-24	27.3	61.2	633	53.9	387	37.6	52.7	714	62.9	376
Knows condom source[1]										
Yes	53.4	38.1	4,406	48.2	1,681	60.2	31.4	4,105	59.2	1,288
No	87.6	8.8	3,337	17.5	295	95.6	2.7	1,921	24.1	51
Residence										
Urban	68.4	24.6	4,361	51.3	1,074	70.3	22.6	2,837	66.0	641
Rural	67.8	26.7	3,383	34.4	902	72.6	21.9	3,190	50.4	698
Zone										
North Central	74.7	19.4	1,247	42.6	242	58.3	33.6	891	65.2	299
North East	84.2	12.7	754	19.9	95	81.5	12.9	825	35.9	107
North West	88.0	9.4	1,365	49.2	129	95.8	3.3	1,797	(38.3)	59
South East	61.2	28.0	1,369	53.8	383	57.0	28.0	681	61.8	191
South South	49.3	43.7	1,467	38.1	641	47.9	44.6	879	57.9	392
South West	61.5	31.5	1,542	46.5	486	61.3	30.6	954	59.6	292
State										
North Central										
FCT-Abuja	66.1	24.6	75	(49.3)	18	69.7	24.0	37	*	9
Benue	68.7	28.1	278	32.8	78	45.8	50.1	244	48.4	122
Kogi	72.4	22.8	211	62.5	48	65.6	32.5	129	74.1	42
Kwara	75.6	16.4	175	45.1	29	60.7	22.5	97	(79.8)	22
Nasarawa	62.7	23.1	126	(16.7)	29	48.1	40.0	106	69.2	42
Niger	89.7	7.4	233	*	17	65.6	22.4	193	(82.2)	43
Plateau	79.2	15.0	150	(58.3)	23	71.7	22.0	85	*	19
North East										
Adamawa	81.0	17.2	160	(7.3)	28	66.2	17.0	128	(42.7)	22
Bauchi	99.1	0.9	84	*	1	92.6	5.0	143	*	7
Borno	93.0	5.6	196	*	11	82.7	12.3	216	*	27
Gombe	88.6	8.0	58	*	5	84.4	7.6	96	*	7
Taraba	54.4	34.8	148	20.0	52	58.3	39.7	111	24.2	44
Yobe	100.0	0.0	108	*	0	100.0	0.0	131	*	0
North West										
Jigawa	100.0)	(0.0)	54	*	0	96.6	2.2	147	*	3
Kaduna	58.9	32.3	387	50.7	125	84.8	13.6	305	*	42
Kano	100.0	0.0	535	*	0	100.0	0.0	696	*	0
Katsina	98.7	0.0	77	*	0	93.2	4.1	169	*	7
Kebbi	97.2	2.8	130	*	4	96.6	3.4	184	*	6
Sokoto	100.0	0.0	104	*	0	96.1	0.5	153	*	1
Zamfara	100.0	0.0	78	*	0	100.0	0.0	143	*	0
South East										
Abia	63.1	30.1	128	58.2	39	61.1	26.4	83	(58.0)	22
Anambra	63.3	22.2	313	51.1	69	52.4	23.7	161	(40.5)	38
Ebonyi	55.4	32.8	376	36.6	123	54.1	35.6	169	71.4	60
Enugu	66.4	26.1	316	69.0	82	68.2	19.4	155	(56.4)	30
Imo	59.7	29.5	236	66.5	70	49.3	35.7	113	(73.7)	40
South South										
Akwa Ibom	40.4	49.8	284	35.8	141	39.2	53.2	172	72.3	91
Bayelsa	47.9	48.6	118	33.7	57	46.7	44.3	71	43.8	31
Cross River	43.6	46.1	166	32.1	77	51.3	42.9	118	61.1	51
Delta	53.5	41.4	316	46.0	131	46.2	47.7	181	39.3	86
Edo	60.8	35.3	267	48.2	94	51.7	37.9	156	72.3	59
Rivers	46.8	44.4	315	31.3	140	52.6	40.2	181	54.2	73
South West										
Ekiti	55.0	38.9	98	39.4	38	60.2	33.1	54	(82.8)	18
Lagos	58.3	34.6	489	53.1	169	57.5	35.2	304	60.3	107
Ogun	67.4	26.1	147	(36.5)	38	67.7	28.1	102	*	29
Ondo	47.9	42.1	226	40.3	95	53.8	35.8	154	59.8	55
Osun	73.1	23.2	230	72.7	53	66.7	28.2	133	67.0	38
Oyo	66.4	26.0	352	(32.4)	92	66.3	22.2	206	(35.7)	46

Continued…

Table 13.19—*Continued*

Background characteristic	Women					Men				
	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married respondents	Percentage who used a condom at last sexual intercourse	Number of respondents	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married respondents	Percentage who used a condom at last sexual intercourse	Number of respondents
Education										
No education	92.4	5.6	639	(1.4)	36	94.0	4.3	846	(27.5)	37
Primary	73.4	20.0	737	23.5	148	77.5	18.1	694	37.6	125
Secondary	67.8	25.9	5,697	42.4	1,475	68.9	23.9	4,044	57.3	966
More than secondary	42.0	47.2	671	63.2	317	42.5	47.7	442	77.9	211
Wealth quintile										
Lowest	88.0	8.5	514	17.2	44	90.8	6.2	925	14.4	57
Second	72.4	22.0	1,002	22.9	220	78.9	16.2	957	49.7	155
Middle	67.5	25.8	1,739	37.2	448	67.7	25.8	1,319	53.1	341
Fourth	66.5	27.9	2,073	45.0	578	65.1	28.1	1,430	61.5	402
Highest	64.1	28.3	2,416	55.0	685	63.7	27.5	1,395	68.1	384
Total	68.2	25.5	7,744	43.6	1,975	71.5	22.2	6,027	57.9	1,339

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

Sixty-eight percent of never-married young women have never had sexual intercourse, while 26 percent had sexual intercourse during the 12 months preceding the survey. Among never-married, sexually active young women, 44 percent used a condom during their last sexual intercourse. At the zonal level, condom use is highest in the South East (54 percent) and lowest in the North East (20 percent).

Among never-married young men, 72 percent have never had sexual intercourse, while 22 percent had sexual intercourse during the 12 months preceding the survey. Overall, 58 percent of never-married, sexually active young men used a condom during their last sexual intercourse. Condom use is highest in the North Central zone (65 percent) and lowest in the North East (36 percent). Among both young women and young men, condom use increases with increasing education and wealth. For example, 78 percent of sexually active, never-married young men with more than a secondary education used a condom the last time they had sexual intercourse, as compared with 38 percent of young men with a primary education.

13.12.5 Multiple Partnerships among Young People

Tables 13.20.1 and 13.20.2 present information on young people age 15-24 who had two or more sexual partners during the 12 months preceding the survey and condom use during the last sexual encounter among those with two or more partners.

Table 13.20.1 shows that 1 percent of young women reported having sexual intercourse with more than one sexual partner in the 12 months preceding the survey. The oldest women in this group (age 23-24) were most likely to say they had two or more sexual partners in the 12 preceding months. The percentage of young women who had two or more sexual partners in the 12 months preceding the survey was highest in the North Central and South South zones (2 percent each). The likelihood of young women having multiple sexual partners increases with increasing education and wealth.

Overall, 41 percent of young women age 15-24 who had two or more partners in the 12 months preceding the survey used a condom the last time they had sexual intercourse.

Table 13.20.2 shows that young men are four times as likely as young women to report having two or more sexual partners in the 12 months preceding the survey (4 percent). The proportion of young men with multiple sexual partners is higher among those age 23-24 (11 percent), those with more than a secondary education (10 percent), and those in the highest wealth quintile (6 percent). The likelihood of having multiple partners in the 12 months preceding the survey is highest in the South South and South West (10 percent each).

Fifty-one percent of young men age 15-24 who had two or more partners in the 12 months preceding the survey used a condom the last time they had sexual intercourse.

Table 13.20.1 Multiple sexual partners in the past 12 months among young people: Women

Among all young women age 15-24, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months, and among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse, by background characteristics, Nigeria 2013

	Women age 15-24		Women age 15-24 who had 2+ partners in the past 12 months	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Number of women	Percentage who reported using a condom at last intercourse	Number of women
Age				
15-19	0.7	7,820	38.1	53
15-17	0.3	4,867	*	14
18-19	1.3	2,952	(38.7)	38
20-24	1.6	6,757	41.9	105
20-22	1.5	4,677	36.8	70
23-24	1.7	2,080	(52.1)	35
Marital status				
Never married	1.3	7,744	61.8	99
Ever married	0.9	6,833	(4.9)	59
Knows condom source[1]				
Yes	1.9	6,627	46.8	128
No	0.4	7,950	(14.2)	30
Residence				
Urban	1.4	6,098	53.2	87
Rural	0.8	8,478	25.2	71
Zone				
North Central	1.6	2,197	(27.3)	35
North East	0.6	2,258	*	13
North West	0.8	4,470	*	36
South East	1.1	1,695	*	18
South South	1.6	1,901	(51.9)	31
South West	1.2	2,056	(57.8)	25
Education				
No education	0.4	4,448	*	16
Primary	1.0	1,805	*	18
Secondary	1.3	7,529	41.6	99
More than secondary	3.1	794	(82.7)	24
Wealth quintile				
Lowest	0.4	2,413	*	10
Second	1.0	2,916	*	29
Middle	0.6	3,048	*	19
Fourth	1.0	3,135	(39.8)	33
Highest	2.2	3,064	59.9	67
Total 15-24	1.1	14,576	40.6	158

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

Table 13.20.2 Multiple sexual partners in the past 12 months among young people: Men

Among all young men age 15-24, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months, and among those having more than one partner in the past 12 months, the percentage reporting that a condom was used at last intercourse, by background characteristics, Nigeria 2013

Background characteristic	Men age 15-24		Men age 15-24 who had 2+ partners in the past 12 months	
	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who reported using a condom at last intercourse	Number of men
Age				
15-19	1.1	3,619	(46.1)	40
15-17	0.5	2,284	*	12
18-19	2.1	1,335	(39.9)	28
20-24	7.5	2,892	51.3	217
20-22	5.8	1,997	45.6	116
23-24	11.3	895	57.7	101
Marital status				
Never married	3.8	6,027	53.6	231
Ever married	5.4	485	(22.8)	26
Knows condom source[1]				
Yes	5.5	4,413	52.8	242
No	0.7	2,098	*	15
Residence				
Urban	4.5	2,899	60.3	131
Rural	3.5	3,612	40.3	126
Zone				
North Central	2.9	997	(60.5)	29
North East	2.4	941	*	23
North West	0.3	1,971	*	7
South East	2.1	700	*	15
South South	9.6	896	41.3	86
South West	9.7	1,005	56.2	97
Education				
No education	1.2	1,082	*	13
Primary	3.2	765	(29.1)	24
Secondary	4.1	4,200	52.2	172
More than secondary	10.2	464	66.2	47
Wealth quintile				
Lowest	0.2	1,103	*	3
Second	2.6	1,103	(32.5)	29
Middle	4.3	1,393	32.3	60
Fourth	5.4	1,495	53.5	80
Highest	6.0	1,416	68.1	85
Total 15-24	3.9	6,511	50.5	257

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

13.12.6 Age Mixing in Sexual Relationships among Young Women Age 15-19

In many societies, young women have sexual relationships with men who are considerably older. This practice can contribute to the spread of HIV and other STIs because older men are more likely to have been exposed to these diseases. Using preventative methods such as negotiating safer sex is more difficult when age differences are large. To examine age mixing in the 2013 NDHS, young women age 15-19 who had a sexual partner in the 12 months preceding the survey were asked the age of the partner.

Table 13.21 shows that, among young women who had sexual intercourse in the 12 months preceding the survey, 39 percent had sexual intercourse with a man 10 or more years older than them. This practice is more common among ever-married women (48 percent), women who do not know a source for condoms (46 percent), rural women (41 percent), and women in the North West (54 percent). The likelihood that a young woman will have sexual intercourse with a man who is at least 10 years older decreases with increasing education and wealth. Women with no education and those in the lowest wealth quintile are most likely to have a sexual relationship with a man 10 or more years older (49 percent and 43 percent, respectively).

Table 13.21 Age mixing in sexual relationships among women age 15-19

Among women age 15-19 who had sexual intercourse in the past 12 months, percentage who had sexual intercourse with a partner who was 10 or more years older than them, by background characteristics, Nigeria 2013

Background characteristic	Women age 15-19 who had sexual intercourse in the past 12 months	
	Percentage who had sexual intercourse with a man 10+ years older	Number of women
Age		
15-17	42.5	1,384
18-19	37.0	1,736
Marital status		
Never married	18.0	876
Ever married	47.8	2,244
Knows condom source[1]		
Yes	27.6	1,096
No	45.8	2,025
Residence		
Urban	35.4	774
Rural	40.7	2,347
Zone		
North Central	21.9	350
North East	44.4	625
North West	54.2	1,331
South East	23.4	195
South South	22.4	345
South West	11.5	275
State		
North Central		
FCT-Abuja	(15.7)	10
Benue	19.4	120
Kogi	25.0	52
Kwara	(20.2)	20
Nasarawa	(27.1)	30
Niger	21.5	95
Plateau	(27.5)	23
North East		
Adamawa	46.0	68
Bauchi	48.0	143
Borno	45.1	166
Gombe	54.3	61
Taraba	55.9	77
Yobe	24.4	110
North West		
Jigawa	52.2	184
Kaduna	38.2	237
Kano	64.2	283
Katsina	56.8	209
Kebbi	47.1	125
Sokoto	47.3	122
Zamfara	68.7	172
South East		
Abia	*	18
Anambra	*	27
Ebonyi	18.6	70
Enugu	(13.1)	46
Imo	(36.0)	34
South South		
Akwa Ibom	20.6	77
Bayelsa	22.6	39
Cross River	(21.6)	35
Delta	29.2	69
Edo	18.1	43
Rivers	20.9	82
South West		
Ekiti	2.3	20
Lagos	15.6	64
Ogun	*	30
Ondo	8.8	65
Osun	(16.5)	22
Oyo	(12.7)	74

Continued…

Table 13.21—*Continued*

Background characteristic	Women age 15-19 who had sexual intercourse in the past 12 months: Percentage who had sexual intercourse with a man 10+ years older	Women age 15-19 who had sexual intercourse in the past 12 months: Number of women
Education		
No education	48.9	1,571
Primary	42.0	420
Secondary	25.3	1,089
More than secondary	(27.6)	41
Wealth quintile		
Lowest	43.0	856
Second	46.3	874
Middle	35.3	604
Fourth	31.3	463
Highest	30.7	325
Total	39.4	3,121

Note: As the percentage of men age 15-19 who had sexual intercourse in the past 12 months with a woman 10 or more years older than them was only 0.3 percent, data are not shown in this table. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

13.12.7 Recent HIV Tests among Youth

Obtaining an HIV test can be more difficult for youth than for adults because many young people lack experience in accessing health services for themselves. Table 13.22 presents information on sexually active young women and men age 15-24 who were tested for HIV and received the results in the 12 months preceding the survey.

Table 13.22 Recent HIV tests among youth

Among young women and young men age 15-24 who have had sexual intercourse in the past 12 months, the percentage who were tested for HIV in the past 12 months and received the results of the last test, by background characteristics, Nigeria 2013

Background characteristic	Women age 15-24 who have had sexual intercourse in the past 12 months: Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Women age 15-24 who have had sexual intercourse in the past 12 months: Number of women	Men age 15-24 who have had sexual intercourse in the past 12 months: Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Men age 15-24 who have had sexual intercourse in the past 12 months: Number of men
Age				
15-19	6.6	3,121	5.4	425
15-17	4.0	1,384	5.7	109
18-19	8.6	1,736	5.3	316
20-24	12.9	5,448	13.8	1,384
20-22	11.4	3,674	12.4	831
23-24	16.1	1,775	15.9	553
Marital status				
Never married	14.7	1,975	13.9	1,339
Ever married	9.4	6,593	6.0	470
Knows condom source[1]				
Yes	18.1	3,817	13.3	1,590
No	4.6	4,752	1.1	220
Residence				
Urban	17.0	2,735	14.8	703
Rural	7.6	5,834	9.9	1,106
Zone				
North Central	16.8	1,121	14.5	398
North East	9.2	1,561	12.2	221
North West	4.6	3,180	2.2	232
South East	19.7	680	14.7	209
South South	15.3	1,060	14.7	409
South West	14.0	966	9.9	340

Continued…

Table 13.22—*Continued*

Background characteristic	Women age 15-24 who have had sexual intercourse in the past 12 months: Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Women age 15-24 who have had sexual intercourse in the past 12 months: Number of women	Men age 15-24 who have had sexual intercourse in the past 12 months: Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Men age 15-24 who have had sexual intercourse in the past 12 months: Number of men
State				
North Central				
FCT-Abuja	26.9	48	(12.6)	12
Benue	19.3	316	12.8	169
Kogi	27.4	131	12.0	49
Kwara	8.8	80	(12.1)	26
Nasarawa	18.4	123	15.0	48
Niger	8.9	330	13.9	72
Plateau	21.1	94	(37.0)	22
North East				
Adamawa	22.3	197	(8.5)	32
Bauchi	5.3	353	(5.2)	39
Borno	2.5	406	(11.5)	55
Gombe	16.0	153	(7.5)	21
Taraba	19.5	202	27.6	52
Yobe	2.8	250	*	21
North West				
Jigawa	3.9	410	(0.0)	37
Kaduna	8.6	596	(3.6)	86
Kano	9.0	690	*	27
Katsina	0.8	464	*	32
Kebbi	1.1	324	*	21
Sokoto	1.7	294	*	14
Zamfara	1.0	403	*	15
South East				
Abia	16.4	63	10.4)	22
Anambra	8.7	143	(8.5)	38
Ebonyi	20.2	196	17.1	70
Enugu	24.7	150	(26.9)	32
Imo	27.1	128	(9.8)	46
South South				
Akwa Ibom	15.4	221	19.1	95
Bayelsa	8.3	96	4.3	34
Cross River	34.9	134	29.3	53
Delta	12.7	237	5.3	90
Edo	12.0	138	12.3	61
Rivers	11.4	234	16.7	77
South West				
Ekiti	7.6	58	9.1	20
Lagos	15.8	259	13.0	109
Ogun	13.2	124	(9.2)	33
Ondo	17.2	154	10.5	62
Osun	12.1	97	10.1	41
Oyo	13.1	274	(5.2)	75
Education				
No education	2.4	3,736	1.0	266
Primary	10.0	1,174	6.8	194
Secondary	17.7	3,221	11.7	1,118
More than secondary	29.9	438	29.5	231
Wealth quintile				
Lowest	2.1	1,892	2.2	230
Second	6.2	2,073	8.1	299
Middle	11.3	1,690	11.9	410
Fourth	17.7	1,597	14.4	465
Highest	20.2	1,316	17.0	405
Total	10.6	8,569	11.8	1,809

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

The results show that 11 percent of young women and 12 percent of young men were tested for HIV in the past 12 months and received the test results. Young women and men age 23-24 are more likely to have been tested for HIV and to have received the results than their younger counterparts. Urban young people are more likely than their rural counterparts to have been tested for HIV and to have received the results.

The proportion of young women who were tested for HIV and received the test results is highest in the South East zone (20 percent). Among young men, the proportion is highest in the North Central, South East, and South South zones (15 percent each). Among both young women and young men, the prevalence of HIV testing and receipt of test results increases with increasing education and wealth.

ADULT AND MATERNAL MORTALITY 14

Key Findings

- Twelve percent of women and men are likely to die between exact ages 15 and 50. These probabilities have decreased since 2008 by 23 percent for women and 27 percent for men.
- Maternal deaths account for 32 percent of all deaths among women age 15-49. The maternal mortality rate for the seven-year period preceding the survey was 1.05 maternal deaths per 1,000 woman-years of exposure.
- The maternal mortality ratio was 576 maternal deaths per 100,000 live births for the seven-year period preceding the survey. This ratio is not significantly different from the ratio reported in the 2008 NDHS.
- The lifetime risk of maternal death indicates that 1 in 30 women in Nigeria will have a death related to pregnancy or childbearing.

Generally, adult and maternal mortality indicators are used in assessing the health status of a population, especially in developing countries such as Nigeria. Estimation of these mortality rates requires complete and accurate data on adult and maternal deaths. In the 2013 NDHS, data were collected on the survivorship of respondents' siblings. These data allow for estimation of adult mortality. The inclusion of questions to determine if deaths among female siblings were maternity-related permits estimation of the level of maternal mortality, a major indicator of maternal health and well-being.

Survey findings relating to child mortality were presented and discussed in Chapter 8 of this report. Similarly, early childbearing and adolescent fertility connected to maternal mortality were described in Chapter 5. While early childhood mortality is high and varies substantially according to social and economic development, death rates are much lower at adult ages, and estimates for particular subgroups can be distorted by small sample sizes. Maternal mortality is an aspect of adult mortality that is of particular interest in the Nigerian context. Worldwide, the 10 countries with the highest maternal mortality ratios are in Africa, and an estimated 14 percent of maternal deaths globally occur in Nigeria (United Nations Economic Commission for Africa [UNECA], 2013). Data from Nigeria's Five-Year Countdown Strategy for achieving Millennium Development Goals (MDGs) show that although maternal mortality fell from 800 deaths per 100,000 live births in 2003 to 545 deaths per 100,000 live births in 2008, progress related to this goal has been slow and challenges remain (Federal Republic of Nigeria, 2010b). In addition to other interventions designed to reduce maternal mortality and achieve the MDG target of 250 deaths per 100,000 live births in Nigeria, the government, in collaboration with development partners, has continued to improve access to quality maternal health services through the Community Health Insurance Scheme and the Midwives Service Scheme (Federal Republic of Nigeria, 2010b, 2012). Maternal mortality is an important indicator for women's programmes and reproductive health programmes in the country (National Population Commission, 2004).

The term "maternal mortality" used in this chapter corresponds to the term "pregnancy-related mortality" as defined in the latest version of the International Classification of Diseases (ICD-10). The ICD-10 definition of a pregnancy-related death is the death of a woman while she is pregnant or within 42 days of the termination of her pregnancy, irrespective of the cause of death (WHO, World Bank, UNFPA, and UNICEF, 2012). In keeping with this definition, the maternal and adult mortality module used in the DHS surveys measures the timing of deaths but not cause of death. However, the data collected in the 2013

NDHS questionnaire are based on information about deaths during the two months following a birth rather than 42 days following a birth.

This chapter includes results based on sibling history data collected in the sibling survival module (commonly referred to as the maternal mortality module) that is part of the Woman's Questionnaire. In addition to adult mortality rates for five-year age groups, the chapter includes a summary measure ($_{35}q_{15}$) that represents the probability of dying between exact ages 15 and 50. To allow assessment of trends in adult mortality probabilities, $_{35}q_{15}$ values for the 2008 NDHS are also included.

14.1 DATA

To obtain the sibling history, each respondent was first asked to give the total number of her mother's live births. The respondent was then asked to provide a list of all of the children born to her mother, starting with the first born. The respondent was further asked whether each of these siblings was still alive at the survey date. For living siblings, the current age was collected. For deceased siblings, the age at death and number of years since the person's death were collected. Interviewers were instructed that, when a respondent could not provide precise information on age at death or years since death, approximate but quantitative answers were acceptable. For sisters who died at age 12 or above, three questions were used to determine whether the death was maternity-related: "Was [NAME OF SISTER] pregnant when she died?" and, if not, "Did she die during childbirth?" and, if not, "Did she die within two months after the end of a pregnancy or childbirth?" Estimation of adult and maternal mortality by either direct or indirect means requires reasonably accurate reporting of the number of sisters and brothers the respondent ever had, the number who have died, and (for maternal mortality) the number of sisters who died of maternity-related causes. Table 14.1 shows the number of siblings reported by the respondents and the completeness of data on current age, age at death, and years since death.

Table 14.1 Completeness of information on siblings

Completeness of data on survival status of sisters and brothers reported by interviewed women, age of living siblings, and age at death (AD) and years since death (YSD) of dead siblings (unweighted), Nigeria 2013

	Sisters		Brothers		All siblings	
	Number	Percent	Number	Percent	Number	Percent
All siblings	100,877	100.0	107,188	100.0	208,065	100.0
Living	86,065	85.3	90,389	84.3	176,454	84.8
Dead	14,746	14.6	16,719	15.6	31,465	15.1
Survival status unknown	66	0.1	80	0.1	146	0.1
Living siblings	86,065	100.0	90,389	100.0	176,454	100.0
Age reported	85,526	99.4	89,847	99.4	175,373	99.4
Age missing	539	0.6	542	0.6	1,081	0.6
Dead siblings	14,746	100.0	16,719	100.0	31,465	100.0
AD and YSD reported	14,509	98.4	16,441	98.3	30,950	98.4
Missing only AD	96	0.7	101	0.6	197	0.6
Missing only YSD	70	0.5	90	0.5	160	0.5
Missing AD and YSD	71	0.5	87	0.5	158	0.5

Of the 208,065 siblings reported in the sibling histories of 2013 NDHS respondents, survival status was not reported for 146 siblings (0.1 percent). Among surviving siblings, current age (used to estimate exposure to death) was not reported for 1,081 siblings (0.6 percent). For 98 percent of deceased siblings, both age at death and years since death (or year of death) were reported; in 0.5 percent of cases, both age at death and years since death (or year of death) were missing. Rather than excluding siblings with missing data from further analysis, information on the birth order of siblings in conjunction with other information was used to impute the missing data.[1] The sex ratio for enumerated siblings (the ratio of brothers to sisters multiplied by 100) is 106 (Appendix Table D.8), which is lower than the figure reported in the 2008 NDHS (107) and indicates less underreporting of sisters in this survey.

14.2 DIRECT ESTIMATES OF ADULT MORTALITY

One way to assess the quality of the data used to estimate maternal mortality is to evaluate the plausibility and stability of overall adult mortality. It is reasoned that if estimated rates of overall adult mortality are implausible, rates based on a subset of deaths (maternal deaths in particular) are unlikely to be free of serious problems.

The reported ages at death and years since death of respondents' brothers and sisters are used in making direct estimates of adult mortality. Because of the differentials in exposure to the risk of dying, age- and sex-specific death rates are presented in this report. Table 14.2 and Figure 14.1 show age-specific mortality rates among women and men (age 15-49) for the seven years preceding the 2013 NDHS. Mortality rates are calculated by dividing the number of deaths in each age group of women and men by the total person-years of exposure to the risk of dying in that age group during a specified period prior to the survey. To ensure a sufficiently large number of adult deaths to generate a robust estimate, the rates are calculated for the seven-year period preceding the survey (roughly mid-2006 to mid-2013). Nevertheless, age-specific mortality rates obtained in this manner are subject to considerable sampling variation. Use of this seven-year period was a compromise between the desire for the most recent data and the need to minimise the level of sampling error.

Table 14.2 Adult mortality rates and trends

Direct estimates of female and male mortality rates for the seven years preceding the survey, by five-year age groups, 2013 NDHS and 2008 NDHS

	2013 NDHS			2008 NDHS
Age	Deaths	Exposure years	Mortality rate[1]	Mortality rate[1]
		WOMEN		
15-19	198	84,788	2.3	3.3
20-24	263	93,675	2.8	3.4
25-29	311	87,756	3.6	4.3
30-34	261	73,521	3.6	6.2
35-39	232	52,655	4.4	5.2
40-44	155	32,414	4.8	6.3
45-49	93	18,292	5.1	6.3
15-49	1,514	443,102	3.5[a]	4.7[a]
		MEN		
15-19	152	88,879	1.7	2.8
20-24	257	99,005	2.6	2.9
25-29	247	93,153	2.7	3.6
30-34	246	76,189	3.2	5.0
35-39	245	55,832	4.4	5.4
40-44	180	34,434	5.2	8.7
45-49	125	19,147	6.5	8.2
15-49	1,452	466,639	3.3[a]	4.6[a]

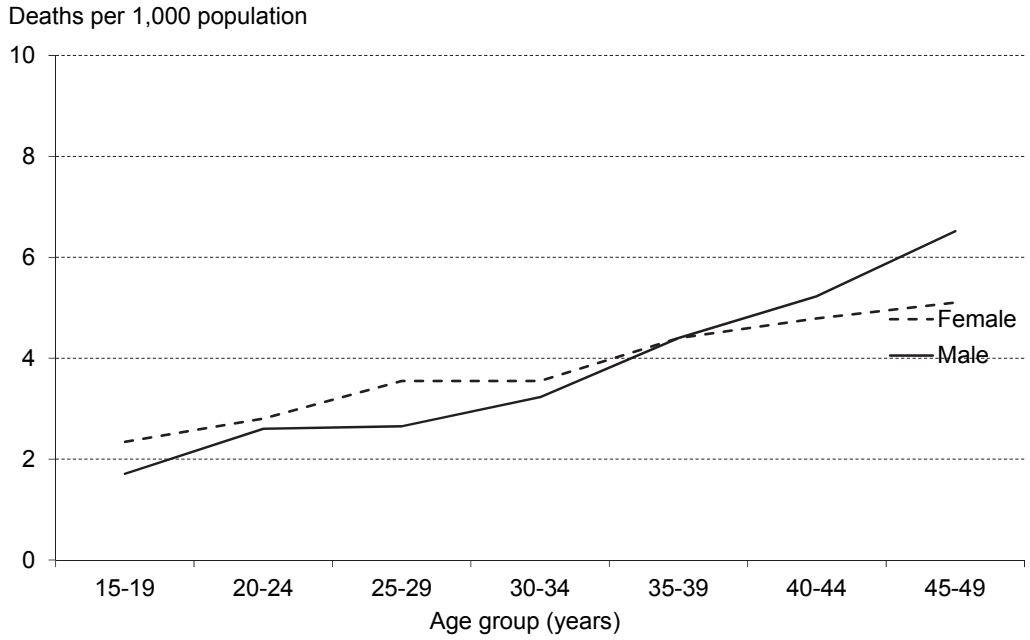
[1] Expressed per 1,000 population
[a] Age-adjusted rate

Table 14.2 and Figure 14.1 show age-specific mortality rates for women and men age 15-49 for the seven-year period preceding the survey. Overall, the level of adult mortality is slightly higher among women (3.5 deaths per 1,000 population) than among men (3.3 deaths per 1,000 population). Mortality levels rise rapidly with age among both women and men. For women, mortality rates increase steadily from 2.3 per 1,000 population in the 15-19 age group to 3.6 per 1,000 population in the 25-29 and 30-34 age groups before reaching the highest level of 5.1 per 1,000 population in the 45-49 age group. Similarly,

[1] The imputation procedure was based on the assumption that the reported birth ordering of siblings in the history was correct. The first step was to calculate birth dates for each living sibling with a reported age and each dead sibling with complete information on both age at death and years since death. For a sibling missing these data, a birth date was imputed within the range defined by the birth dates of the bracketing siblings. In the case of living siblings, an age was then calculated from the imputed birth date. In the case of dead siblings, if either age at death or years since death were reported, that information was combined with the birth date to produce the missing information. If both pieces of information were missing, the distribution of the ages at death for siblings for whom years since death were not reported but age at death was reported was used as a basis for imputing age at death.

mortality rates among men increase steadily from age 15-19 (1.7 deaths per 1,000 population) to age 35-39 (4.4 deaths per 1,000 population) and age 45-49 (6.5 deaths per 1,000 population). Mortality rates are higher among women than men in the younger age groups (below 35 years), while the reverse is true in the older age groups (40 years and above).

Figure 14.1 **Mortality rates among women and men age 15-49**



NDHS 2013

14.2.1 Trends in Adult Mortality

Table 14.2 also presents trends in adult mortality rates between the 2008 and 2013 NDHS surveys. The results show a decline in mortality rates from 4.7 deaths to 3.5 deaths per 1,000 population among women and from 4.6 deaths to 3.3 deaths per 1,000 population among men. Age-specific assessments of mortality rates indicate a declining trend for both women and men in all age groups.

The mortality pattern, however, is similar in the two surveys. For example, in the 2008 NDHS, the female adult mortality rate increased from 3.3 deaths per 1,000 population among women age 15-19 to 6.3 deaths among women age 45-49; similarly, in the 2013 NDHS, the mortality rate rose from 2.3 deaths per 1,000 population among women age 15-19 to 5.1 deaths among women age 45-49. The male mortality rate in the 2008 NDHS rose from 2.8 deaths per 1,000 population among men age 15-19 to 8.2 deaths among men age 45-49, and the rate in the 2013 NDHS increased from 1.7 deaths per 1,000 population among men age 15-19 to 6.5 deaths among men age 45-49.

Table 14.3 provides a summary measure of the risk of dying between exact ages 15 and 50 ($_{35}q_{15}$). The 2013 NDHS data show that women and men have equal probabilities of dying (12 percent) between age 15 and age 50. The $_{35}q_{15}$ estimates based on the 2008 and 2013 NDHS also show that, in 2008, women had a marginally lower probability of dying between exact ages 15 and 50 than men (16 percent of women versus 17 percent of men). In the five years between the 2008 and 2013 NDHS surveys, the probability of dying between exact ages 15 and 50 decreased from 16 percent to 12 percent among women (a 23 percent decrease) and from 17 percent to 12 percent among men (a 27 percent decrease). Confidence

Table 14.3 Adult mortality probabilities

Probability of dying between the ages of 15 and 50 for women and men over the seven years preceding the survey, Nigeria 2013

Survey	$_{35}q_{15}$[1] Female	$_{35}q_{15}$[1] Male
2013 NDHS	124 (CI : 114-134)	123 (CI : 113-134)
2008 NDHS	161 (CI : 149-172)	168 (CI : 156-180)

CI: Confidence interval
[1] The probability of dying between exact ages 15 and 50, expressed per 1,000 person-years of exposure

intervals for the $_{35}q_{15}$ estimates, also presented in the Table 14.3, indicate a significant decrease over the years.

14.3 DIRECT ESTIMATES OF MATERNAL MORTALITY

Maternal deaths are a subset of all female deaths and are associated with pregnancy and childbearing. Two methods are generally used to estimate maternal mortality in developing countries: the indirect sisterhood method (Graham et al., 1989) and a direct variant of the sisterhood method (Rutenberg and Sullivan, 1991). In this report, the direct estimation procedure is applied (Stanton et al., 1997). Age-specific estimates of maternal mortality from reported survivorship of sisters are shown in Table 14.4 for the seven-year period before the 2013 survey.

These rates were calculated by dividing the number of maternal deaths by woman-years of exposure. To remove the effect of truncation bias—the upper boundary of eligibility for women interviewed in the survey was 49 years—the overall rate for women age 15-49 was standardised according to the age distribution of survey respondents. A maternal death was defined as any death reported as occurring during pregnancy, childbirth, or within two months after the birth or termination of a pregnancy. Estimates of maternal mortality are therefore based solely on the timing of the death in relationship to the pregnancy.

Table 14.4 shows that the maternal mortality rate among women age 15-49 is 1.1 deaths per 1,000 woman-years of exposure. By five-year age groups, the maternal mortality rate is highest among women age 35-39 (1.6), followed by those age 20-24 (1.3). The percentage of female deaths that are maternal deaths varies by age and ranges from 12 percent among women age 45-49 to 44 percent among women age 20-24.

Table 14.4 Maternal mortality

Direct estimates of maternal mortality rates for the seven years preceding the survey, by five-year age groups, Nigeria 2013

Age	Percentage of female deaths that are maternal	Maternal deaths	Exposure years	Maternal mortality rate[1]
15-19	30.5	61	84,788	0.71
20-24	44.4	117	93,675	1.25
25-29	31.2	97	87,756	1.11
30-34	28.3	74	73,521	1.00
35-39	36.8	85	52,655	1.62
40-44	22.9	36	32,414	1.10
45-49	11.5	11	18,292	0.59
15-49	31.7	480	443,102	1.05[a]

General fertility rate (GFR)[2]	0.183[a]	(CI : 178-188)
Maternal mortality ratio (MMR)[3]	576	(CI : 500-652)
Lifetime risk of maternal death[4]	0.033	
2008 NDHS		
Maternal mortality ratio (MMR)[3]	545	(CI : 475-615)

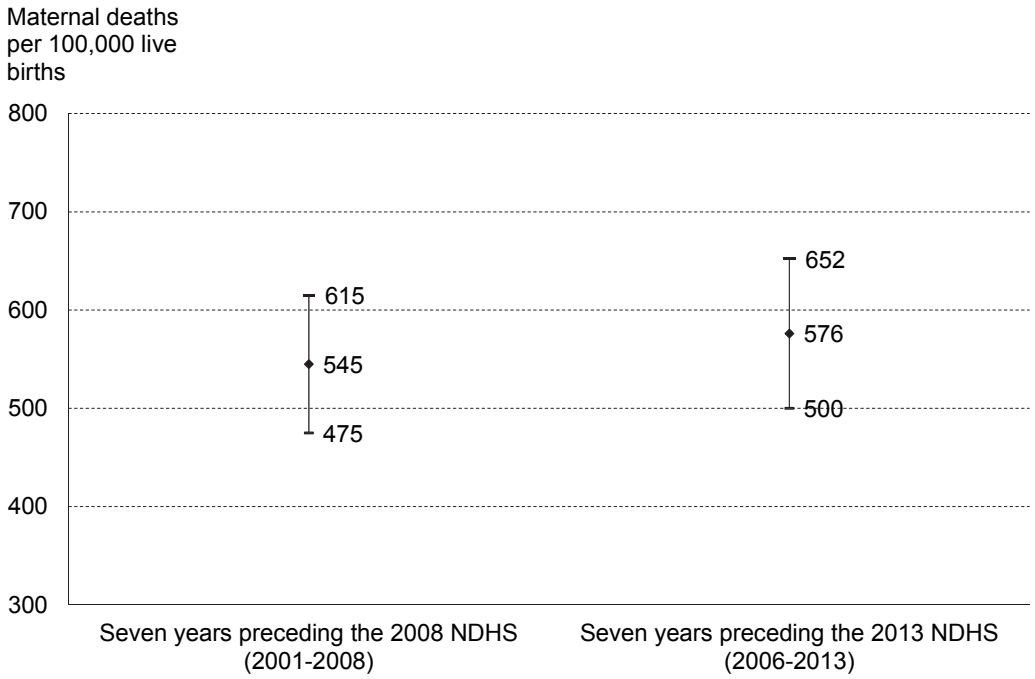
CI: Confidence interval
[1] Expressed per 1,000 woman-years of exposure
[2] Expressed per 1,000 women age 15-49
[3] Expressed per 100,000 live births; calculated as age-adjusted maternal mortality rate multiplied by 100 divided by age-adjusted general fertility rate
[4] Calculated as $1-(1-MMR)^{TFR}$, where TFR represents the total fertility rate for the seven years preceding the survey
[a] Age-adjusted rate

The estimated age-specific mortality rates display a plausible pattern, being generally higher during the peak childbearing ages than in the younger and older age groups. However, the age-specific pattern should be interpreted with caution because of the small number of events: only 480 maternal deaths among women of all ages, representing 32 percent of female deaths.

The maternal mortality rate can be converted to a maternal mortality ratio (expressed as deaths per 100,000 live births) by dividing the rate by the general fertility rate (GFR) of 183 that prevailed during the same time period and multiplying the result by 100,000. This procedure produces a maternal mortality ratio (MMR) of 576 deaths per 100,000 live births during the seven-year period preceding the survey. In other words, for every 1,000 live births in Nigeria during the seven years preceding the 2013 NDHS, approximately six women died during pregnancy, during childbirth, or within two months of childbirth. The lifetime risk of maternal death (0.033) indicates that about 3 percent of women died during pregnancy, childbirth, or within two months of childbirth.

The estimated maternal mortality ratio in 2013 (576) is almost the same as in the 2008 NDHS (545). As shown in Table 14.4 and Figure 14.2, the confidence interval surrounding the maternal mortality ratio of 576 deaths per 100,000 live births is 500-652, while the confidence interval for the 2008 ratio of 545 deaths per 100,000 live births is 475-615, showing that the MMR confidence intervals overlap for the 2008 and 2013 surveys. The difference between the 2008 and 2013 MMR estimates is not statistically significant. Based on these results, the main conclusion is that there is no evidence to suggest that the maternal mortality ratio changed between these surveys.

Figure 14.2 **Maternal mortality ratios with confidence intervals for the seven years preceding the 2008 NDHS and the 2013 NDHS**



WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES 15

Key Findings

- Seventy percent of currently married women who earn cash make independent decisions on how to spend their earnings.
- Only 31 percent of currently married women participate in three specified decisions pertaining to their own health care, major household purchases, and visits to their family or relatives.
- Contraceptive use is positively associated with women's empowerment.
- Mean ideal number of children decreases with improvements in women's empowerment.
- Access to antenatal care and delivery assistance from a skilled provider increases with women's empowerment.
- Infant, child, and under-5 mortality rates decline with improvements in women's empowerment.

The 1994 International Conference on Population and Development declared that "advancing gender equality and equity and the empowerment of women and the elimination of all kinds of violence against women, and ensuring women's ability to control their own fertility…are cornerstones of population and development-related programs" (United Nations, 1994). Women's empowerment has been defined to encompass women having a sense of self-worth, access to opportunities and resources, choices and the ability to exercise them, control over their own lives, and influence over the direction of social change (United Nations Population Information Network, 1995).

Nigeria is a signatory to almost all of the international conventions on human rights, women's rights, and children's rights, as well as to agreements on international goals regarding education, health, and poverty eradication. As a signatory to the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), adopted in 1979 by the United Nations General Assembly, Nigeria launched a national gender policy to promote gender equity and sustainable development in June 2007 (National Population Commission [NPC] and ICF Macro, 2009). The policy derives essentially from the 1999 Constitution of the Federal Republic of Nigeria. The government of Nigeria, at the federal executive level, has adhered to the Beijing Platform of Action by ensuring that women fill at least 35 percent of all political posts. This commitment is, however, not met for elective positions at all levels.

Data from the 2013 NDHS discussed in Chapter 3 show that women in Nigeria are predominantly engaged in agriculture and are much less likely than men to be engaged in professional, technical, and managerial fields (see Table 3.6.1). Furthermore, women lag behind men in educational attainment, literacy, and exposure to mass media, all of which are critical contributors to women's empowerment and exert considerable influence on strengthening women's position in the household and in society in general.

This chapter presents additional data on the status of women in Nigeria, including information on gender differences in employment, access to and control over cash earnings, asset ownership, participation in household decision making, and the relative earnings of husbands and wives. The chapter also explores how demographic and health indicators vary according to women's empowerment, as measured by the number of decisions in which women participate and the number of situations in which they believe wife beating is justified. The ranking of women on these two indices is then related to selective demographic and health outcomes including contraceptive use, ideal family size, unmet need for family planning, access to reproductive health care services, and early childhood mortality.

15.1 EMPLOYMENT AND FORM OF EARNINGS

Employment, particularly employment for cash, and control over how earnings are used are important indicators of empowerment for women as well as men. Table 15.1 shows the percentage of currently married women and men age 15-49 who were employed at any time in the 12 months before the survey and the percent distribution of employed women and men by the type of earnings they received (cash only, cash and in-kind, in-kind only), if any. The table shows that 71 percent of currently married women were employed in the 12 months preceding the survey and that almost all currently married men were employed (99 percent). Younger women are less likely than older women to be employed, while there is no such variation by age among currently married men. The proportion of currently married women and men employed in the 12 months preceding the survey has remained almost the same in the past five years. Eighty-three percent of women and 76 percent of men receive cash only, while 10 percent of women and 17 percent of men receive cash and in-kind payment. Six percent of women and men are not paid for their work.

Table 15.1 Employment and cash earnings of currently married women and men

Percentage of currently married women and men age 15-49 who were employed at any time in the past 12 months and the percent distribution of currently married women and men employed in the past 12 months by type of earnings, according to age, Nigeria 2013

	Among currently married respondents:		Percent distribution of currently married respondents employed in the past 12 months, by type of earnings						
Age	Percentage employed in past 12 months	Number of respondents	Cash only	Cash and in-kind	In-kind only	Not paid	Missing/ don't know	Total	Number of women
				WOMEN					
15-19	42.1	2,251	80.6	10.8	0.4	7.6	0.5	100.0	947
20-24	56.1	4,362	79.6	11.1	0.8	8.2	0.3	100.0	2,446
25-29	68.7	5,913	83.2	9.8	0.6	6.0	0.3	100.0	4,060
30-34	77.4	4,869	84.4	9.7	0.3	5.3	0.3	100.0	3,766
35-39	81.9	4,302	84.4	9.4	0.4	5.5	0.3	100.0	3,522
40-44	82.9	3,226	81.9	10.3	0.5	7.1	0.2	100.0	2,674
45-49	83.1	2,907	82.7	10.0	0.5	6.5	0.3	100.0	2,416
Total	71.3	27,830	82.8	10.0	0.5	6.4	0.3	100.0	19,830
				MEN					
15-19	(96.3)	41	(62.4)	(36.5)	(0.0)	(1.1)	(0.0)	100.0	39
20-24	99.0	418	64.6	21.1	3.9	10.5	0.0	100.0	414
25-29	98.3	1,240	72.9	17.8	2.1	7.3	0.0	100.0	1,219
30-34	98.8	1,750	77.2	16.7	0.9	4.9	0.2	100.0	1,728
35-39	99.5	1,937	78.1	14.5	0.7	6.2	0.3	100.0	1,927
40-44	99.2	1,688	77.2	15.7	1.6	5.4	0.1	100.0	1,675
45-49	98.9	1,649	76.9	16.7	0.7	5.4	0.2	100.0	1,632
Total	99.0	8,723	76.1	16.5	1.3	6.0	0.2	100.0	8,635

Note: Figures in parentheses are based on 25-49 unweighted cases.

15.2 CONTROL OVER AND RELATIVE MAGNITUDE OF WOMEN'S AND HUSBANDS' EARNINGS

15.2.1 Control Over Wife's Earnings

In addition to having access to income, women need to have control over their earnings to be empowered. To assess control over earnings, the survey asked currently married women with cash earnings in the past 12 months who the main decision maker is with regard to the use of their earnings. It is expected that women who control their own cash earnings will have a greater say in the use of other household resources.

Table 15.2.1 shows the percent distribution of currently married women who received cash earnings in the past 12 months, according to the person who mainly decides on the use of their earnings. Seventy percent of currently married women who earn cash report that they themselves mainly decide how

their cash earnings are used; another 19 percent report that they decide jointly with their husbands, and 10 percent report that their husbands alone decide how their earnings are used.

There are regional variations in who makes decisions about how women's earnings are used. The percentage of women who make independent decisions on the use of their earnings ranges from 41 percent in the South East to 88 percent in the North West. Women in the South South and South East (41 percent and 38 percent, respectively) are most likely to decide jointly with their husbands on how to spend the money they make. In the North Central zone, husbands are most likely (26 percent) to make decisions on the use of their wives' earnings. The proportion of women who make these decisions jointly with their husbands increases with increasing education and wealth.

Table 15.2.1 also shows that only 4 percent of women earn more cash than their husbands, 86 percent earn less than their husbands, and 5 percent earn about the same amount as their husbands. Only 1 percent of women say that their husbands have no cash earnings.

Women in urban areas are more likely than women in rural areas to earn more than their husbands (6 percent and 4 percent, respectively). Among the regions, the North East, South East, and South South (7 percent each) have the highest proportions of women who earn more than their husbands. Similarly, women with more than a secondary education and those living in households in the fourth and highest wealth quintiles are more likely than other women to earn more than their husbands. Four percent of women in the North East reported that their husbands had no earnings, the highest percentage among the regions. Among the states, Gombe (14 percent) had the highest proportion of women who reported that their husbands had no earnings, followed by Taraba (11 percent). Women in Borno are more likely to report that they earn more than their husbands (24 percent) than women in any other state.

Table 15.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Nigeria 2013

Background characteristic	Person who decides how the wife's cash earnings are used:					Wife's cash earnings compared with husband's cash earnings:						
	Mainly wife	Wife and husband jointly	Mainly husband	Missing	Total	More	Less	About the same	Husband has no earnings	Don't know/ Missing	Total	Number of women
Age												
15-19	74.8	12.8	11.7	0.6	100.0	1.7	94.4	1.9	0.4	1.5	100.0	866
20-24	70.6	17.5	11.4	0.4	100.0	3.0	90.8	3.2	1.4	1.7	100.0	2,219
25-29	69.0	19.3	11.2	0.5	100.0	3.7	88.5	4.5	0.9	2.5	100.0	3,775
30-34	69.2	20.7	9.8	0.3	100.0	4.3	86.2	5.9	1.0	2.7	100.0	3,545
35-39	69.3	21.7	8.8	0.2	100.0	4.7	84.6	6.4	1.1	3.3	100.0	3,304
40-44	70.0	19.5	10.1	0.4	100.0	5.9	82.5	6.4	0.9	4.2	100.0	2,464
45-49	72.7	18.3	8.8	0.1	100.0	6.0	80.9	7.5	1.3	4.3	100.0	2,239
Number of living children												
0	63.6	24.0	11.7	0.5	100.0	5.6	85.8	4.5	2.0	2.1	100.0	1,364
1-2	69.7	20.0	9.9	0.4	100.0	3.9	87.1	5.0	1.1	2.9	100.0	5,131
3-4	69.5	20.0	10.1	0.3	100.0	4.5	86.0	5.6	0.9	3.0	100.0	5,947
5+	72.6	17.2	9.9	0.3	100.0	4.4	85.7	5.9	0.8	3.2	100.0	5,970
Residence												
Urban	69.7	22.5	7.6	0.2	100.0	5.5	83.4	6.6	0.9	3.6	100.0	7,536
Rural	70.4	17.2	11.8	0.5	100.0	3.6	88.1	4.7	1.1	2.5	100.0	10,876
Zone												
North Central	48.3	25.8	25.5	0.4	100.0	3.9	87.4	6.0	0.6	2.2	100.0	2,928
North East	73.5	19.1	6.0	1.3	100.0	7.3	85.1	2.3	3.6	1.7	100.0	1,773
North West	87.7	7.3	4.7	0.3	100.0	1.2	95.3	2.1	0.2	1.1	100.0	6,334
South East	40.9	37.9	20.9	0.3	100.0	7.1	78.9	10.5	1.0	2.5	100.0	1,677
South South	48.0	40.6	11.2	0.2	100.0	7.1	74.5	11.0	2.3	5.1	100.0	1,995
South West	80.9	15.2	3.8	0.1	100.0	6.0	79.7	6.9	0.8	6.5	100.0	3,704

Continued…

Table 15.2.1—*Continued*

Background characteristic	Person who decides how the wife's cash earnings are used: Mainly wife	Wife and husband jointly	Mainly husband	Missing	Total	Wife's cash earnings compared with husband's cash earnings: More	Less	About the same	Husband has no earnings	Don't know/ Missing	Total	Number of women
State												
North Central												
FCT-Abuja	81.6	14.9	3.0	0.5	100.0	5.4	86.5	3.9	1.3	2.8	100.0	120
Benue	20.2	40.3	39.4	0.2	100.0	7.4	88.7	3.1	0.0	0.8	100.0	718
Kogi	50.9	23.8	24.9	0.4	100.0	6.7	76.8	8.6	0.3	7.6	100.0	349
Kwara	86.6	12.1	1.4	0.0	100.0	2.0	84.9	12.3	0.8	0.0	100.0	330
Nasarawa	36.6	51.2	11.4	0.8	100.0	5.1	77.8	13.6	0.6	2.8	100.0	278
Niger	60.8	7.7	31.2	0.4	100.0	0.1	95.5	1.9	0.7	1.8	100.0	905
Plateau	24.4	50.5	23.9	1.2	100.0	4.4	82.9	9.5	1.3	2.0	100.0	228
North East												
Adamawa	75.0	20.3	4.6	0.1	100.0	6.2	91.9	1.5	0.3	0.1	100.0	295
Bauchi	75.1	18.0	4.2	2.3	100.0	4.4	90.7	1.2	1.4	2.3	100.0	465
Borno	77.4	17.9	4.7	0.0	100.0	23.6	69.5	5.7	0.0	1.2	100.0	266
Gombe	82.1	6.8	10.9	0.3	100.0	1.8	81.0	1.9	14.0	1.2	100.0	163
Taraba	47.4	44.6	6.8	1.2	100.0	6.7	78.6	2.0	10.9	1.8	100.0	305
Yobe	89.1	0.3	8.2	2.4	100.0	1.9	92.7	2.4	0.0	3.0	100.0	280
North West												
Jigawa	82.7	8.6	7.7	0.7	100.0	2.9	91.5	1.6	0.8	3.1	100.0	684
Kaduna	55.8	29.6	14.4	0.2	100.0	1.5	91.1	6.6	0.5	0.4	100.0	1,096
Kano	99.0	0.4	0.5	0.1	100.0	0.5	98.8	0.0	0.1	0.6	100.0	1,658
Katsina	91.9	6.1	1.6	0.4	100.0	1.7	95.4	2.5	0.0	0.4	100.0	956
Kebbi	98.4	0.3	1.1	0.1	100.0	1.0	92.6	1.8	0.1	4.5	100.0	654
Sokoto	94.8	0.4	4.3	0.5	100.0	0.6	96.7	1.9	0.2	0.6	100.0	453
Zamfara	94.3	1.2	4.5	0.0	100.0	0.8	98.3	0.8	0.2	0.0	100.0	834
South East												
Abia	21.2	42.9	35.9	0.0	100.0	7.3	83.8	7.2	0.5	1.1	100.0	221
Anambra	32.0	51.1	16.7	0.2	100.0	8.5	73.7	11.1	1.4	5.3	100.0	413
Ebonyi	41.0	35.8	23.2	0.0	100.0	5.6	84.9	7.3	1.1	1.1	100.0	410
Enugu	55.1	23.3	21.3	0.3	100.0	7.9	73.5	17.4	0.7	0.5	100.0	356
Imo	51.7	36.2	11.1	1.0	100.0	6.2	80.9	8.1	1.0	3.8	100.0	277
South South												
Akwa Ibom	77.3	16.8	5.6	0.3	100.0	12.3	67.3	18.3	0.5	1.5	100.0	319
Bayelsa	65.8	20.3	13.5	0.4	100.0	7.2	79.1	11.0	1.7	1.1	100.0	152
Cross River	28.2	61.3	10.1	0.4	100.0	5.8	83.5	7.1	0.8	2.9	100.0	269
Delta	40.3	35.2	24.1	0.4	100.0	10.3	61.1	14.6	3.5	10.5	100.0	390
Edo	73.5	19.2	7.3	0.0	100.0	4.4	82.9	6.5	1.3	5.0	100.0	312
Rivers	26.7	65.9	7.4	0.0	100.0	3.9	77.7	8.8	3.8	5.7	100.0	552
South West												
Ekiti	75.6	20.8	3.6	0.0	100.0	5.9	76.0	8.2	3.2	6.7	100.0	165
Lagos	82.0	14.9	3.0	0.1	100.0	3.9	81.2	7.8	0.9	6.3	100.0	1,020
Ogun	87.5	7.3	5.2	0.0	100.0	12.3	68.6	5.6	0.0	13.6	100.0	602
Ondo	72.9	23.1	3.8	0.0	100.0	5.6	78.3	7.9	0.6	7.6	100.0	438
Osun	89.9	9.3	0.8	0.0	100.0	2.3	80.8	11.1	1.1	4.7	100.0	447
Oyo	76.2	18.6	4.9	0.3	100.0	6.4	85.6	4.4	0.8	2.8	100.0	1,033
Education												
No education	80.8	9.0	9.7	0.5	100.0	2.3	92.0	2.9	0.8	2.0	100.0	7,726
Primary	65.6	22.3	11.8	0.3	100.0	5.4	82.8	7.0	1.0	3.9	100.0	3,925
Secondary	62.9	26.8	10.1	0.2	100.0	5.4	83.1	6.1	1.3	4.0	100.0	5,162
More than secondary	53.1	38.5	8.4	0.1	100.0	8.7	76.2	11.6	1.1	2.5	100.0	1,599
Wealth quintile												
Lowest	83.4	7.1	8.9	0.5	100.0	2.1	93.1	1.9	1.4	1.5	100.0	3,417
Second	70.8	16.5	12.0	0.6	100.0	2.7	90.7	3.7	0.7	2.1	100.0	3,608
Middle	64.4	21.8	13.6	0.2	100.0	4.6	85.5	6.1	0.9	3.0	100.0	3,321
Fourth	69.3	20.7	9.7	0.3	100.0	5.7	82.1	7.0	0.9	4.2	100.0	3,782
Highest	64.2	28.6	7.1	0.1	100.0	6.2	81.0	7.9	1.1	3.8	100.0	4,284
Total	70.1	19.4	10.1	0.3	100.0	4.4	86.2	5.4	1.0	3.0	100.0	18,412

15.2.2 Control Over Husband's Earnings

Currently married men who receive cash earnings were asked who decides how their cash earnings are spent. As Table 15.2.2 shows, 73 percent of currently married men who receive cash earnings report that they mainly make the decision on how their earnings are used, while 17 percent report that they make the decision jointly with their wives. Nine percent say their wives mainly make the decisions on how their earnings are used.

Table 15.2.2 Control over men's cash earnings

Percent distributions of currently married men age 15-49 who receive cash earnings and of currently married women age 15-49 whose husbands receive cash earnings, by person who decides how husband's cash earnings are used, according to background characteristics, Nigeria 2013

Background characteristic	Men							Women						
	Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing	Total	Number	Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing	Total	Number
Age														
15-19	(29.0)	(2.7)	(64.4)	(0.0)	(3.9)	100.0	39	2.4	12.8	84.3	0.4	0.1	100.0	2,220
20-24	9.6	12.4	75.9	1.7	0.4	100.0	354	2.7	20.5	76.4	0.2	0.3	100.0	4,301
25-29	9.1	13.3	77.0	0.4	0.3	100.0	1,106	3.4	23.0	73.3	0.0	0.3	100.0	5,853
30-34	8.2	16.3	74.5	0.3	0.7	100.0	1,624	3.4	25.9	70.3	0.0	0.4	100.0	4,819
35-39	8.1	19.0	72.5	0.1	0.3	100.0	1,786	4.8	25.9	69.1	0.1	0.1	100.0	4,241
40-44	11.2	19.2	69.3	0.1	0.2	100.0	1,556	5.9	25.1	68.7	0.0	0.3	100.0	3,191
45-49	9.8	18.1	71.8	0.1	0.2	100.0	1,528	4.7	23.6	71.5	0.0	0.2	100.0	2,867
Number of living children														
0	9.8	16.3	72.4	0.9	0.7	100.0	796	2.1	22.9	74.3	0.3	0.3	100.0	2,770
1-2	9.5	18.4	71.6	0.2	0.3	100.0	2,515	3.6	23.3	72.8	0.0	0.3	100.0	8,529
3-4	9.1	18.7	71.5	0.3	0.5	100.0	2,295	4.0	23.9	71.8	0.1	0.3	100.0	8,216
5+	9.4	14.6	75.7	0.1	0.2	100.0	2,388	4.6	21.9	73.3	0.0	0.2	100.0	7,978
Residence														
Urban	9.4	20.7	69.3	0.0	0.5	100.0	3,213	4.4	28.7	66.6	0.0	0.3	100.0	10,030
Rural	9.4	14.7	75.3	0.4	0.3	100.0	4,780	3.5	19.8	76.3	0.1	0.3	100.0	17,463
Zone														
North Central	15.9	16.9	67.0	0.1	0.1	100.0	1,306	6.6	32.4	60.4	0.1	0.5	100.0	3,870
North East	8.8	10.7	78.7	1.4	0.4	100.0	1,046	2.4	15.5	81.7	0.2	0.1	100.0	4,518
North West	12.0	5.6	82.1	0.1	0.2	100.0	2,610	1.9	11.2	86.7	0.0	0.2	100.0	10,012
South East	15.1	35.2	49.5	0.0	0.2	100.0	632	5.7	48.1	45.9	0.0	0.3	100.0	2,312
South South	2.6	39.8	56.8	0.1	0.8	100.0	995	7.1	44.0	48.4	0.0	0.5	100.0	2,634
South West	1.2	19.4	78.7	0.1	0.7	100.0	1,403	4.5	23.8	71.5	0.0	0.2	100.0	4,147
State														
North Central														
FCT-Abuja	22.3	3.3	74.3	0.0	0.0	100.0	93	6.3	23.7	69.4	0.0	0.7	100.0	198
Benue	41.9	31.7	26.4	0.0	0.0	100.0	273	4.9	31.3	63.4	0.4	0.0	100.0	827
Kogi	16.5	1.0	82.5	0.0	0.0	100.0	139	9.2	33.1	57.1	0.0	0.6	100.0	431
Kwara	0.6	19.0	80.4	0.0	0.0	100.0	130	5.6	39.6	54.6	0.2	0.0	100.0	381
Nasarawa	9.0	32.6	57.4	0.5	0.5	100.0	104	12.7	49.1	37.4	0.1	0.7	100.0	417
Niger	0.8	6.0	93.2	0.0	0.0	100.0	441	6.5	16.7	75.7	0.0	1.0	100.0	1,181
Plateau	28.6	35.1	34.9	0.6	0.8	100.0	126	2.9	57.5	39.1	0.0	0.5	100.0	435
North East														
Adamawa	0.8	19.3	79.9	0.0	0.0	100.0	115	3.4	23.5	73.0	0.0	0.1	100.0	585
Bauchi	9.1	10.8	75.5	3.7	0.9	100.0	220	2.7	17.6	78.6	1.0	0.1	100.0	1,043
Borno	0.8	10.4	88.8	0.0	0.0	100.0	278	1.8	12.4	85.8	0.0	0.0	100.0	1,116
Gombe	12.7	18.0	63.3	5.4	0.7	100.0	96	5.4	5.9	88.4	0.1	0.1	100.0	401
Taraba	30.8	10.7	57.2	0.8	0.4	100.0	175	2.2	37.6	60.0	0.0	0.2	100.0	548
Yobe	1.3	0.6	97.7	0.0	0.4	100.0	161	0.8	1.4	97.5	0.0	0.2	100.0	824
North West														
Jigawa	9.1	3.8	86.2	0.5	0.4	100.0	297	7.6	6.3	85.9	0.1	0.1	100.0	1,248
Kaduna	4.1	12.2	83.4	0.0	0.3	100.0	557	1.6	33.3	65.0	0.0	0.1	100.0	1,589
Kano	34.7	0.4	64.8	0.0	0.1	100.0	674	1.1	0.3	98.5	0.0	0.1	100.0	2,520
Katsina	0.0	6.0	93.7	0.0	0.4	100.0	346	1.6	33.3	64.9	0.0	0.3	100.0	1,404
Kebbi	9.4	3.5	87.1	0.0	0.0	100.0	227	1.2	0.3	98.5	0.0	0.1	100.0	1,074
Sokoto	0.4	2.1	97.2	0.2	0.0	100.0	215	0.4	0.3	99.1	0.0	0.2	100.0	955
Zamfara	2.2	10.8	87.0	0.0	0.0	100.0	294	0.4	2.6	96.7	0.0	0.3	100.0	1,223
South East														
Abia	7.2	47.0	45.8	0.0	0.0	100.0	77	2.4	48.3	49.3	0.0	0.0	100.0	289
Anambra	25.3	1.2	73.5	0.0	0.0	100.0	186	3.5	55.8	40.2	0.0	0.5	100.0	558
Ebonyi	23.1	46.9	29.0	0.0	1.0	100.0	144	4.6	40.5	54.4	0.2	0.3	100.0	560
Enugu	1.0	65.1	33.9	0.0	0.0	100.0	101	11.3	40.9	47.7	0.0	0.1	100.0	464
Imo	6.9	40.9	52.3	0.0	0.0	100.0	125	6.1	55.2	38.1	0.0	0.6	100.0	440
South South														
Akwa Ibom	3.4	48.7	46.1	0.5	1.3	100.0	169	8.2	32.4	58.9	0.0	0.5	100.0	407
Bayelsa	6.3	28.4	64.0	0.0	1.3	100.0	80	4.0	14.7	81.0	0.0	0.3	100.0	198
Cross River	1.6	76.5	21.9	0.0	0.0	100.0	131	6.1	56.7	36.1	0.0	1.0	100.0	432
Delta	2.8	30.6	64.6	0.0	1.9	100.0	192	13.6	37.4	48.3	0.0	0.6	100.0	534
Edo	0.0	49.5	49.9	0.0	0.6	100.0	129	1.8	31.5	66.5	0.0	0.2	100.0	388
Rivers	2.4	23.2	74.4	0.0	0.0	100.0	295	5.8	63.9	29.9	0.0	0.4	100.0	675
South West														
Ekiti	0.0	4.2	95.8	0.0	0.0	100.0	69	5.0	30.3	64.5	0.0	0.2	100.0	186
Lagos	1.3	23.9	73.3	0.3	1.3	100.0	434	4.1	22.8	72.7	0.1	0.3	100.0	1,221
Ogun	1.1	10.4	87.6	0.0	0.9	100.0	206	7.1	18.9	74.0	0.0	0.0	100.0	655
Ondo	3.7	51.7	44.7	0.0	0.0	100.0	179	5.2	30.1	64.4	0.0	0.2	100.0	504
Osun	0.0	0.6	99.4	0.0	0.0	100.0	166	2.8	26.4	70.9	0.0	0.0	100.0	460
Oyo	0.6	14.4	84.4	0.0	0.5	100.0	349	3.7	22.8	73.2	0.0	0.4	100.0	1,120

Continued…

Table 15.2.2—*Continued*

Background characteristic	Men							Women						
	Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing	Total	Number	Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing	Total	Number
Education														
No education	8.1	4.9	86.1	0.5	0.3	100.0	2,139	2.8	11.7	85.2	0.1	0.2	100.0	13,320
Primary	9.9	18.1	71.3	0.2	0.4	100.0	1,741	5.4	28.2	65.9	0.2	0.3	100.0	5,279
Secondary	9.6	21.7	68.3	0.1	0.3	100.0	2,848	4.8	34.2	60.7	0.0	0.3	100.0	6,879
More than secondary	10.2	26.3	62.9	0.1	0.4	100.0	1,265	3.6	46.3	49.7	0.0	0.4	100.0	2,015
Wealth quintile														
Lowest	10.5	5.8	82.5	0.8	0.5	100.0	1,412	2.6	10.7	86.4	0.1	0.2	100.0	6,329
Second	10.8	11.4	77.3	0.3	0.2	100.0	1,537	3.0	17.3	79.3	0.2	0.2	100.0	5,906
Middle	8.7	18.0	73.2	0.0	0.0	100.0	1,430	5.3	26.6	67.8	0.0	0.2	100.0	4,934
Fourth	8.7	21.1	69.5	0.1	0.6	100.0	1,660	4.2	27.4	67.9	0.0	0.4	100.0	4,990
Highest	8.6	25.9	65.1	0.1	0.5	100.0	1,954	4.6	36.6	58.6	0.0	0.3	100.0	5,334
Total 15-49	9.4	17.1	72.9	0.3	0.4	100.0	7,993	3.9	23.0	72.8	0.1	0.3	100.0	27,493

Note: Figures in parentheses are based on 25-49 unweighted cases.

The practice of making joint decisions regarding the use of men's cash earnings increases as men's level of education increases. Men living in rural areas, those in the North West, those in Osun, those with no education, and those belonging to households in the lowest wealth quintile are least likely to report that they make joint decisions on how their earnings are used.

Table 15.2.2 also shows women's responses on who makes decisions about their husbands' earnings. Only currently married women whose husbands had cash earnings are included. About one in four currently married women whose husbands receive cash earnings say that they decide jointly with their husband on the use of his cash earnings, only 4 percent say that they decide by themselves, and 73 percent say that their husband alone decides. The proportion of currently married women who report that their husbands mainly make decisions on spending their earnings is lower in urban areas (67 percent) than in rural areas (76 percent).

A comparison between women's responses about the main decision maker regarding the use of their husbands' earnings and men's responses about the use of their own earnings shows both similarities and differences. Whereas the same proportion of women and men (73 percent) say that the husband mainly makes the decision about his cash earnings, men are twice (9 percent) as likely as women (4 percent) to say that the wife is the main decision maker. Furthermore, women are more likely than men to say that the husband and wife jointly make the decision regarding the use of the husband's earnings (23 percent versus 17 percent).

15.3 CONTROL OVER WOMEN'S EARNINGS AND RELATIVE SIZE OF HUSBAND'S AND WIFE'S EARNINGS

Among currently married women who earned cash in the 12 months before the survey, Table 15.3 shows who decides how the woman's cash earnings are used, according to the relative magnitude of the woman's and the husband's cash earnings. Women whose cash earnings are less than their husbands' are more likely to decide for themselves on how their earnings are used (72 percent) than women who earn the same as or more than their husbands (49 percent and 63 percent, respectively). In contrast, women who earn the same as their husbands are most likely to report that decisions on the use of their earnings are mainly made jointly with their husbands (45 percent). Among women whose husbands have no cash earnings, 31 percent share the decision with their husbands, while 62 percent decide on their own.

Table 15.3 also shows who decides how the husband's cash earnings are used. Women whose cash earnings exceed their husbands' are more likely to report that they themselves decide how their husbands' earnings are used (16 percent) than are those who earn less than their husbands (4 percent) or those who earn the same as their husbands (5 percent). Women who earn the same as their husbands are most likely to report that decisions on the use of their husbands' earnings are mainly made jointly with their husbands (60 percent). Seventy-two percent of women who earn less than their husbands say that their husbands decide on the use of their earnings.

Table 15.3 Women's control over their own earnings and over those of their husbands

Percent distribution of currently married women age 15-49 with cash earnings in the last 12 months by person who decides how the wife's cash earnings are used and percent distribution of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between wife's and husband's cash earnings, Nigeria 2013

Women's earnings relative to husband's earnings	Person who decides how the wife's cash earnings are used:							Person who decides how husband's cash earnings are used:						
	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	Number	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	Number of women
More than husband	62.9	28.5	8.5	0.0	0.1	100.0	806	16.1	37.3	46.5	0.1	0.0	100.0	806
Less than husband	71.8	17.5	10.7	0.0	0.0	100.0	15,868	3.8	24.1	72.1	0.0	0.1	100.0	15,868
Same as husband	49.4	44.8	5.7	0.1	0.0	100.0	1,003	5.0	60.3	34.2	0.5	0.0	100.0	1,003
Husband has no cash earnings or did not work	62.0	30.5	7.0	0.5	0.0	100.0	187	na	na	na	na	na	na	na
Woman worked but had no cash earnings	na	na	na	na	na	na	na	9.3	35.3	53.8	0.2	1.4	100.0	1,344
Woman did not work	na	na	na	na	na	na	na	1.3	13.2	85.0	0.1	0.4	100.0	7,924
Don't know/missing	74.0	10.5	4.6	0.0	10.9	100.0	549	9.4	16.1	71.3	0.0	3.2	100.0	549
Total[1]	70.1	19.4	10.1	0.0	0.3	100.0	18,412	3.9	23.0	72.8	0.1	0.3	100.0	27,493

na = Not applicable
[1] Includes cases where a woman does not know whether she earned more or less than her husband

15.4 OWNERSHIP OF ASSETS

Lack of assets may make a woman vulnerable to various forms of violence and affects her decision-making power in the family. Although the Nigerian constitution gives equal property rights to women, tradition and women's low social and economic status limit their ownership of assets.

Table 15.4.1 shows that only 4 percent of women own a house alone and 11 percent jointly. Three percent of women own houses both alone and jointly. Ownership of a house or land increases with age. The urban-rural variation in ownership of house and land is not marked. In general, high proportions of women do not own a house (82 percent) or own land (85 percent) in Nigeria. The proportion of women who do not own a house or land is highest in the North East (95 percent and 94 percent, respectively).

Table 15.4.1 Ownership of assets: Women

Percent distribution of women age 15-49 by ownership of housing and land, according to background characteristics, Nigeria 2013

Background characteristic	Percentage who own a house:						Percentage who own land:						
	Alone	Jointly	Alone and jointly	Percentage who do not own a house	Missing	Total	Alone	Jointly	Alone and jointly	Percentage who do not own land	Missing	Total	Number
Age													
15-19	1.1	5.3	0.9	92.7	0.0	100.0	1.1	2.4	1.0	95.3	0.1	100.0	7,820
20-24	1.8	7.9	1.8	88.4	0.1	100.0	2.1	4.8	1.8	91.2	0.2	100.0	6,757
25-29	2.7	11.4	2.8	83.0	0.1	100.0	3.6	7.3	2.1	86.7	0.2	100.0	7,145
30-34	3.8	11.9	3.5	80.6	0.2	100.0	5.2	8.7	2.8	82.9	0.4	100.0	5,467
35-39	5.8	14.2	3.3	76.5	0.2	100.0	7.5	11.1	2.9	78.3	0.3	100.0	4,718
40-44	6.9	17.3	4.3	71.3	0.0	100.0	8.5	12.8	3.3	75.3	0.1	100.0	3,620
45-49	9.6	18.1	5.4	66.9	0.0	100.0	11.2	12.1	4.0	72.6	0.2	100.0	3,422
Residence													
Urban	3.5	10.3	2.5	83.5	0.1	100.0	4.2	7.9	1.7	85.9	0.2	100.0	16,414
Rural	4.0	11.7	2.9	81.3	0.1	100.0	5.0	7.1	2.7	84.9	0.2	100.0	22,534
Zone													
North Central	8.8	24.1	2.8	64.1	0.2	100.0	7.5	10.5	2.7	79.2	0.2	100.0	5,572
North East	1.7	2.8	0.3	95.1	0.1	100.0	3.3	2.4	0.4	93.6	0.3	100.0	5,766
North West	2.0	8.1	4.0	85.7	0.1	100.0	4.2	2.7	3.4	89.5	0.2	100.0	11,877
South East	6.5	17.1	4.3	71.9	0.1	100.0	5.4	14.1	2.0	78.2	0.3	100.0	4,476
South South	4.3	11.1	3.3	81.3	0.1	100.0	5.1	12.6	3.0	79.1	0.3	100.0	4,942
South West	2.1	8.5	1.2	88.1	0.1	100.0	3.5	9.6	1.3	85.4	0.1	100.0	6,314

Continued…

Table 15.4.1—*Continued*

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Missing	Total	Percentage who own land: Alone	Jointly	Alone and jointly	Percentage who do not own land	Missing	Total	Number
State													
North Central													
FCT-Abuja	3.4	10.9	6.9	78.7	0.1	100.0	3.6	10.2	6.3	79.7	0.2	100.0	315
Benue	16.8	26.1	0.8	56.3	0.0	100.0	3.7	12.1	0.8	83.3	0.1	100.0	1,240
Kogi	3.3	36.1	0.6	60.0	0.0	100.0	4.7	20.1	0.5	74.7	0.0	100.0	704
Kwara	0.5	10.3	12.1	77.1	0.0	100.0	0.3	7.4	10.4	81.9	0.1	100.0	596
Nasarawa	3.7	5.6	1.6	89.1	0.0	100.0	10.8	11.5	2.0	75.5	0.2	100.0	594
Niger	12.9	33.8	1.0	51.8	0.5	100.0	12.7	2.0	0.9	83.8	0.7	100.0	1,462
Plateau	5.0	21.8	3.7	69.4	0.1	100.0	11.2	17.9	4.4	66.5	0.0	100.0	662
North East													
Adamawa	1.7	5.9	0.8	91.5	0.1	100.0	2.5	2.0	0.5	94.9	0.1	100.0	828
Bauchi	1.3	3.5	0.1	94.9	0.1	100.0	2.9	3.7	0.3	92.5	0.5	100.0	1,161
Borno	2.3	0.7	0.0	96.7	0.3	100.0	3.5	2.4	0.3	93.5	0.3	100.0	1,412
Gombe	0.4	0.8	0.3	98.5	0.1	100.0	1.0	0.7	0.4	97.7	0.2	100.0	550
Taraba	1.7	2.5	0.2	95.6	0.0	100.0	2.9	3.1	0.5	93.5	0.1	100.0	844
Yobe	1.8	4.0	0.5	93.7	0.0	100.0	6.0	1.6	0.2	91.9	0.2	100.0	971
North West													
Jigawa	1.2	2.3	5.1	91.1	0.2	100.0	3.8	2.5	4.1	89.2	0.4	100.0	1,353
Kaduna	1.6	6.9	1.8	89.8	0.0	100.0	3.2	3.2	0.2	93.4	0.0	100.0	2,136
Kano	2.3	20.5	2.1	75.1	0.0	100.0	6.8	3.1	1.7	88.4	0.0	100.0	3,189
Katsina	0.6	0.1	0.2	98.9	0.2	100.0	1.1	0.1	0.2	98.2	0.4	100.0	1,525
Kebbi	6.4	8.3	22.9	62.3	0.1	100.0	6.3	8.2	22.5	62.9	0.1	100.0	1,244
Sokoto	1.0	2.3	0.0	96.3	0.4	100.0	1.2	1.9	0.1	96.4	0.5	100.0	1,098
Zamfara	1.3	0.1	1.2	97.3	0.1	100.0	3.6	0.1	0.8	95.4	0.1	100.0	1,332
South East													
Abia	9.0	16.0	2.5	72.5	0.0	100.0	3.6	17.0	2.4	77.0	0.1	100.0	518
Anambra	7.4	6.9	2.0	83.4	0.3	100.0	3.1	3.7	1.4	90.9	0.9	100.0	1,052
Ebonyi	10.5	13.7	10.8	65.1	0.0	100.0	9.9	9.4	3.2	77.5	0.0	100.0	1,122
Enugu	2.2	40.7	1.7	55.3	0.1	100.0	4.5	34.5	0.8	59.8	0.4	100.0	951
Imo	3.6	8.4	2.7	85.3	0.0	100.0	4.3	8.5	2.1	85.1	0.0	100.0	833
South South													
Akwa Ibom	5.7	14.7	1.5	78.0	0.2	100.0	6.3	12.3	1.4	79.5	0.4	100.0	864
Bayelsa	5.3	9.6	9.1	76.0	0.0	100.0	12.2	10.7	8.6	68.4	0.0	100.0	364
Cross River	4.7	21.4	11.1	62.8	0.0	100.0	5.3	25.8	10.4	57.8	0.7	100.0	703
Delta	1.0	2.7	1.6	94.6	0.2	100.0	2.3	5.3	2.0	90.3	0.1	100.0	993
Edo	2.5	3.1	0.5	93.9	0.0	100.0	3.2	3.4	0.6	92.8	0.0	100.0	742
Rivers	6.4	14.6	1.4	77.6	0.0	100.0	5.5	16.9	0.5	76.8	0.2	100.0	1,276
South West													
Ekiti	4.3	8.9	0.9	85.8	0.1	100.0	6.9	11.7	1.1	80.2	0.1	100.0	326
Lagos	2.1	5.8	1.0	90.8	0.2	100.0	3.2	9.2	1.4	85.9	0.3	100.0	1,964
Ogun	1.6	5.1	0.5	92.9	0.0	100.0	2.7	7.1	0.7	89.5	0.0	100.0	883
Ondo	0.7	9.5	4.1	85.6	0.1	100.0	2.7	8.3	4.1	84.8	0.1	100.0	808
Osun	1.4	8.9	0.2	89.6	0.0	100.0	4.2	9.0	0.0	86.8	0.0	100.0	765
Oyo	2.9	13.1	0.8	83.2	0.0	100.0	3.8	12.1	0.9	83.2	0.1	100.0	1,568
Education													
No education	3.5	10.0	3.2	83.0	0.1	100.0	4.9	4.0	2.7	88.1	0.3	100.0	14,729
Primary	6.0	15.4	3.8	74.8	0.0	100.0	6.5	10.9	2.8	79.6	0.2	100.0	6,734
Secondary	2.9	10.0	1.9	85.2	0.1	100.0	3.3	8.2	1.5	86.8	0.2	100.0	13,927
More than secondary	3.8	12.0	2.3	81.6	0.2	100.0	5.5	12.5	2.8	79.0	0.3	100.0	3,558
Wealth quintile													
Lowest	3.0	7.9	2.7	86.3	0.2	100.0	4.5	2.8	2.2	90.2	0.3	100.0	7,132
Second	4.5	10.5	3.6	81.3	0.1	100.0	4.8	6.5	2.8	85.7	0.2	100.0	7,428
Middle	4.6	15.1	3.8	76.4	0.1	100.0	5.5	9.6	2.7	81.9	0.3	100.0	7,486
Fourth	3.5	13.0	2.0	81.4	0.1	100.0	4.5	8.9	2.0	84.5	0.1	100.0	7,992
Highest	3.3	9.1	2.0	85.6	0.1	100.0	4.2	8.9	1.8	84.9	0.2	100.0	8,910
Total	3.8	11.1	2.8	82.3	0.1	100.0	4.7	7.5	2.3	85.3	0.2	100.0	38,948

Table 15.4.2 shows that ownership of land and a house among men increases with age. A comparison of women and men indicates that there are differences in the proportions of older women and older men owning these high-value assets. For example, only 10 percent of women age 45-49 own a house alone and 11 percent own land alone, as compared with 56 percent and 51 percent of men age 45-49, respectively. Rural men are more likely than urban men to own either asset. Men's sole ownership of a house declines sharply from 48 percent among men with no education to 15 percent among men with a secondary education before increasing to 22 percent among men with more than a secondary education. Surprisingly, sole ownership of a house declines with increasing wealth; ownership of land varies

minimally and inconsistently with wealth. Men in the North East are more likely than men in other zones to solely own a house and land. Similarly, men in Yobe are more likely than men in other states to own a house. For example, 50 percent of men in Yobe solely own a house, as compared with only 5 percent of men in Anambra.

Table 15.4.2 Ownership of assets: Men

Percent distribution of men age 15-49 by ownership of housing and land, according to background characteristics, Nigeria 2013

Background characteristic	Percentage who own a house:						Percentage who own land:						
	Alone	Jointly	Alone and jointly	Percentage who do not own a house	Missing	Total	Alone	Jointly	Alone and jointly	Percentage who do not own land	Missing	Total	Number
Age													
15-19	1.8	8.4	1.7	88.1	0.0	100.0	3.7	3.1	0.5	92.5	0.1	100.0	3,619
20-24	9.2	10.7	2.5	77.6	0.1	100.0	12.3	5.5	1.2	81.0	0.1	100.0	2,892
25-29	21.8	13.7	4.1	60.3	0.0	100.0	23.8	7.7	1.4	67.0	0.0	100.0	2,757
30-34	31.6	11.3	4.1	52.7	0.2	100.0	34.1	6.8	2.0	56.8	0.2	100.0	2,414
35-39	43.3	11.8	4.2	40.6	0.1	100.0	42.0	8.3	1.1	48.5	0.1	100.0	2,175
40-44	47.6	10.2	6.4	35.8	0.0	100.0	47.3	7.8	2.1	42.6	0.2	100.0	1,777
45-49	55.8	9.5	4.4	30.2	0.1	100.0	51.2	7.2	2.7	38.8	0.2	100.0	1,724
Residence													
Urban	14.3	6.5	2.0	77.0	0.1	100.0	19.9	5.3	1.0	73.7	0.1	100.0	7,611
Rural	34.5	14.1	4.8	46.6	0.1	100.0	31.7	7.1	1.8	59.3	0.1	100.0	9,748
Zone													
North Central	30.9	23.2	0.4	45.5	0.0	100.0	34.5	9.2	0.4	55.8	0.1	100.0	2,685
North East	42.0	9.1	4.4	44.5	0.0	100.0	36.6	4.5	1.1	57.7	0.1	100.0	2,515
North West	32.4	12.2	8.8	46.4	0.2	100.0	28.5	4.7	2.8	63.9	0.1	100.0	5,185
South East	12.9	8.2	1.1	77.7	0.1	100.0	15.9	14.1	2.0	67.8	0.2	100.0	1,686
South South	14.4	5.2	0.5	79.7	0.1	100.0	18.0	5.9	0.6	75.3	0.2	100.0	2,445
South West	11.0	4.0	0.5	84.4	0.1	100.0	20.1	3.9	0.6	75.4	0.1	100.0	2,843
State													
North Central													
FCT-Abuja	30.9	6.6	0.0	62.5	0.0	100.0	31.1	8.5	0.2	60.2	0.0	100.0	175
Benue	42.1	38.9	0.0	19.0	0.0	100.0	44.8	20.6	0.0	34.6	0.0	100.0	616
Kogi	15.5	0.6	0.0	83.9	0.0	100.0	24.1	1.1	0.2	74.6	0.0	100.0	333
Kwara	15.4	2.7	0.2	81.6	0.0	100.0	32.6	2.4	0.0	65.0	0.0	100.0	274
Nasarawa	28.2	12.6	1.4	57.9	0.0	100.0	31.0	7.2	1.8	59.9	0.0	100.0	282
Niger	32.6	45.4	0.6	21.4	0.0	100.0	28.4	8.7	0.3	62.4	0.3	100.0	701
Plateau	37.3	2.9	1.0	58.9	0.0	100.0	46.0	4.4	1.1	48.6	0.0	100.0	302
North East													
Adamawa	43.9	2.0	0.0	54.1	0.0	100.0	45.2	0.3	0.1	54.4	0.0	100.0	358
Bauchi	34.3	17.5	19.6	28.6	0.0	100.0	38.1	11.7	3.8	46.3	0.2	100.0	512
Borno	42.1	0.6	0.3	57.1	0.0	100.0	26.8	1.0	0.3	71.9	0.0	100.0	676
Gombe	36.2	27.5	2.8	33.3	0.2	100.0	29.8	2.2	1.2	66.6	0.2	100.0	255
Taraba	46.9	10.1	0.0	43.0	0.0	100.0	39.5	7.1	0.2	53.1	0.0	100.0	325
Yobe	49.7	6.7	0.0	43.5	0.0	100.0	45.6	4.4	0.3	49.4	0.2	100.0	390
North West													
Jigawa	43.4	21.4	4.2	31.0	0.0	100.0	26.1	5.1	1.4	67.4	0.0	100.0	510
Kaduna	38.7	2.9	1.5	57.0	0.0	100.0	41.4	3.3	1.8	53.5	0.0	100.0	1,033
Kano	18.7	11.1	17.3	52.6	0.3	100.0	23.3	9.0	6.9	60.4	0.3	100.0	1,592
Katsina	42.2	7.1	1.2	49.2	0.4	100.0	22.2	0.6	0.4	76.6	0.2	100.0	596
Kebbi	28.5	37.5	1.5	32.6	0.0	100.0	16.4	3.9	1.1	78.5	0.0	100.0	551
Sokoto	45.5	13.4	0.0	41.1	0.0	100.0	32.0	2.4	0.0	65.6	0.0	100.0	424
Zamfara	33.8	2.5	27.2	36.6	0.0	100.0	39.4	0.5	0.4	59.7	0.0	100.0	479
South East													
Abia	15.4	6.5	0.1	77.9	0.0	100.0	20.3	12.5	0.0	67.2	0.0	100.0	229
Anambra	4.7	11.2	2.5	81.6	0.0	100.0	4.4	11.9	2.0	81.7	0.0	100.0	446
Ebonyi	25.1	6.8	1.5	66.6	0.0	100.0	19.3	10.5	6.6	63.6	0.0	100.0	368
Enugu	13.7	4.3	0.0	81.5	0.4	100.0	14.7	16.9	0.0	67.5	0.8	100.0	320
Imo	7.6	10.8	0.3	81.2	0.0	100.0	26.0	19.9	0.3	53.9	0.0	100.0	323
South South													
Akwa Ibom	13.9	7.9	0.6	77.1	0.5	100.0	22.5	6.7	0.7	69.7	0.5	100.0	451
Bayelsa	12.7	6.3	0.9	80.1	0.0	100.0	17.6	4.0	0.4	78.0	0.0	100.0	187
Cross River	16.2	11.6	0.5	71.8	0.0	100.0	19.1	11.3	0.4	69.3	0.0	100.0	310
Delta	12.6	6.0	0.0	81.3	0.0	100.0	19.4	7.4	0.1	73.0	0.1	100.0	473
Edo	7.2	0.6	0.0	91.8	0.4	100.0	9.9	0.5	0.4	88.8	0.4	100.0	365
Rivers	19.8	1.9	1.1	77.2	0.0	100.0	18.2	5.2	1.1	75.5	0.0	100.0	658
South West													
Ekiti	8.2	3.3	0.0	88.5	0.0	100.0	14.2	3.3	0.0	82.5	0.0	100.0	148
Lagos	9.0	3.9	0.2	86.8	0.1	100.0	19.7	4.7	0.5	74.9	0.1	100.0	948
Ogun	8.6	2.3	0.0	89.0	0.0	100.0	14.0	2.7	0.0	83.0	0.4	100.0	358
Ondo	18.5	3.8	1.0	76.5	0.1	100.0	18.4	4.8	0.0	76.7	0.1	100.0	404
Osun	7.0	4.2	0.0	88.8	0.0	100.0	27.2	3.7	0.0	69.1	0.0	100.0	356
Oyo	13.4	5.3	1.6	79.7	0.0	100.0	22.6	2.9	1.7	72.8	0.0	100.0	629

Continued…

Table 15.4.2—*Continued*

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Missing	Total	Percentage who own land: Alone	Jointly	Alone and jointly	Percentage who do not own land	Missing	Total	Number
Education													
No education	48.0	13.1	6.5	32.4	0.1	100.0	35.9	4.2	2.1	57.6	0.2	100.0	3,685
Primary	31.2	12.5	6.1	50.1	0.1	100.0	30.9	8.4	2.3	58.3	0.1	100.0	2,907
Secondary	14.8	9.4	1.9	73.9	0.1	100.0	18.8	6.4	0.8	73.9	0.1	100.0	8,281
More than secondary	22.1	9.8	2.2	65.7	0.2	100.0	33.4	6.6	1.3	58.5	0.2	100.0	2,486
Wealth quintile													
Lowest	44.4	13.7	7.9	34.0	0.0	100.0	32.8	5.2	2.1	59.7	0.1	100.0	2,862
Second	40.0	13.4	6.6	39.9	0.1	100.0	34.3	6.0	2.7	57.0	0.1	100.0	2,992
Middle	26.5	13.7	2.7	57.1	0.1	100.0	27.4	8.1	1.6	62.8	0.1	100.0	3,338
Fourth	15.6	9.6	1.5	73.2	0.2	100.0	21.2	6.9	0.7	71.0	0.2	100.0	3,835
Highest	11.6	5.7	1.2	81.4	0.1	100.0	21.1	5.3	0.7	72.9	0.1	100.0	4,332
Total	25.6	10.8	3.6	59.9	0.1	100.0	26.5	6.3	1.4	65.6	0.1	100.0	17,359

15.5 WOMEN'S PARTICIPATION IN DECISION MAKING

Decision making can be a complex process, and the ability of women to make decisions that affect their personal circumstances is an essential aspect of their empowerment.

In order to assess women's decision-making autonomy, the 2013 NDHS collected information on women's participation in three types of household decisions: their own health care, making major household purchases, and visits to family or relatives. Table 15.5 shows the percent distribution of currently married women and men according to the person in the household who usually makes decisions concerning these matters. Women are considered to participate in decision making if they usually make decisions alone or jointly with their husbands.

The role of women in decision making varies according to the type of decision. Only 6 percent of currently married women make decisions themselves on their own health care, while three in five women report that their husbands mainly make such decisions. Sixty-two percent of women say that the husband is the main decision maker on large household purchases, while 32 percent say that they and their husband jointly make such decisions. Fifty-two percent of women report that decisions to visit family or relatives are made mainly by their husbands.

Currently married men also were asked who makes decisions about two specific issues: their own health care and major household purchases. Sixty-five percent of currently married men mainly make decisions on their own health care, and 50 percent usually make decisions on major household purchases (Table 15.5). About one in four men make such decisions jointly with their wives. Twelve percent of men report that their wives are the chief decision makers about their health care, while 23 percent report that their wives are the primary decision makers about major household purchases.

Table 15.5 Participation in decision making

Percent distribution of currently married women and currently married men age 15-49 by person who usually makes decisions about various issues, Nigeria 2013

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Missing	Total	Number of women
			WOMEN					
Own health care	6.2	32.6	60.8	0.2	0.1	0.2	100.0	27,830
Major household purchases	5.6	32.0	61.9	0.2	0.1	0.2	100.0	27,830
Visits to her family or relatives	7.9	39.5	52.2	0.2	0.0	0.2	100.0	27,830
			MEN					
Own health care	11.9	22.0	65.0	0.8	0.0	0.4	100.0	8,723
Major household purchases	23.3	26.0	50.0	0.4	0.0	0.4	100.0	8,723

Table 15.6.1 shows the percentage of women who participate in the three decisions (woman's own health care, making household purchases, and visits to her family or relatives) by background characteristics. Women's participation in household decision making increases with age. More women who are employed for cash take part in all three decisions (39 percent) than women who are employed but do not earn cash (35 percent) and women who are not employed (14 percent).

Table 15.6.1 Women's participation in decision making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Nigeria 2013

Background characteristic	Specific decisions			All three decisions	None of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives			
Age						
15-19	17.7	16.0	27.4	12.0	69.2	2,251
20-24	30.0	28.0	39.8	22.4	56.2	4,362
25-29	36.9	35.7	45.9	29.5	49.1	5,913
30-34	44.6	43.4	52.1	36.7	43.3	4,869
35-39	46.0	44.5	53.5	37.6	41.6	4,302
40-44	45.8	46.0	54.5	38.7	40.7	3,226
45-49	43.5	43.3	52.3	36.7	43.2	2,907
Employment (last 12 months)						
Not employed	19.5	17.0	28.1	13.7	69.3	7,977
Employed for cash	46.6	45.9	55.0	38.7	39.9	18,412
Employed not for cash	46.3	46.4	58.2	35.3	33.7	1,360
Missing	20.0	20.5	24.5	18.0	73.7	80
Number of living children						
0	30.9	29.7	39.8	24.4	55.9	2,823
1-2	39.1	37.9	49.2	31.3	46.4	8,637
3-4	43.3	42.2	51.2	35.5	44.0	8,305
5+	36.4	35.3	44.2	29.4	51.4	8,065
Residence						
Urban	54.3	52.9	63.1	46.0	32.3	10,124
Rural	29.8	28.9	38.3	22.9	57.1	17,705
Zone						
North Central	42.1	44.2	46.8	36.0	46.8	3,895
North East	26.3	19.4	36.6	15.4	60.0	4,679
North West	16.2	15.0	23.5	12.2	73.8	10,034
South East	63.3	61.9	73.2	51.9	19.9	2,333
South South	65.7	71.0	73.2	57.6	17.2	2,699
South West	72.4	70.9	85.9	62.2	10.1	4,189
State						
North Central						
FCT-Abuja	55.9	55.6	63.7	47.9	31.1	200
Benue	28.5	32.7	33.0	20.4	57.2	827
Kogi	61.7	63.2	67.5	57.9	29.3	433
Kwara	80.3	78.9	94.3	73.8	3.2	384
Nasarawa	50.7	57.9	49.9	38.5	30.5	420
Niger	18.7	19.4	22.1	16.2	76.4	1,190
Plateau	63.7	65.5	67.1	56.4	25.5	442
North East						
Adamawa	34.9	32.8	49.4	29.5	48.1	586
Bauchi	29.0	12.9	40.1	8.8	56.0	1,051
Borno	25.0	16.1	30.9	13.8	66.9	1,120
Gombe	5.6	5.1	6.6	3.0	91.6	467
Taraba	56.8	51.5	64.9	39.9	26.0	632
Yobe	7.0	5.9	26.2	4.2	72.4	824
North West						
Jigawa	13.3	11.2	21.9	7.9	75.0	1,256
Kaduna	54.1	52.4	54.1	41.9	34.7	1,594
Kano	1.4	1.1	1.9	1.0	97.7	2,521
Katsina	33.7	28.8	50.9	27.1	48.7	1,408
Kebbi	2.7	5.0	8.0	1.9	90.9	1,074
Sokoto	0.9	0.9	1.0	0.5	98.7	956
Zamfara	3.9	3.0	29.4	1.6	68.4	1,226
South East						
Abia	59.3	59.6	62.6	55.8	34.8	292
Anambra	75.9	72.4	86.3	69.4	11.4	564
Ebonyi	42.1	52.3	64.3	33.5	24.2	564
Enugu	63.7	62.3	69.5	53.4	24.8	467
Imo	76.6	62.0	78.6	49.1	10.2	446

Continued…

Table 15.6.1—*Continued*

Background characteristic	Specific decisions			All three decisions	None of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives			
South South						
Akwa Ibom	54.9	61.6	67.9	46.1	25.1	410
Bayelsa	31.6	58.0	47.2	18.8	19.2	202
Cross River	60.0	76.3	69.9	54.0	15.9	437
Delta	71.1	71.8	72.1	67.7	23.9	551
Edo	71.5	71.0	72.7	58.4	16.2	395
Rivers	77.9	76.2	87.1	69.4	8.0	704
South West						
Ekiti	72.0	68.8	86.0	61.5	10.1	194
Lagos	78.8	72.3	90.1	65.3	6.7	1,236
Ogun	79.0	78.3	93.2	68.5	4.3	655
Ondo	64.1	63.5	75.5	51.2	14.1	510
Osun	53.0	53.5	76.3	47.9	22.1	465
Oyo	73.4	75.8	85.7	66.1	10.4	1,129
Education						
No education	19.0	16.5	27.3	13.1	69.6	13,470
Primary	49.3	50.1	58.9	41.0	35.1	5,336
Secondary	59.4	59.6	68.3	50.3	25.7	6,981
More than secondary	70.7	69.1	77.8	60.9	16.8	2,043
Wealth quintile						
Lowest	15.5	13.3	24.7	10.2	72.6	6,424
Second	25.9	23.8	34.4	19.0	61.6	5,986
Middle	40.6	41.3	49.3	32.8	44.8	4,983
Fourth	50.7	51.0	59.3	42.7	35.2	5,042
Highest	67.7	65.9	75.8	58.1	18.9	5,395
Total	38.7	37.6	47.4	31.3	48.1	27,830

Urban women are more likely to participate in all three decisions than their rural counterparts (46 percent and 23 percent, respectively). Women living in the South West (62 percent), South South (58 percent), and South East (52 percent) are more likely to participate in all three decisions than women in the North Central (36 percent), North East (15 percent), and North West (12 percent) zones. Women in Sokoto, Kano, Zamfara, and Kebbi are least likely to participate in all three specified decisions (less than 2 percent each).

Women's participation in decision making increases with increasing education and wealth. For example, only 13 percent of women with no education participate in all three household decisions, as compared with 61 percent of women with more than a secondary education. Similarly, 58 percent of women in the highest wealth quintile participate in all three decisions, compared with 10 percent of women in the lowest quintile.

Figure 15.1 shows the number of decisions in which currently married women participate. About one in three currently married women (31 percent) participate in all three decisions, 9 percent participate in two of the three decisions, and 11 percent in one decision. Almost half of currently married women (48 percent) do not participate in any of the decisions.

Figure 15.1 Number of decisions in which currently married women participate

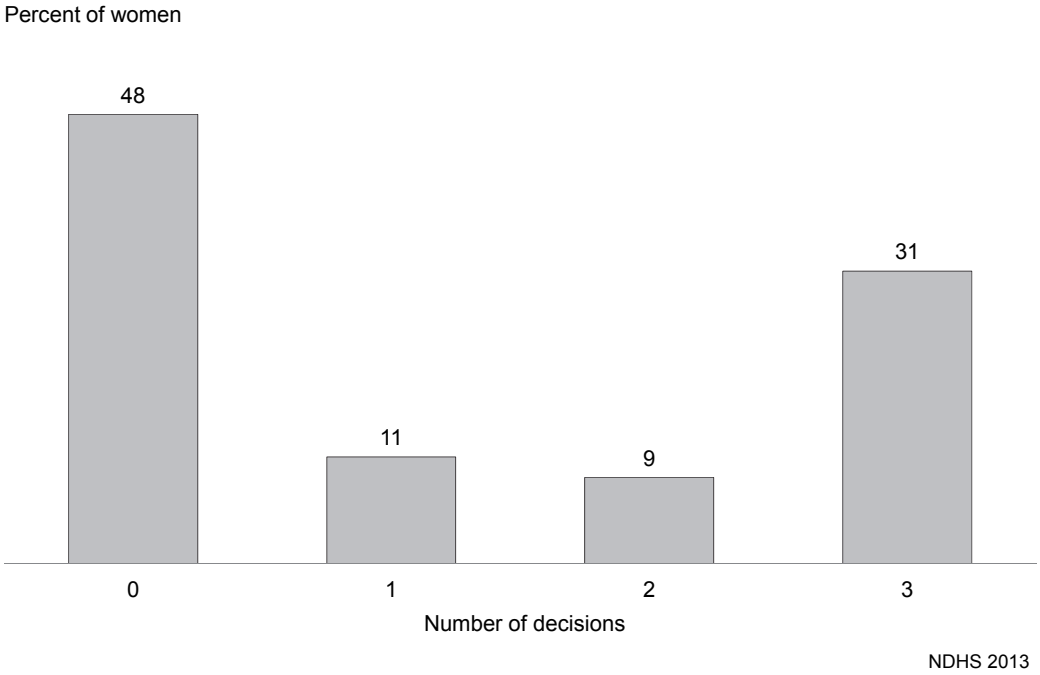


Table 15.6.2 shows that most men participate in decision making regarding their own health (87 percent) as well as in making major household purchases (76 percent). There is generally not much variation in men's participation in decision making according to background characteristics. However, the likelihood of men participating in both decisions tends to fall with increasing education and wealth.

Table 15.6.2 Men's participation in decision making by background characteristics

Percentage of currently married men age 15-49 who usually make specific decisions either alone or jointly with their wife, by background characteristics, Nigeria 2013

Background characteristic	Specific decisions		Both decisions	Neither of the two decisions	Number of men
	Man's own health	Making major household purchases			
Age					
15-19	(65.0)	(69.2)	(59.7)	(25.5)	41
20-24	87.4	79.6	76.7	9.7	418
25-29	86.4	77.6	74.7	10.7	1,240
30-34	88.0	76.6	74.2	9.6	1,750
35-39	88.6	76.9	75.0	9.5	1,937
40-44	85.2	73.2	71.3	13.0	1,688
45-49	86.9	74.9	72.7	10.8	1,649
Employment (last 12 months)					
Not employed	76.2	69.0	64.1	18.9	82
Employed for cash	86.9	75.1	72.9	10.9	7,993
Employed not for cash	91.5	88.0	85.6	6.1	626
Missing	*	*	*	*	21
Number of living children					
0	86.7	77.1	75.4	11.6	897
1-2	86.9	76.4	73.6	10.3	2,717
3-4	86.7	74.5	72.5	11.3	2,471
5+	87.5	76.5	74.2	10.2	2,638
Residence					
Urban	85.6	70.6	68.1	12.0	3,302
Rural	87.9	79.2	77.0	9.9	5,421
Zone					
North Central	81.1	77.3	75.0	16.6	1,395
North East	86.8	85.4	80.9	8.7	1,404
North West	85.5	70.0	69.1	13.6	2,846
South East	81.6	82.4	77.9	13.9	643
South South	94.5	91.1	89.2	3.6	1,020
South West	93.0	63.5	61.2	4.7	1,414

Continued…

Table 15.6.2—*Continued*

Percentage of currently married men age 15-49 who usually make specific decisions either alone or jointly with their wife, by background characteristics, Nigeria 2013

Background characteristic	Specific decisions		Both decisions	Neither of the two decisions	Number of men
	Man's own health	Making major household purchases			
State					
North Central					
FCT-Abuja	73.4	71.4	70.6	25.9	96
Benue	55.5	54.1	49.5	40.0	283
Kogi	73.8	72.8	66.5	19.9	142
Kwara	99.6	98.4	98.4	0.4	132
Nasarawa	80.7	65.8	63.0	16.5	136
Niger	97.0	93.8	93.0	2.2	447
Plateau	78.5	71.8	71.2	20.9	158
North East					
Adamawa	97.3	92.5	91.4	1.6	174
Bauchi	85.1	88.4	79.9	6.4	325
Borno	91.8	91.7	85.5	2.0	368
Gombe	79.5	80.3	76.2	16.4	131
Taraba	67.4	64.2	62.5	31.0	177
Yobe	92.5	84.9	83.6	6.3	229
North West					
Jigawa	89.8	73.9	72.6	8.9	334
Kaduna	93.7	74.5	74.1	6.0	569
Kano	64.7	29.9	29.9	35.3	691
Katsina	97.9	97.8	97.5	1.8	390
Kebbi	90.1	78.3	76.8	8.3	314
Sokoto	79.5	79.0	77.6	19.1	236
Zamfara	96.8	96.2	93.5	0.5	312
South East					
Abia	92.3	88.8	85.4	4.3	77
Anambra	73.7	74.1	73.7	25.9	188
Ebonyi	71.8	80.7	69.2	16.7	145
Enugu	95.2	87.8	85.2	2.3	104
Imo	86.8	88.2	83.2	8.2	129
South South					
Akwa Ibom	95.5	89.7	89.1	3.9	175
Bayelsa	93.6	91.9	91.9	6.4	80
Cross River	98.4	97.1	97.1	1.6	131
Delta	92.3	86.9	82.0	2.8	199
Edo	97.2	89.0	88.2	2.1	131
Rivers	92.9	92.7	90.2	4.7	304
South West					
Ekiti	100.0	65.8	65.8	0.0	70
Lagos	89.6	74.8	73.5	9.1	435
Ogun	98.9	35.7	35.3	0.8	210
Ondo	80.3	83.7	70.8	6.9	183
Osun	92.3	46.9	44.7	5.5	167
Oyo	99.1	63.3	63.3	0.9	349
Education					
No education	89.1	79.7	78.1	9.3	2,594
Primary	87.0	76.6	73.6	10.0	1,854
Secondary	86.5	74.7	72.2	11.0	2,961
More than secondary	84.2	70.4	68.3	13.8	1,313
Wealth quintile					
Lowest	87.9	79.2	77.0	9.9	1,795
Second	86.2	78.1	75.6	11.3	1,732
Middle	87.5	79.1	76.2	9.7	1,506
Fourth	87.4	73.5	71.6	10.7	1,697
Highest	86.2	71.0	68.9	11.6	1,992
Total	87.0	76.0	73.7	10.7	8,723

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

15.6 ATTITUDES TOWARD WIFE BEATING

In Nigeria, generally "women are considered as tools to be used by men. They are regarded as objects to be used for pleasure, temptation and elimination. In Nigeria, a man will beat his wife and nothing will happen, instead [he] will expect her to go on her knees and beg him" (Arisi & Oromareghake, 2011). Wife beating is a form of physical violence that particularly degrades women. It is also a violation of women's human rights. Worldwide, abuse by a husband is one of the most common forms of violence

against women (Heise et al., 1999). Acceptance of this practice reflects women's low status and the perception that men are superior to women. In addition to adverse physical health outcomes, this form of violence lowers a woman's self-esteem and her image in society, leading to her disempowerment.

In Nigeria, as in many other African countries, reports reveal a "shockingly high" level of violence against women (NPC and UNFPA, 2014). Domestic violence is common in both urban and rural families in Nigeria (NPC and ICF Macro, 2009). When a society tolerates and accepts violence against women, eradication of such violence is more difficult. Women who believe that a husband is justified in hitting or beating his wife may think they have low status. Such a perception could act as a barrier to their accessing health care for themselves and their children, affect their attitudes toward contraceptive use, and damage their general well-being.

The 2013 NDHS gathered information on attitudes toward wife beating. Women and men were asked whether a husband is justified in beating his wife in various circumstances: if the wife burns the food, argues with him, goes out without telling him, neglects the children, or refuses sexual intercourse with him. Table 15.7.1 shows that about one in three women (35 percent) agree that wife beating is justified in at least one of the specified situations, a decline from the proportion reported in the 2008 NDHS (43 percent). This trend suggests that Nigerian women are less likely to accept wife beating than in the past.

Table 15.7.1 Attitudes toward wife beating: Women

Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Nigeria 2013

Background characteristic	Husband is justified in hitting or beating his wife if she: Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	Percentage who agree with at least one specified reason	Number
Age							
15-19	13.4	21.0	23.6	23.8	16.6	33.4	7,820
20-24	14.6	22.6	26.8	26.8	20.1	37.5	6,757
25-29	14.5	21.5	25.6	24.9	19.9	35.1	7,145
30-34	15.6	21.4	25.6	24.8	19.3	35.2	5,467
35-39	13.6	20.2	25.0	23.4	18.3	33.3	4,718
40-44	14.3	21.9	26.4	24.5	20.2	35.5	3,620
45-49	13.0	20.1	24.1	23.0	17.1	32.3	3,422
Employment (last 12 months)							
Not employed	13.9	20.2	25.4	23.3	18.9	34.2	14,230
Employed for cash	13.7	20.8	24.2	24.2	18.2	33.6	22,333
Employed not for cash	20.8	33.8	35.5	37.0	24.3	50.2	2,255
Missing	14.1	24.2	26.0	23.5	21.0	32.8	131
Number of living children							
0	10.9	18.3	20.5	21.7	13.6	30.4	11,750
1-2	14.9	21.6	25.8	25.0	20.0	35.1	9,737
3-4	15.1	21.9	26.2	25.4	20.5	35.7	8,876
5+	17.0	24.5	30.2	27.4	22.8	39.2	8,585
Marital status							
Never married	9.2	16.9	18.3	21.0	10.9	28.7	9,326
Married or living together	15.8	22.8	27.7	25.7	21.5	36.8	27,830
Divorced/separated/widowed	15.0	22.2	24.4	26.0	17.4	34.4	1,793
Residence							
Urban	7.8	15.0	16.5	18.6	10.3	25.9	16,414
Rural	18.9	25.9	31.7	29.0	25.0	41.2	22,534
Zone							
North Central	20.0	26.3	31.8	31.3	21.5	39.0	5,572
North East	21.2	31.4	40.2	32.6	34.9	49.6	5,766
North West	16.5	20.4	24.0	21.3	22.7	33.6	11,877
South East	10.1	28.0	26.6	29.0	10.8	40.6	4,476
South South	10.5	13.9	21.7	25.2	12.6	31.7	4,942
South West	4.2	10.7	10.3	14.0	4.8	17.8	6,314

Continued…

Table 15.7.1—*Continued*

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
State							
North Central							
FCT-Abuja	3.6	7.5	10.4	14.3	9.6	20.4	315
Benue	38.4	41.5	44.9	47.6	28.8	54.6	1,240
Kogi	2.1	2.4	2.1	3.5	2.2	6.1	704
Kwara	2.1	2.3	5.1	5.9	1.1	7.5	596
Nasarawa	20.2	33.6	36.6	40.7	26.1	47.7	594
Niger	22.8	30.7	43.6	36.3	27.2	49.8	1,462
Plateau	22.0	37.8	42.6	41.5	35.5	50.0	662
North East							
Adamawa	14.0	25.8	26.4	24.0	28.5	43.4	828
Bauchi	44.8	55.3	71.9	55.7	65.7	80.8	1,161
Borno	2.3	5.1	7.5	2.7	3.9	11.7	1,412
Gombe	36.4	43.1	66.8	51.9	45.0	75.8	550
Taraba	24.7	48.3	53.9	60.1	44.7	66.1	844
Yobe	14.8	24.7	34.9	21.2	34.1	43.6	971
North West							
Jigawa	31.5	37.0	45.6	32.4	39.1	52.7	1,353
Kaduna	8.6	24.2	25.1	25.5	25.5	35.3	2,136
Kano	5.6	8.2	10.4	5.7	9.4	14.9	3,189
Katsina	12.7	8.9	16.3	14.4	9.5	22.5	1,525
Kebbi	41.5	38.3	31.8	43.0	48.8	73.1	1,244
Sokoto	22.3	25.8	29.4	27.1	31.2	35.3	1,098
Zamfara	16.4	18.4	29.5	23.4	17.6	30.5	1,332
South East							
Abia	2.0	29.0	30.0	15.6	8.8	35.9	518
Anambra	5.7	13.5	15.9	19.5	6.0	24.2	1,052
Ebonyi	24.3	51.3	44.1	47.2	19.6	66.2	1,122
Enugu	6.0	23.0	25.6	34.1	8.8	41.2	951
Imo	6.4	19.8	15.7	18.8	8.6	29.0	833
South South							
Akwa Ibom	4.5	9.9	11.0	9.7	7.3	17.1	864
Bayelsa	5.5	10.1	23.0	31.4	9.0	38.7	364
Cross River	33.8	25.3	52.9	52.9	29.4	65.4	703
Delta	3.0	11.9	15.6	17.1	6.1	21.8	993
Edo	5.2	9.9	17.9	27.8	14.7	33.5	742
Rivers	11.8	15.1	18.3	23.3	11.8	27.6	1,276
South West							
Ekiti	4.7	11.1	13.1	19.6	5.1	23.1	326
Lagos	1.2	4.8	3.9	8.1	1.1	11.4	1,964
Ogun	0.8	1.1	1.6	2.1	0.7	3.0	883
Ondo	15.8	26.3	25.9	27.0	14.0	34.0	808
Osun	2.3	10.4	10.2	23.3	3.3	26.4	765
Oyo	4.7	15.3	14.5	15.7	7.8	20.8	1,568
Education							
No education	20.2	26.3	32.7	28.0	27.8	41.6	14,729
Primary	15.7	24.8	28.1	28.7	19.1	38.5	6,734
Secondary	9.7	17.6	20.0	22.3	12.2	30.2	13,927
More than secondary	4.4	8.7	9.7	11.6	7.0	16.9	3,558
Wealth quintile							
Lowest	20.9	27.0	34.1	27.7	29.2	42.9	7,132
Second	21.7	29.8	34.1	32.0	27.3	45.1	7,428
Middle	17.4	26.8	31.4	31.4	21.7	41.7	7,486
Fourth	9.2	16.4	20.0	21.4	12.5	29.5	7,992
Highest	4.4	9.6	10.5	13.1	6.6	18.5	8,910
Total	14.2	21.3	25.3	24.6	18.8	34.7	38,948

The proportion of women who believe that a husband is justified in beating his wife increases with the woman's number of children. Women who are currently married or living together and women who are employed but not for cash are more likely than other women to believe that there are occasions when wife beating is justified. In addition, rural women are more likely than women living in urban areas to believe that wife beating is justified (41 percent and 26 percent, respectively). There are variations across zones in the proportion of women who agree with at least one specified justification for wife beating, ranging from a high of 50 percent in the North East to a low of 18 percent in the South West.

The acceptance of wife beating inversely correlates with education. Women with no education are more than two times as likely as women with more than a secondary education to agree with at least one specified justification for wife beating (42 percent and 17 percent, respectively). Similarly, women in households in the lowest wealth quintile are more than twice as likely to accept at least one reason justifying wife beating as those in households in the highest quintile (43 percent and 19 percent, respectively).

Table 15.7.2 shows men's attitudes toward wife beating. Twenty-five percent of men agree that wife beating is justified in at least one of the specified situations. This proportion is slightly lower than in the 2008 NDHS (30 percent). Although the decrease is not large, it may indicate that wife beating is increasingly unacceptable among men. It is interesting that more women (35 percent) than men (25 percent) agree that husbands are justified in beating their wives for at least one specified reason.

Table 15.7.2 Attitudes toward wife beating: Men

Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Nigeria 2013

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
Age							
15-19	10.6	15.5	14.7	15.9	11.4	27.4	3,619
20-24	7.8	13.5	14.2	15.2	11.4	27.2	2,892
25-29	8.5	12.8	14.3	15.2	12.4	26.0	2,757
30-34	6.3	11.9	12.0	12.1	10.3	23.3	2,414
35-39	6.7	12.6	12.5	13.9	11.8	23.3	2,175
40-44	7.0	12.3	12.2	11.9	10.0	21.4	1,777
45-49	5.6	10.5	11.3	9.7	9.8	19.5	1,724
Employment (last 12 months)							
Not employed	5.8	10.7	9.8	11.5	7.0	20.9	3,461
Employed for cash	7.5	13.0	13.3	13.7	11.1	24.3	12,470
Employed not for cash	15.5	19.7	22.0	20.6	20.9	36.8	1,373
Missing	18.9	21.9	21.2	24.4	25.4	43.4	55
Number of living children							
0	8.3	13.3	13.5	14.4	10.9	25.6	9,177
1-2	7.2	12.5	12.7	13.9	11.0	24.2	2,981
3-4	7.0	13.1	12.8	12.9	10.9	23.3	2,531
5+	7.7	12.8	13.8	12.6	12.4	23.2	2,671
Marital status							
Never married	8.3	13.3	13.8	14.8	10.7	26.0	8,378
Married or living together	7.4	12.8	12.6	12.7	11.5	23.2	8,723
Divorced/separated/widowed	9.3	16.3	20.1	20.2	12.6	32.4	258
Residence							
Urban	5.0	9.5	9.6	11.1	6.7	19.4	7,611
Rural	10.1	15.8	16.2	16.0	14.6	28.7	9,748
Zone							
North Central	10.6	15.0	17.6	18.5	15.3	30.7	2,685
North East	19.1	21.7	21.6	20.9	22.6	34.9	2,515
North West	7.3	11.4	9.7	8.4	13.5	20.8	5,185
South East	4.6	13.3	15.3	13.5	4.5	25.6	1,686
South South	2.7	10.0	14.5	17.3	3.9	26.5	2,445
South West	2.5	9.2	6.3	10.3	2.9	14.8	2,843
State							
North Central							
FCT-Abuja	10.8	11.8	9.9	11.6	13.4	18.0	175
Benue	24.3	28.6	34.0	26.2	23.3	57.0	616
Kogi	0.6	5.0	1.9	15.7	2.7	18.7	333
Kwara	1.8	3.3	3.8	3.5	2.8	6.2	274
Nasarawa	14.7	20.8	27.5	31.7	32.3	45.4	282
Niger	5.2	10.8	14.4	14.0	12.8	19.6	701
Plateau	10.3	15.4	16.4	21.7	15.1	31.7	302
North East							
Adamawa	16.3	21.0	19.3	20.3	20.2	28.0	358
Bauchi	20.5	24.6	29.3	27.9	29.1	41.6	512
Borno	29.9	26.9	23.2	26.2	31.2	40.1	676
Gombe	15.4	22.4	22.4	20.9	20.2	33.7	255
Taraba	15.2	10.8	10.5	13.9	6.2	22.6	325
Yobe	6.8	17.9	19.6	9.2	16.7	34.5	390

Continued…

Table 15.7.2—*Continued*

Background characteristic	Husband is justified in hitting or beating his wife if she: Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	Percentage who agree with at least one specified reason	Number
North West							
Jigawa	4.8	10.2	8.5	10.7	12.6	20.2	510
Kaduna	5.0	10.3	5.7	5.8	6.1	15.1	1,033
Kano	0.4	0.7	0.4	0.3	0.6	1.1	1,592
Katsina	5.3	24.6	1.0	1.5	14.0	28.8	596
Kebbi	23.7	17.0	36.8	19.9	36.9	49.5	551
Sokoto	16.6	16.6	16.5	18.3	27.6	33.2	424
Zamfara	13.2	22.6	24.1	25.5	33.8	44.7	479
South East							
Abia	6.5	20.5	20.3	26.5	6.9	35.4	229
Anambra	0.9	8.4	16.4	5.6	3.4	21.1	446
Ebonyi	2.6	10.5	10.8	11.7	4.2	22.7	368
Enugu	7.3	13.5	14.5	16.9	3.1	26.5	320
Imo	8.0	18.0	16.3	13.7	6.1	27.3	323
South South							
Akwa Ibom	2.8	12.9	15.8	16.5	4.3	26.5	451
Bayelsa	5.4	18.6	8.9	9.8	3.7	25.1	187
Cross River	3.2	19.1	22.3	20.8	5.2	37.0	310
Delta	1.7	4.3	15.1	20.2	5.2	28.1	473
Edo	3.8	9.4	23.9	25.7	4.6	35.1	365
Rivers	1.9	5.7	6.0	11.7	1.7	16.1	658
South West							
Ekiti	0.5	1.8	1.5	2.1	0.0	3.4	148
Lagos	2.0	7.8	5.9	10.5	3.5	14.9	948
Ogun	5.0	15.5	12.0	19.1	6.0	23.4	358
Ondo	7.0	12.4	11.8	16.5	4.0	21.8	404
Osun	0.2	5.7	2.2	4.2	1.0	7.4	356
Oyo	0.9	9.1	3.4	6.3	1.1	12.3	629
Education							
No education	11.6	16.3	15.1	13.8	18.3	27.9	3,685
Primary	9.0	16.6	16.4	15.8	12.5	28.5	2,907
Secondary	7.1	12.7	13.6	15.1	9.0	25.1	8,281
More than secondary	3.1	5.3	6.0	7.3	6.2	13.8	2,486
Wealth quintile							
Lowest	13.8	18.9	17.8	15.9	20.7	31.1	2,862
Second	12.8	17.6	17.6	17.5	17.0	31.4	2,992
Middle	8.0	13.6	14.5	15.3	11.1	26.6	3,338
Fourth	5.3	11.4	12.7	13.6	7.3	23.4	3,835
Highest	2.6	7.1	6.9	9.0	4.2	15.3	4,332
Total	7.8	13.1	13.3	13.9	11.1	24.7	17,359

Similar to women, there are only small age differentials in men's attitudes toward wife beating. The acceptability of wife beating is slightly higher among divorced, separated, and widowed men than among men who have never been married and men who are currently married or living together with a woman.

As was observed for female respondents, men living in rural areas are more likely than men living in urban areas to accept wife beating (29 percent and 19 percent, respectively). Similar to women's beliefs, men's beliefs vary among regions. Men in the North East are most likely to agree that wife beating is justified for at least one specified reason (35 percent), and men in the South West are least likely to agree (15 percent).

Among men, acceptance of wife beating inversely correlates with age. Twenty-seven percent of men age 15-19 agree with at least one specified reason for wife beating, as compared with 20 percent of men age 45-49. Men in the lowest wealth quintile are twice as likely as men in the highest quintile to agree with at least one specified reason for wife beating (31 percent and 15 percent, respectively).

15.7 WOMEN'S EMPOWERMENT INDICES

Two women's empowerment indices were created for the 2013 NDHS, namely women's participation in making household decisions and women's attitudes toward wife beating. The distribution

of women by these two indices was linked to selected demographic and health indicators such as contraceptive use, ideal family size, unmet need for family planning, use of reproductive health care, and childhood mortality.

The index of women's participation in household decisions ranges in value from 0 to 3 and corresponds with the number of decisions in which women participate alone or jointly with their husbands or partners (see Table 15.6.1 for the list of decisions). This index reflects the degree of decision-making control that women are able to exercise in areas that affect their own lives and environments. A high score on this index indicates a high level of empowerment.

The index of women's attitudes toward wife beating ranges in value from 0 to 5 and corresponds with the total number of reasons for which they feel that a husband is justified in beating his wife (see Table 15.7.1 for the list of reasons). A low score on this index reflects a greater sense of self-worth and higher status.

Table 15.8 shows how these two indices relate to each other. In general, the expectation is that women who participate more in making household decisions will be less likely to endorse wife beating. The percentage of women who do not agree with wife beating under any circumstance is highest among women who participate in all three decisions (73 percent). On the other hand, women who do not participate in any decisions and those who participate in one or two decisions have similar levels of endorsement of wife beating (59 percent and 58 percent, respectively). Women who agree with all five justifications for wife beating are least likely (17 percent) to participate in decision making, while women who disagree with all of these justifications are most likely to participate in all decisions (36 percent).

Table 15.8 Indicators of women's empowerment

Percentage of currently married women age 15-49 who participate in all decision making and the percentage who disagree with all of the reasons justifying wife beating, by value on each of the indicators of women's empowerment, Nigeria 2013

Empowerment indicator	Percentage who participate in all decision making	Percentage who disagree with all of the reasons justifying wife beating	Number of women
Number of decisions in which women participate[1]			
0	na	58.8	13,382
1-2	na	58.3	5,733
3	na	73.4	8,714
Number of reasons for which wife beating is justified[2]			
0	36.3	na	17,595
1-2	24.3	na	4,261
3-4	26.6	na	2,966
5	16.6	na	3,008

na = Not applicable
[1] See Table 15.6.1 for the list of decisions.
[2] See Table 15.7.1 for the list of reasons.

15.8 CURRENT USE OF CONTRACEPTION BY WOMEN'S STATUS

A woman's ability to control her fertility and the method of contraception she uses are likely to be affected by her self-image and sense of empowerment. A woman who feels that she is unable to control other aspects of her life may be less likely to feel she can make decisions regarding fertility. She may also feel the need to choose methods that are easier to conceal from her husband or partner.

Table 15.9 shows the relationship of each of the two empowerment indices to current use of contraceptive methods among currently married women age 15-49. The two empowerment indices and contraceptive use are positively associated. For example, the proportion of currently married women who

are using any method of contraception rises from 5 percent among those who do not participate in any household decision making to 29 percent among those who participate in all three decisions. Use of any method of contraception decreases with increases in the number of reasons that a woman thinks wife beating is justified. About one in five women (18 percent) who do not feel that wife beating is justified for any reason are using a contraceptive method, as compared with less than one in 10 women (7 percent) who believe that wife beating is justified for all five reasons. The same pattern is evident with use of any modern contraceptive method.

Table 15.9 Current use of contraception by women's empowerment

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Nigeria 2013

Empowerment indicator	Any method	Any modern method	Modern methods			Any traditional method	Not currently using	Total	Number of women
			Female sterilisation	Temporary modern female methods[1]	Male condom				
Number of decisions in which women participate[1]									
0	5.1	3.4	0.2	2.6	0.6	1.7	94.8	100.0	13,382
1-2	17.3	11.6	0.2	8.4	3.0	5.7	82.6	100.0	5,733
3	28.8	18.0	0.7	13.6	3.8	10.8	71.1	100.0	8,714
Number of reasons for which wife beating is justified[2]									
0	17.5	11.0	0.3	8.2	2.5	6.4	82.4	100.0	17,595
1-2	13.0	8.4	0.2	6.2	1.9	4.6	87.0	100.0	4,261
3-4	11.8	7.8	0.6	5.9	1.3	4.0	88.0	100.0	2,966
5	7.0	5.3	0.4	4.2	0.7	1.7	92.9	100.0	3,008
Total	15.1	9.7	0.3	7.2	2.1	5.4	84.9	100.0	27,830

Note: If more than one method is used, only the most effective method is considered in this tabulation.
[1] Pill, IUD, injectables, implants, female condom, diaphragm, foam/jelly, and lactational amenorrhoea method
[2] See Table 15.6.1 for the list of decisions.
[3] See Table 15.7.1 for the list of reasons.

15.9 IDEAL FAMILY SIZE AND UNMET NEED BY WOMEN'S STATUS

As a woman becomes more empowered, she is more likely to have a say in the number (ideal family size) and spacing of children she desires. Table 15.10 depicts how a woman's ideal family size and her unmet need for family planning vary by the two indices of women's empowerment.

Women who participate in all three decisions desire an average of 5.7 children, as compared with 8.3 children among women who do not participate in any decisions. Similarly, women who accept all five reasons for wife beating have the highest mean ideal number of children, at 7.8, compared with 6.3 children among women who do not justify wife beating for any reason.

There is no variation between the number of decisions in which women participate and their unmet need for family planning. However, women who participate in of the all specified decisions are less likely to have an unmet need for spacing (10 percent) than women who do not participate in any decisions (14 percent). Total unmet need tends to vary inconsistently with number of reasons for which wife beating is justified.

Table 15.10 Ideal number of children and unmet need for family planning by women's empowerment

Mean ideal number of children for women age 15-49 and the percentage of currently married women age 15-49 with an unmet need for family planning, by indicators of women's empowerment, Nigeria 2013

Empowerment indicator	Mean ideal number of children[1]	Number of women	Percentage of currently married women with an unmet need for family planning[2]			Number of women
			For spacing	For limiting	Total	
Number of decisions in which women participate[1]						
0	8.3	12,108	13.5	2.9	16.4	13,382
1-2	6.7	5,275	11.7	4.4	16.1	5,733
3	5.7	8,098	9.5	6.0	15.6	8,714
Number of reasons for which wife beating is justified[2]						
0	6.3	23,687	11.1	4.2	15.3	17,595
1-2	6.7	5,424	13.2	4.2	17.4	4,261
3-4	6.9	3,714	14.3	4.9	19.2	2,966
5	7.8	3,265	12.5	3.6	16.1	3,008
Total	6.5	36,091	11.9	4.2	16.1	27,830

[1] Mean excludes respondents who gave non-numeric responses.
[2] See Table 7.13.1 for the definition of unmet need for family planning.
[3] Restricted to currently married women. See Table 15.6.1 for the list of decisions.
[4] See Table 15.7.1 for the list of reasons.

15.10 WOMEN'S STATUS AND REPRODUCTIVE HEALTH CARE

In societies where health care is widely available, women's status may not affect their access to health services. In other societies, however, increased empowerment is likely to enhance women's ability to seek and use health services to better meet their own reproductive health needs.

Table 15.11 examines whether the extent to which women receive antenatal, delivery, and postnatal care services from health workers varies by their status as measured on the two women's empowerment indices. The proportion of women who received antenatal care from health personnel for a live birth in the five years before the survey increases with the number of decisions in which they participate, from 48 percent among women who do not participate in any decisions to 78 percent among those who have a say in all three decisions.

Table 15.11 Reproductive health care by women's empowerment

Percentage of women age 15-49 with a live birth in the five years preceding the survey who received antenatal care, delivery assistance, and postnatal care from health personnel for the most recent birth, by indicators of women's empowerment, Nigeria 2013

Empowerment indicator	Percentage receiving antenatal care from a skilled provider[1]	Percentage receiving delivery care from a skilled provider[1]	Received postnatal care from health personnel within the first two days since delivery[2]	Number of women with a child born in the last five years
Number of decisions in which women participate[1]				
0	47.6	21.6	23.5	9,750
1-2	64.2	45.6	49.2	4,022
3	78.1	65.3	60.3	5,625
Number of reasons for which wife beating is justified[2]				
0	64.3	44.7	43.0	12,693
1-2	55.5	35.8	37.5	3,231
3-4	58.6	35.6	42.1	2,208
5	49.1	24.1	26.5	2,335
Total	60.6	40.0	40.1	20,467

[1] "Skilled provider" includes doctor, nurse, midwife, or auxiliary nurse/midwife.
[2] Includes women who received a postnatal checkup from a doctor, nurse, midwife, community health worker, or traditional birth attendant in the first two days after the birth. Includes women who gave birth in a health facility and those who did not give birth in a health facility.
[3] Restricted to currently married women. See Table 15.6.1 for the list of decisions.
[4] See Table 15.7.1 for the list of reasons.

Similarly, among women who do not justify wife beating for any reason, 64 percent received antenatal care from health personnel, 45 percent received assistance at delivery, and 43 percent received postnatal care within the first two days after delivery. In contrast, the corresponding proportions among women who justify wife beating for all five specified reasons were 49 percent, 24 percent, and 27 percent.

15.11 DIFFERENTIALS IN INFANT AND CHILD MORTALITY BY WOMEN'S STATUS

The abilities of women to access information, make decisions, and act effectively in their own interests or in the interests of those who depend on them are essential aspects of empowerment. If women, the primary caretakers of children, are empowered, the health and survival of their children will be enhanced. In fact, maternal empowerment fits into Mosley and Chen's framework on child survival as an individual-level variable that affects child survival through proximate determinants (Mosley and Chen, 1984).

Table 15.12 presents childhood mortality rates by the two indices of women's status (participation in household decision making and attitudes toward wife beating). It shows that the likelihood of children surviving increases with improvements in women's empowerment status. For example, in the case of women who make no decisions, infant mortality is 84 deaths per 1,000 live births and under-5 mortality is 163 deaths per 1,000 live births, as compared with 62 deaths per 1,000 live births and 106 deaths per 1,000 live births, respectively, among women who participate in all three decisions.

Similarly, infant mortality and under-5 mortality rise with increases in women's agreement with wife beating. Among women who do not agree with any reason for wife beating, infant mortality and under-5 mortality are 71 and 131 per 1,000 live births, respectively, as compared with 88 and 182 per 1,000 live births for women who agree with all five reasons for wife beating.

Table 15.12 Early childhood mortality rates by women's status

Infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by indicators of women's empowerment, Nigeria 2013

Empowerment indicator	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Number of decisions in which women participate[1]			
0	84	86	163
1-2	75	78	147
3	62	47	106
Number of reasons for which wife beating is justified[2]			
0	71	65	131
1-2	85	76	155
3-4	87	80	160
5	88	103	182

[1] Restricted to currently married women. See Table 15.6.1 for the list of decisions.
[2] See Table 15.7.1 for the list of reasons.

DOMESTIC VIOLENCE 16

Key Findings

- Twenty-eight percent of women age 15-49 have experienced physical violence at least once since age 15, and 11 percent experienced physical violence within the 12 months prior to the survey.
- Seven percent of women age 15-49 report having experienced sexual violence at least once in their lifetime.
- Overall, 25 percent of ever-married women age 15-49 report ever having experienced emotional, physical, or sexual violence from their spouse, and 19 percent report having experienced one or more of these forms of violence in the past 12 months.
- Among ever-married women who had experienced spousal physical violence in the past 12 months, 33 percent reported experiencing physical injuries.
- Forty-five percent of women who experienced violence never sought help or never told anyone about the violence.

Domestic violence is a confrontation between family or household members that typically involves physical harm, sexual assault, or fear of physical harm. Family or household members include spouses, former spouses, those in (or formerly in) a dating relationship, adults related by blood or marriage, and those who have a biological or legal parent-child relationship. Domestic violence can include physical and sexual abuse, emotional abuse, economic abuse, coercion and threats, intimidation, isolation, jealousy, and blame.

Gender-based violence against women has been acknowledged worldwide as a violation of basic human rights. An increasing amount of research highlights the health burdens, intergenerational effects, and demographic consequences of such violence (United Nations, 2006). The World Health Organization defines such violence as "the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, or deprivation" (Krug et al., 2002). This chapter focuses on domestic violence, a form of gender-based violence, which is defined here as any act of violence resulting in physical, sexual, or psychological harm or suffering to women, girls, or men, including threats of such acts, coercion, or arbitrary deprivation of liberty.

In Nigeria, domestic violence is widely acknowledged to be of great concern, not just from a human rights perspective but also from an economic and health perspective. The 2013 NDHS included a special module designed to obtain information on the extent to which women in Nigeria experience domestic violence. These findings may provide evidence that can be used in advocating for improved legislation on domestic violence such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), expansion of domestic violence prevention efforts, and improved services for women who experience domestic violence. Despite ongoing efforts to protect women and vulnerable populations against violence, there is widespread recognition in Nigeria that much remains to be done to protect victims. The 2013 NDHS collected information on domestic violence (also known as spousal violence or intimate partner violence) and violence committed by other family members or unrelated individuals. This chapter presents findings for women age 15-49 who experienced interpersonal physical, emotional, or sexual violence. It describes when and from whom they sought help. The chapter also provides detailed information collected from ever-married women on their experiences of spousal

emotional, physical, and sexual violence; the physical consequences of the violence; and when the violence first began in the relationship. In addition, information is included on women's perpetration of spousal violence.

16.1 MEASUREMENT OF VIOLENCE

Collecting valid, reliable, and ethical data on intimate partner violence poses particular challenges because what constitutes violence or abuse varies across cultures and individuals and a "culture of silence" can create sensitivity and affect reporting. Assuring the safety of respondents and interviewers when asking questions about domestic violence in a familiar setting and protecting those women who disclose violence raise specific ethical concerns.

16.1.1 Use of Valid Measures of Violence

The 2013 NDHS measured violence committed by spouses and by other household members. Accordingly, information was obtained from ever-married women on violence committed by spouses and others and from never-married women on violence committed by anyone, including boyfriends. International research on violence shows that intimate partner violence is one of the most common forms of violence against women. Thus, spousal/partner violence was measured in more detail than violence committed by other perpetrators through the use of a greatly shortened and modified version of the Conflict Tactics Scale (CTS) (Straus, 1990). Specifically, spousal violence by the husband/partner for currently married women and the most recent husband/partner for formerly married women was measured by asking all ever-married women the following set of questions:

Does (did) your (last) husband/partner ever:

(a) Say or do something to humiliate you in front of others?
(b) Threaten to hurt or harm you or someone close to you?
(c) Insult you or make you feel bad about yourself?

Does (did) your (last) husband/partner ever do any of the following things to you?

(d) Push you, shake you, or throw something at you?
(e) Slap you?
(f) Twist your arm or pull your hair?
(g) Punch you with his fist or with something that could hurt you?
(h) Kick you, drag you, or beat you up?
(i) Try to choke you or burn you on purpose?
(j) Threaten or attack you with a knife, gun, or any other weapon?
(k) Physically force you to have sexual intercourse with him even when you did not want to?
(l) Physically force you to perform any other sexual acts you did not want to?
(m) Force you with threats or in any other way to perform sexual acts you did not want to?

When the answer to any of these questions was "yes," women were asked about the frequency of the act in the 12 months preceding the survey. A yes answer to one or more of items (a) to (c) above constitutes evidence of emotional violence, a yes answer to one or more of items (d) to (j) constitutes evidence of physical violence, and a yes answer to one or more of items (k) to (m) constitutes evidence of sexual violence.

This approach of asking about specific acts to measure different forms of violence has the advantage of not being affected by different understandings of what constitutes a summary term such as violence. By including a wide range of acts, the approach also has the advantage of giving the respondent multiple opportunities to disclose any experience of violence.

In addition to these questions asked only of ever-married women, *all* women were asked about physical violence perpetrated by others with the following question: "From the time you were 15 years old, has anyone [other than your current (last) husband/partner] hit, slapped, kicked, or done anything else to hurt you physically?" Respondents who answered this question in the affirmative were asked who committed the violence against them. A similar question was used to ask women who had ever been pregnant about violence during pregnancy. Women were also asked about sexual violence committed by anyone other than the current husband/partner using the question "At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?"

Although this approach to questioning is generally considered to be optimal, the possibility of underreporting of violence cannot be entirely ruled out in any survey.

16.1.2 Ethical Considerations

Three specific protections were built into the survey questionnaire in accordance with the World Health Organization's ethical and safety recommendations for research on domestic violence (WHO, 2001):

1. The DHS protocol specifies that the domestic violence module can be administered to only one randomly selected woman per household. Therefore, in households with more than one eligible woman, the respondent for the module was selected using the Kish grid built into the Household Questionnaire (Kish, 1965). Interviewing only one woman in each household for the domestic violence module provides assurance to the selected respondent that other respondents in the household will not know about the questions she was asked.

2. Informed consent for the survey was obtained from the respondent at the beginning of the individual interview. Also, at the beginning of the domestic violence section, respondents were read an additional statement informing them that the subsequent questions could be sensitive and reassuring them of the confidentiality of their responses.

3. The domestic violence module was implemented only if privacy could be obtained. If privacy could not be obtained, the interviewer was instructed to skip the module, thank the respondent, and end the interview.

Complete privacy is also essential for ensuring the security of the respondent and the interviewer. Asking about or reporting violence, especially in households where the perpetrator may be present at the time of the interview, carries the risk of further violence. Furthermore, collection of such sensitive information requires the establishment of rapport between the interviewer and the respondent. Accordingly, interviewers were provided with specific training on implementing the domestic violence module to enable the field staff to collect violence data in a secure, confidential, and ethical manner.

16.1.3 Subsample for the Violence Module

As mentioned above, in keeping with ethical requirements, only one woman per household was selected for the module. In all, 27,634 (unweighted) women were interviewed. Specially constructed weights were used to adjust for the selection of only one woman per household and to ensure that the domestic violence subsample was nationally representative.

16.2 WOMEN EXPERIENCING PHYSICAL VIOLENCE

In Nigeria, domestic violence cuts across all socioeconomic and cultural backgrounds. Table 16.1 shows the percentage of women age 15-49 who have experienced physical violence since age 15 and the percentage who experienced physical violence during the 12 months preceding the survey, by background

characteristics. The results show that 28 percent of all women have experienced physical violence since age 15; this proportion is virtually the same as that found in the 2008 NDHS. The proportion of women who experienced physical violence in the 12 months preceding the survey decreased from 15 percent in 2008 to 11 percent in 2013.

The experience of physical violence since age 15 varies substantially by background characteristics. By age group, experiences of physical violence since age 15 increase from 27 percent among women age 15-19 to 29 percent among women age 20-24 and then decrease to 28 percent among women age 25-29. Twenty-five percent of women age 40-49 have experienced physical violence at some time since age 15, while 15 percent of women age 15-19 experienced violence during the 12 months preceding the survey.

Experiences of physical violence vary among religious groups, with Catholic and other Christian (Protestant) women (44 percent each) more likely to report experiences of violence than any other religious group. The experience of physical violence is also high among women in the traditionalist group, with 36 percent of these women experiencing physical violence since age 15 and 23 percent experiencing violence during the 12 months preceding the survey. Experience of physical violence is lowest among Muslim women (13 percent).

Women who are divorced, separated, or widowed are far more likely to have experienced physical violence than other women. Forty-two percent of divorced, separated, or widowed women reported experiencing violence since age 15, as compared with 25 percent of women who are married or living together with a partner and 35 percent of never-married women.

Differentials in experiences of physical violence by number of living children are small; however, women with no children (30 percent) are more likely to have experienced physical violence since age 15 than other women. Experiences of physical violence in the past 12 months tend to decrease with increases in the number of living children.

Women who are employed but are not paid in cash are more likely than other women to have experienced physical violence since age 15 and during the 12 months preceding the survey (45 percent and 20 percent, respectively). It is interesting to note that unemployed women are least likely to have experienced physical violence; 23 percent of these women reported having experienced physical violence since age 15, and 10 percent reported experiencing violence during the 12 months preceding the survey.

Women in urban areas are more likely than their rural counterparts to report having experienced physical violence since age 15 (33 percent versus 24 percent). There are notable variations in the experience of physical violence by zone. The proportion of women experiencing physical violence since age 15 is highest in the South South (52 percent) and lowest in the North West (7 percent). The same pattern is observed for experiences of physical violence in the past 12 months (19 percent in the South South versus 3 percent in the North West). The percentage of women age 15-49 who have experienced physical violence since age 15 varies from a low of 1 percent in Kano to a high of 72 percent in Benue.

Women with primary and secondary levels of schooling are more likely than other women to have experienced physical violence since age 15. Women who never attended school are least likely to have experienced physical violence since age 15 (12 percent). A similar pattern is observed for physical violence in the past 12 months. The experience of physical violence generally increases with increasing wealth. A slight decrease in physical violence in the past 12 months is observed between the fourth and highest quintiles.

Table 16.1 Experience of physical violence

Percentage of women age 15-49 who have experienced physical violence since age 15 and percentage who experienced violence during the 12 months preceding the survey, by background characteristics, Nigeria 2013

Background characteristic	Percentage who have experienced physical violence since age 15[1]	Percentage who experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes[2]	
Age					
15-19	26.5	1.6	13.2	14.9	5,417
20-24	29.1	1.7	9.2	10.8	4,813
25-29	27.6	1.8	8.5	10.3	5,034
30-39	30.0	1.8	9.6	11.4	7,233
40-49	25.1	1.3	6.8	8.1	5,137
Religion					
Catholic	44.0	1.8	16.0	17.9	3,007
Other Christian	43.6	2.6	14.5	17.1	9,885
Islam	13.3	0.8	4.6	5.5	14,340
Traditionalist	36.3	8.4	14.7	23.0	258
Missing	36.2	1.0	11.3	12.4	140
Marital status					
Never married	34.9	1.4	12.6	14.0	6,438
Married or living together	24.6	1.5	8.4	10.0	19,925
Divorced/separated/ widowed	42.3	4.5	11.7	16.3	1,272
Number of living children					
0	30.4	1.3	11.0	12.3	8,176
1-2	29.0	1.9	9.3	11.3	7,025
3-4	27.2	1.8	9.1	10.9	6,429
5+	23.5	1.5	8.3	9.8	6,005
Employment					
Employed for cash	29.0	1.8	8.9	10.7	15,921
Employed not for cash	44.8	2.4	17.7	20.1	1,612
Not employed	23.2	1.3	9.1	10.4	10,038
Residence					
Urban	32.7	1.5	9.7	11.3	11,628
Rural	24.3	1.7	9.4	11.1	16,007
Zone					
North Central	30.5	2.1	11.9	14.0	3,882
North East	29.5	1.2	11.8	13.0	4,079
North West	6.9	0.5	2.8	3.3	8,531
South East	38.3	1.6	12.6	14.1	3,142
South South	52.2	3.0	15.8	18.8	3,518
South West	37.1	2.8	11.1	13.9	4,482
State					
North Central					
FCT-Abuja	41.6	0.9	9.1	10.0	216
Benue	72.1	5.5	33.3	39.0	873
Kogi	18.8	0.6	5.0	5.6	497
Kwara	9.3	0.6	2.8	3.4	424
Nasarawa	23.0	1.4	9.4	10.8	394
Niger	7.7	1.4	3.2	4.5	1,036
Plateau	36.5	1.2	10.3	11.5	442
North East					
Adamawa	68.8	3.4	26.5	30.1	578
Bauchi	22.4	0.1	8.3	8.5	798
Borno	15.4	0.5	5.9	6.5	1,014
Gombe	17.5	0.8	7.9	8.8	382
Taraba	56.9	2.7	20.5	23.4	607
Yobe	8.2	0.3	6.4	6.7	700
North West					
Jigawa	7.9	0.2	2.5	2.7	959
Kaduna	19.0	0.5	8.8	9.3	1,553
Kano	1.1	0.0	0.7	0.7	2,280
Katsina	4.7	1.2	0.7	1.9	1,088
Kebbi	7.6	1.6	2.8	4.4	905
Sokoto	4.6	0.7	1.6	2.4	795
Zamfara	4.3	0.1	1.8	1.9	951
South East					
Abia	21.2	1.9	5.0	6.9	373
Anambra	39.5	1.0	10.8	11.9	758
Ebonyi	42.4	2.1	13.7	15.8	785
Enugu	51.5	1.5	18.2	19.7	644
Imo	27.4	1.5	11.8	13.4	581

Continued…

Table 16.1—*Continued*

Background characteristic	Percentage who have experienced physical violence since age 15[1]	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes[2]	
South South					
Akwa Ibom	59.5	4.5	28.0	32.4	610
Bayelsa	56.1	2.0	17.9	19.8	264
Cross River	65.5	4.1	15.2	19.3	484
Delta	22.1	2.3	5.9	8.2	721
Edo	75.4	4.0	23.1	27.1	527
Rivers	49.6	1.8	11.0	12.9	911
South West					
Ekiti	25.8	2.9	9.7	12.6	236
Lagos	43.9	2.9	12.1	15.0	1,365
Ogun	22.8	0.6	10.2	10.8	629
Ondo	43.7	4.8	15.8	20.6	575
Osun	12.8	0.4	3.6	4.1	556
Oyo	48.0	4.0	12.1	16.1	1,121
Education					
No education	11.8	1.0	4.6	5.6	10,479
Primary	36.5	2.6	13.3	15.9	4,809
Secondary	38.6	2.1	14.0	16.1	9,841
More than secondary	35.6	0.7	5.2	6.0	2,505
Wealth quintile					
Lowest	12.8	1.0	5.4	6.4	5,069
Second	23.3	1.7	9.7	11.4	5,275
Middle	30.0	2.2	11.3	13.5	5,301
Fourth	33.1	1.9	10.8	12.7	5,683
Highest	37.0	1.4	10.1	11.5	6,307
Total	27.8	1.6	9.5	11.2	27,634

Note: Total includes 63 cases with missing information on employment.
[1] Includes violence in the past 12 months. For women who were married before age 15 and who reported physical violence by a spouse, the violence could have occurred before age 15.
[2] Includes women for whom frequency in the past 12 months is not known

16.3 PERPETRATORS OF PHYSICAL VIOLENCE

Table 16.2 shows the percentage of women age 15-49 who reported experiencing physical violence since age 15 by the specific persons who committed the violence, according to marital status. The most commonly reported perpetrator of physical violence is the current husband or partner. A total of 36 percent of women who have experienced violence since age 15 reported their current husband or partner as the perpetrator, while 11 percent reported their former husband or partner. Among ever-married women, 51 percent reported that their current husband or partner committed physical violence against them, and 15 percent reported that their former husband or partner did so. Among all women who experienced physical violence, the next most commonly mentioned perpetrator was their mother or stepmother (29 percent), followed by their sister or brother (23 percent) and their father or stepfather (21 percent). Among never-married women, the mother or stepmother was mentioned as the most common perpetrator of physical violence (41 percent). Nearly one third of never-married women reported teachers as the perpetrator of physical violence (32 percent).

Table 16.2 Persons committing physical violence

Among women age 15-49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, according to the respondent's current marital status, Nigeria 2013

Person	Marital status		Total
	Ever married	Never married	
Current husband/partner	51.0	na	36.1
Former husband/partner	14.8	na	10.5
Current boyfriend	0.9	2.9	1.5
Former boyfriend	1.8	3.9	2.5
Father/stepfather	17.4	31.0	21.3
Mother/stepmother	23.7	40.6	28.6
Sister/brother	18.8	32.7	22.9
Daughter/son	0.2	0.3	0.3
Other relative	6.0	8.2	6.7
Mother-in-law	0.6	na	0.4
Father-in-law	0.1	na	0.1
Other in-law	1.6	na	1.3
Teacher	12.0	32.3	17.9
Employer/someone at work	0.5	0.7	0.6
Police/soldier	0.3	0.1	0.2
Other	1.4	0.3	1.1
Number of women who have experienced physical violence since age 15	5,438	2,244	7,682

na = Not applicable

16.4 EXPERIENCE OF SEXUAL VIOLENCE

The 2013 NDHS asked women whether they had experienced sexual violence in their lifetime. As shown in Table 16.3, 7 percent of women age 15-49 reported that they had experienced sexual violence at some time. There is no pronounced difference among the age groups. The experience of sexual violence ranges from 6 percent among women age 15-19 to 9 percent among women age 20-24. Catholics and other Christians are more likely to report sexual violence (11 percent and 10 percent, respectively) than women in other religious groups.

Women who are divorced, separated, or widowed are more likely to have experienced sexual violence (15 percent) than currently married women (7 percent) and never-married women (8 percent). Women who are employed but not paid in cash are most likely to have experienced sexual violence (17 percent), while unemployed women are least likely (6 percent). Differences in the experience of sexual violence are also seen by residence, zone, and state. By zone, the experience of sexual violence ranges from 2 percent in the North West to 10 percent in the South South and 16 percent in the North East.

Women with no education are less likely to have experienced sexual violence (5 percent) than women who have been to school (8-10 percent). There is no clear relationship between sexual violence and wealth, although women in the lowest wealth quintile are less likely to report sexual violence than women in the other quintiles.

Three percent of women report having experienced sexual violence in the 12 months preceding the survey. The variation by background characteristics among women who experienced sexual violence in the past 12 months is similar to the variation among women who had ever experienced sexual violence. However, there does not seem to be a clear relationship with education.

Table 16.3 Experience of sexual violence

Percentage of women age 15-49 who have ever experienced sexual violence and percentage who experienced sexual violence in the 12 months preceding the survey, by background characteristics, Nigeria 2013

Background characteristic	Percentage who have experienced sexual violence: Ever[1]	In the past 12 months	Number of women
Age			
15-19	5.6	2.3	5,417
20-24	8.5	3.9	4,813
25-29	8.4	4.2	5,034
30-39	7.7	3.5	7,233
40-49	6.7	2.6	5,137
Religion			
Catholic	11.4	4.4	3,007
Other Christian	10.2	3.9	9,885
Islam	4.6	2.7	14,340
Traditionalist	8.3	3.5	258
Missing	5.5	1.6	140
Marital status			
Never married	7.6	1.5	6,438
Married or living together	6.8	3.7	19,925
Divorced/separated/ widowed	15.2	5.4	1,272
Number of living children			
0	7.3	2.3	8,176
1-2	8.0	4.0	7,025
3-4	7.2	3.4	6,429
5+	7.0	3.8	6,005
Employment			
Employed for cash	7.1	3.2	15,921
Employed not for cash	17.0	7.4	1,612
Not employed	6.3	2.8	10,038
Residence			
Urban	6.8	2.4	11,628
Rural	7.8	3.9	16,007

Continued…

Table 16.3—*Continued*

Background characteristic	Percentage who have experienced sexual violence: Ever[1]	In the past 12 months	Number of women
Zone			
North Central	9.6	4.2	3,882
North East	15.7	9.4	4,079
North West	2.3	1.1	8,531
South East	8.4	3.5	3,142
South South	10.3	3.1	3,518
South West	4.6	1.1	4,482
State			
North Central			
FCT-Abuja	9.0	0.6	216
Benue	20.3	10.5	873
Kogi	3.2	0.5	497
Kwara	0.6	0.3	424
Nasarawa	9.5	3.5	394
Niger	3.3	2.3	1,036
Plateau	19.2	6.3	442
North East			
Adamawa	38.4	24.1	578
Bauchi	16.1	10.1	798
Borno	3.0	1.6	1,014
Gombe	14.4	9.9	382
Taraba	28.1	13.7	607
Yobe	4.9	4.0	700
North West			
Jigawa	3.5	1.8	959
Kaduna	4.6	2.4	1,553
Kano	0.7	0.5	2,280
Katsina	0.6	0.5	1,088
Kebbi	3.0	1.0	905
Sokoto	3.7	1.6	795
Zamfara	0.8	0.1	951
South East			
Abia	5.5	1.0	373
Anambra	3.8	1.9	758
Ebonyi	11.5	4.8	785
Enugu	9.7	4.2	644
Imo	10.9	4.4	581
South South			
Akwa Ibom	9.1	3.3	610
Bayelsa	6.5	3.2	264
Cross River	20.0	6.9	484
Delta	3.2	0.5	721
Edo	7.7	2.0	527
Rivers	14.2	3.8	911
South West			
Ekiti	6.6	0.9	236
Lagos	5.8	0.8	1,365
Ogun	4.3	1.3	629
Ondo	5.2	1.3	575
Osun	2.2	0.3	556
Oyo	3.9	1.9	1,121
Education			
No education	5.3	3.2	10,479
Primary	9.7	4.8	4,809
Secondary	8.2	3.1	9,841
More than secondary	8.4	2.1	2,505
Wealth quintile			
Lowest	6.0	3.4	5,069
Second	8.8	4.5	5,275
Middle	8.7	4.7	5,301
Fourth	6.6	2.3	5,683
Highest	6.9	2.0	6,307
Total	7.4	3.3	27,634

Note: Total includes 63 cases with missing information on employment.
[1] Includes violence in the past 12 months

16.5 PERSONS COMMITTING SEXUAL VIOLENCE

Table 16.4 shows the percentage of women age 15-49, by marital status, who have ever experienced sexual violence according to the specific persons who committed the violence. Among ever-married women, the current husband is the most commonly reported perpetrator of sexual violence (58 percent). The next most common perpetrator is a former husband (22 percent). Among all women, 13 percent have experienced sexual violence perpetrated by a stranger and 10 percent by a friend or acquaintance.

Table 16.4 Persons committing sexual violence

Among women age 15-49 who have experienced sexual violence, percentage who report specific persons who committed the violence, according to the respondent's current marital status, Nigeria 2013

Person	Marital status: Ever married	Marital status: Never married	Total
Current husband/partner	57.9	na	44.0
Former husband/partner	21.6	na	16.4
Current/former boyfriend	9.4	22.9	12.7
Father/stepfather	0.3	0.6	0.4
Brother/stepbrother	0.4	0.6	0.5
Other relative	1.9	10.0	3.8
In-law	0.6	na	0.7
Own friend/acquaintance	6.9	21.0	10.3
Family friend	2.4	9.5	4.1
Teacher	0.7	1.2	0.8
Employer/someone at work	0.3	0.4	0.3
Police/soldier	0.2	0.0	0.1
Priest/religious leader	0.1	0.2	0.1
Stranger	8.0	29.2	13.1
Other	0.1	0.2	0.2
Missing	0.5	0.7	0.5
Number of women who have experienced sexual violence	1,551	490	2,041

na = Not applicable

16.6 AGE AT FIRST EXPERIENCE OF SEXUAL VIOLENCE

Table 16.5 presents information on the specific age at first experience of sexual violence for women age 15-49 who have ever experienced sexual violence, according to background characteristics. Five percent of women age 25-29 who have ever experienced sexual violence were age 22 when they first experienced the violence, and 4 percent of women age 30-39 were age 22 at their first experience of sexual violence. Seven percent of never-married women who have experienced sexual violence were age 22 when they first experienced the violence.

Table 16.5 Age at first experience of sexual violence

Percentage of women age 15-49 who experienced sexual violence by specific exact ages, according to current age and current marital status, Nigeria 2013

Background characteristic	Percentage who first experienced sexual violence by exact age: 10	12	15	18	22	Percentage who have not experienced sexual violence	Number of women
Age							
15-19	0.4	0.6	2.6	na	na	94.4	5,417
20-24	0.2	0.4	1.2	3.9	na	91.5	4,813
25-29	0.3	0.6	1.3	3.2	5.0	91.6	5,034
30-39	0.2	0.3	1.0	2.4	4.1	92.3	7,233
40-49	0.1	0.3	0.8	1.6	2.9	93.3	5,137
Marital status							
Never married	0.5	0.9	2.6	5.1	6.5	92.4	6,438
Ever married	0.2	0.3	1.0	2.6	4.3	92.7	21,196
Total	0.2	0.4	1.4	3.2	4.8	92.6	27,634

na = Not applicable

16.7 EXPERIENCE OF DIFFERENT FORMS OF VIOLENCE

Table 16.6 presents information on women age 15-49 who reported experiencing various combinations of physical and sexual violence, by current age. Overall, 30 percent of women reported that they had experienced either physical or sexual violence. About one in five women experienced only physical violence, 2 percent experienced only sexual violence, and 6 percent experienced both physical and sexual violence. There is not substantial variation in the experience of different forms of violence by age.

Table 16.6 Experience of different forms of violence

Percentage of women age 15-49 who have ever experienced different forms of violence by current age, Nigeria 2013

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
15-19	22.7	1.8	3.8	28.3	5,417
15-17	22.4	1.7	3.3	27.3	3,370
18-19	23.3	2.1	4.5	29.9	2,047
20-24	22.6	2.1	6.4	31.2	4,813
25-29	21.1	1.9	6.6	29.5	5,034
30-39	23.8	1.5	6.2	31.5	7,233
40-49	19.9	1.5	5.2	26.6	5,137
Total	22.2	1.8	5.6	29.6	27,634

16.8 VIOLENCE DURING PREGNANCY

Experiencing violence during pregnancy not only affects the health of a woman but also can have serious consequences for her unborn child. Respondents to the domestic violence module who had ever been pregnant (whether or not the pregnancy resulted in a live birth) were asked specifically whether they had ever experienced physical violence while pregnant and, if so, who the perpetrators of the violence were. Table 16.7 presents findings on violence during pregnancy according to selected background characteristics. Overall, 5 percent of women who have ever been pregnant reported that they experienced violence during one or more of their pregnancies.

Violence during pregnancy is highest, at 6 percent, among women currently age 15-24 and 30-39 and lowest among women age 40-49 (4 percent). Notably, the prevalence of violence during pregnancy is higher among Catholic and other Christian women (10 percent and 9 percent, respectively) than among Muslim women (2 percent). Women who have never been married are more likely than other women to have experienced violence during pregnancy (14 percent). Thirteen percent of women who are divorced, separated, or widowed have experienced violence during pregnancy. Only small proportions of women who are married or living together with a partner reported that they had ever experienced violence while pregnant.

The prevalence of violence during pregnancy varies little by urban-rural residence but shows greater variations by zone and state. Women in the South South (9 percent), South East (8 percent), and North East (8 percent) are most likely to experience violence during pregnancy, while women in the North West are least likely (2 percent). There is high variation in the experience of violence during pregnancy among states.

Table 16.7 Experience of violence during pregnancy

Among women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, by background characteristics, Nigeria 2013

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Age		
15-19	6.0	1,266
20-24	5.8	3,275
25-29	5.1	4,338
30-39	5.9	6,819
40-49	3.7	4,985
Religion		
Catholic	9.7	1,919
Other Christian	9.0	6,790
Islam	2.2	11,635
Traditionalist	7.4	226
Missing	8.8	109
Marital status		
Never married	14.2	596
Married or living together	4.4	18,894
Divorced/separated/ widowed	12.5	1,193
Number of living children		
0	3.9	1,224
1-2	6.0	7,025
3-4	5.2	6,429
5+	4.6	6,005
Residence		
Urban	6.0	7,839
Rural	4.7	12,844
Zone		
North Central	5.8	2,869
North East	8.2	3,220
North West	1.8	7,079
South East	8.1	1,908
South South	9.0	2,376
South West	4.6	3,231
State		
North Central		
FCT-Abuja	1.9	141
Benue	16.9	646
Kogi	2.4	338
Kwara	0.6	292
Nasarawa	4.3	310
Niger	1.0	823
Plateau	7.4	319
North East		
Adamawa	27.1	439
Bauchi	3.9	693
Borno	6.3	730
Gombe	2.5	315
Taraba	11.9	492
Yobe	0.8	552

Continued…

Women with no education (3 percent) are less likely to experience physical violence during pregnancy than women with any education (4 percent to 8 percent). In addition, women in the lowest wealth quintile are less likely than other women to experience violence during pregnancy.

Table 16.7—*Continued*

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
North West		
Jigawa	0.9	848
Kaduna	7.9	1,262
Kano	0.2	1,753
Katsina	0.2	967
Kebbi	0.3	756
Sokoto	0.4	668
Zamfara	1.0	825
South East		
Abia	5.9	246
Anambra	5.0	435
Ebonyi	12.5	495
Enugu	9.5	386
Imo	5.7	347
South South		
Akwa Ibom	8.7	398
Bayelsa	9.4	198
Cross River	12.2	377
Delta	3.8	444
Edo	8.0	300
Rivers	11.1	659
South West		
Ekiti	3.0	158
Lagos	5.6	954
Ogun	3.9	512
Ondo	6.3	411
Osun	2.9	376
Oyo	4.0	821
Education		
No education	2.6	9,332
Primary	8.1	4,144
Secondary	7.7	5,660
More than secondary	4.0	1,547
Wealth quintile		
Lowest	2.8	4,377
Second	5.6	4,298
Middle	6.6	3,924
Fourth	7.0	3,985
Highest	4.3	4,099
Total	5.2	20,683

16.9 MARITAL CONTROL BY HUSBAND OR PARTNER

Attempts by husbands/partners to closely control and monitor their wives' behaviour have been found to be important early warning signs and correlates of violence in a relationship. A series of questions were included in the 2013 NDHS to elicit the degree of marital control exercised by the husband/partner over the respondent. Controlling behaviours most often manifest themselves in terms of extreme possessiveness, jealousy, and attempts to isolate the woman from her family and friends.

To examine the degree of marital control by husbands of their wives, ever-married women were asked whether they had experienced any of the following five controlling behaviours by their husbands: (1) he is jealous or angry if she talks to other men; (2) he frequently accuses her of being unfaithful; (3) he does not permit her to meet her female friends; (4) he tries to limit contact with her family; and (5) he insists on knowing where she is at all times. Because the combination of such behaviours is more significant than the display of any single behaviour, the proportion of women whose husbands display at least three of the specified behaviours is highlighted. Table 16.8 presents the percentage of ever-married women whose husbands or partners display each of the listed behaviours, three or more of these behaviours, and none of these behaviours by selected background characteristics.

The main controlling behaviours women experienced from their husbands were jealousy or anger if they talked to other men and husbands insisting on knowing where they are at all times (57 percent and 37 percent, respectively). The next most common behaviours were the husband frequently accusing them of being unfaithful and not permitting them to meet female friends (10 percent each). Thirteen percent of ever-married women reported that their husbands display three or more of these controlling behaviours. With respect to religious groups, traditionalist women are most likely to report that their husbands display at least three controlling behaviours (22 percent), followed by Catholic women (21 percent). Women who are divorced, separated, or widowed are more likely than currently married women to say that their husband engaged in at least three controlling behaviours (24 percent versus 12 percent).

Women in the North East are most likely to report that their husband or partner engages in at least three controlling behaviours (20 percent), followed by women in the South East and South South (18 percent each). On the other hand, only 7 percent of women in the North West say that their husband engages in at least three of the behaviours. Women with no education and those with more than a secondary education are less likely than women with a primary or secondary education to report that their husband engages in at least three controlling behaviours. Women in the middle wealth quintile report the

highest percentages of husbands who exhibit at least three controlling behaviours. Women who are afraid of their husband most of the time are more likely than women who are never afraid of their husband to report that their husbands display at least three controlling behaviours (28 percent versus 9 percent).

Table 16.8 Marital control exercised by husbands

Percentage of ever-married women age 15-49 whose husbands/partners have ever demonstrated specific types of controlling behaviours, by background characteristics, Nigeria 2013

Background characteristic	Percentage of women whose husband/partner: Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays 3 or more of the specific behaviours	Displays none of the specific behaviours	Number of ever-married women
Age								
15-19	63.9	7.6	10.2	8.2	38.5	12.1	30.7	1,633
20-24	63.0	10.0	10.9	7.9	39.0	13.9	30.8	3,278
25-29	60.0	10.3	11.7	7.4	40.0	14.2	33.1	4,323
30-39	56.5	10.4	10.5	6.5	38.1	13.3	36.3	6,877
40-49	48.8	9.9	8.8	6.1	33.0	11.4	43.5	5,086
Religion								
Catholic	45.5	17.7	16.7	12.0	41.7	21.4	41.7	1,921
Other Christian	47.8	13.5	13.4	7.9	38.7	16.5	41.4	6,531
Islam	63.6	6.8	7.6	5.6	36.2	9.7	32.4	12,398
Traditionalist	52.2	18.9	16.0	10.4	33.2	21.5	36.9	230
Missing	61.0	5.1	14.8	7.5	38.4	16.1	35.2	112
Marital status								
Married or living together	57.1	9.3	9.7	6.4	37.1	12.3	36.2	19,925
Divorced/separated/ widowed	54.5	21.6	21.6	15.1	42.9	24.2	34.7	1,272
Number of living children								
0	60.2	9.3	10.8	8.5	40.0	13.8	33.5	2,130
1-2	58.4	10.1	11.0	7.7	38.6	13.4	34.2	6,649
3-4	56.4	10.0	10.4	6.4	37.8	13.3	36.6	6,415
5+	54.8	10.1	9.5	6.2	34.8	12.0	38.5	6,002
Employment								
Employed for cash	54.0	10.4	10.0	6.5	37.6	12.8	38.3	14,121
Employed not for cash	56.4	14.4	18.2	13.2	44.4	21.0	33.3	1,077
Not employed	64.1	8.3	9.9	6.8	35.9	12.1	31.3	5,952
Residence								
Urban	53.8	9.6	10.6	6.4	41.8	13.3	37.1	7,883
Rural	58.9	10.3	10.2	7.3	34.8	12.9	35.4	13,313
Zone								
North Central	56.0	16.1	12.8	8.3	37.2	14.9	35.2	2,929
North East	79.3	11.5	17.5	13.0	46.7	20.4	16.2	3,476
North West	60.9	5.2	4.2	3.3	32.3	6.5	36.1	7,519
South East	32.9	11.9	14.9	12.8	37.8	17.7	51.4	1,870
South South	47.6	14.3	14.0	7.4	36.1	17.6	44.0	2,182
South West	44.7	10.1	9.8	4.1	40.2	12.6	43.9	3,220
State								
North Central								
FCT-Abuja	41.4	4.1	10.8	5.3	30.0	8.6	51.1	146
Benue	59.5	33.7	30.8	22.0	52.8	37.4	24.4	665
Kogi	44.0	2.0	7.0	2.3	34.1	6.6	53.0	336
Kwara	47.3	3.1	4.7	0.5	36.8	5.1	44.4	294
Nasarawa	40.4	13.1	11.4	4.5	38.4	14.3	46.8	311
Niger	76.3	13.6	4.3	1.4	32.8	4.9	22.6	848
Plateau	38.2	21.0	14.2	16.3	23.2	15.8	45.1	330
North East								
Adamawa	67.6	16.2	24.4	16.0	65.7	28.1	15.8	447
Bauchi	81.1	18.3	26.3	29.2	60.0	35.2	12.5	734
Borno	72.2	1.1	6.6	5.5	7.3	4.4	27.6	848
Gombe	92.0	20.5	11.6	9.2	88.6	21.6	4.0	336
Taraba	84.7	15.8	23.1	6.8	56.5	23.2	12.1	500
Yobe	84.1	5.8	15.6	8.7	40.8	16.5	15.2	612
North West								
Jigawa	63.9	4.1	7.7	5.2	19.7	7.6	32.7	920
Kaduna	73.3	18.6	8.7	1.4	42.2	17.3	20.9	1,262
Kano	72.0	1.5	2.5	2.3	60.0	2.7	26.2	1,899
Katsina	41.6	0.8	2.6	1.6	14.4	3.1	57.8	1,031
Kebbi	32.8	6.1	5.7	13.4	23.1	12.8	61.0	804
Sokoto	33.6	1.7	0.8	0.8	25.5	1.3	63.8	717
Zamfara	86.9	2.2	0.8	0.9	6.9	0.7	12.5	885

Continued…

Table 16.8—*Continued*

Background characteristic	Percentage of women whose husband/partner: Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays 3 or more of the specific behaviours	Displays none of the specific behaviours	Number of ever-married women
South East								
Abia	24.4	9.9	8.3	4.0	25.9	9.4	66.0	234
Anambra	22.8	6.4	5.5	3.0	22.0	6.4	69.3	447
Ebonyi	38.8	20.3	24.8	23.8	52.9	29.4	34.3	458
Enugu	43.5	10.3	19.8	20.9	41.9	21.8	41.7	378
Imo	32.4	11.1	13.2	8.3	41.6	18.2	51.8	352
South South								
Akwa Ibom	46.3	14.9	14.4	6.9	40.2	16.7	41.9	355
Bayelsa	77.0	12.4	6.4	3.7	47.8	11.8	16.7	172
Cross River	62.6	26.2	25.8	16.0	57.5	39.6	29.9	341
Delta	25.1	5.6	7.4	3.5	22.4	5.7	67.3	432
Edo	58.6	14.6	15.0	7.3	39.6	17.5	26.4	303
Rivers	41.7	13.8	13.4	6.5	25.8	16.0	53.4	580
South West								
Ekiti	60.1	10.1	19.9	9.4	42.5	20.3	32.2	153
Lagos	51.7	9.2	11.8	5.9	53.0	15.3	36.3	951
Ogun	16.6	5.7	6.3	2.1	6.2	6.1	82.3	518
Ondo	44.9	8.9	11.7	3.8	47.4	12.3	31.9	401
Osun	40.3	4.9	5.3	1.3	37.0	5.9	44.2	374
Oyo	53.4	16.7	9.0	3.8	44.3	15.3	36.6	823
Education								
No education	62.5	7.4	7.7	6.3	33.3	9.8	33.7	9,980
Primary	52.4	13.9	14.1	8.9	39.4	17.5	38.7	4,176
Secondary	52.8	12.6	12.3	7.1	41.9	15.8	37.5	5,472
More than secondary	48.4	7.3	10.5	5.4	42.9	11.8	39.1	1,569
Wealth quintile								
Lowest	63.8	7.9	8.7	7.6	32.0	11.0	33.1	4,695
Second	59.1	10.9	11.0	8.1	36.5	13.5	33.8	4,498
Middle	56.8	12.1	11.9	8.6	38.0	15.3	35.5	3,926
Fourth	53.8	10.5	10.4	5.6	39.3	13.0	38.5	3,956
Highest	50.1	9.0	10.0	4.6	42.4	12.6	40.1	4,120
Woman afraid of husband/partner								
Afraid most of the time	69.9	21.3	22.5	15.8	54.1	28.2	23.9	2,096
Sometimes afraid	64.6	10.7	10.5	7.2	39.6	13.7	29.7	9,576
Never afraid	46.1	6.8	7.6	4.7	31.5	9.1	45.3	9,292
Missing	59.2	5.4	8.0	5.1	33.1	7.8	40.1	232
Total	57.0	10.0	10.4	7.0	37.4	13.0	36.1	21,196

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated or widowed women. Total includes 46 cases with missing information on employment.

16.10 FORMS OF SPOUSAL VIOLENCE

Table 16.9 shows the percentage of ever-married women age 15-49 who experienced physical, sexual, and emotional violence from their husband or partner. It should be noted that different types of violence are not mutually exclusive, and women may report multiple forms of violence. Research suggests that physical violence in intimate relationships is often accompanied by psychological abuse and, in one-third to more than a half of cases, by sexual abuse (Krug et al., 2002).

The results show that 14 percent of ever-married women reported having experienced physical violence from their current or most recent husband, 5 percent reported sexual violence, and 19 percent reported emotional violence. Seventeen percent of ever-married women reported having experienced physical and sexual violence by any husband or partner. Figure 16.1 shows the proportion of ever-married women who have experienced different forms of violence committed by their current or most recent husband at any time and during the 12 months preceding the survey.

Table 16.9 Forms of spousal violence

Percentage of ever-married women age 15-49 who have experienced various forms of violence committed by their husband/partner ever or in the 12 months preceding the survey, Nigeria 2013

Type of violence	Ever	In the past 12 months		
		Often	Sometimes	Often or sometimes
Physical violence				
Any physical violence	14.4	1.6	7.6	9.3
Pushed her, shook her, or threw something at her	6.7	0.7	3.6	4.3
Slapped her	12.7	1.3	6.5	7.8
Twisted her arm or pulled her hair	2.9	0.4	1.5	1.9
Punched her with his fist or with something that could hurt her	3.4	0.5	1.6	2.1
Kicked her, dragged her, or beat her up	5.2	0.7	2.6	3.3
Tried to choke her or burn her on purpose	0.7	0.1	0.3	0.4
Threatened her or attacked her with a knife, gun, or other weapon	0.8	0.1	0.4	0.5
Sexual violence				
Any sexual violence	4.8	0.6	3.1	3.7
Physically forced her to have sexual intercourse with him when she did not want to	4.2	0.6	2.7	3.2
Physically forced her to perform any other sexual acts she did not want to	1.8	0.2	1.3	1.5
Forced her with threats or in any other way to perform sexual acts she did not want to	1.2	0.1	0.8	0.9
Emotional violence				
Any emotional violence	19.2	2.8	12.6	15.3
Said or did something to humiliate her in front of others	10.7	1.4	6.5	7.9
Threatened to hurt or harm her or someone she cared about	5.6	0.7	3.2	4.0
Insulted her or made her feel bad about herself	15.5	2.1	10.3	12.5
Any form of physical and/or sexual violence	16.2	2.0	8.9	10.9
Any form of emotional and/or physical and/or sexual violence	24.5	3.9	15.1	19.0
Spousal violence committed by any husband/partner				
Physical violence	15.7	na	na	9.3
Sexual violence	5.5	na	na	3.7
Physical and/or sexual violence	17.4	na	na	11.0
Number of ever-married women	21,196	21,196	21,196	21,196

na = Not applicable

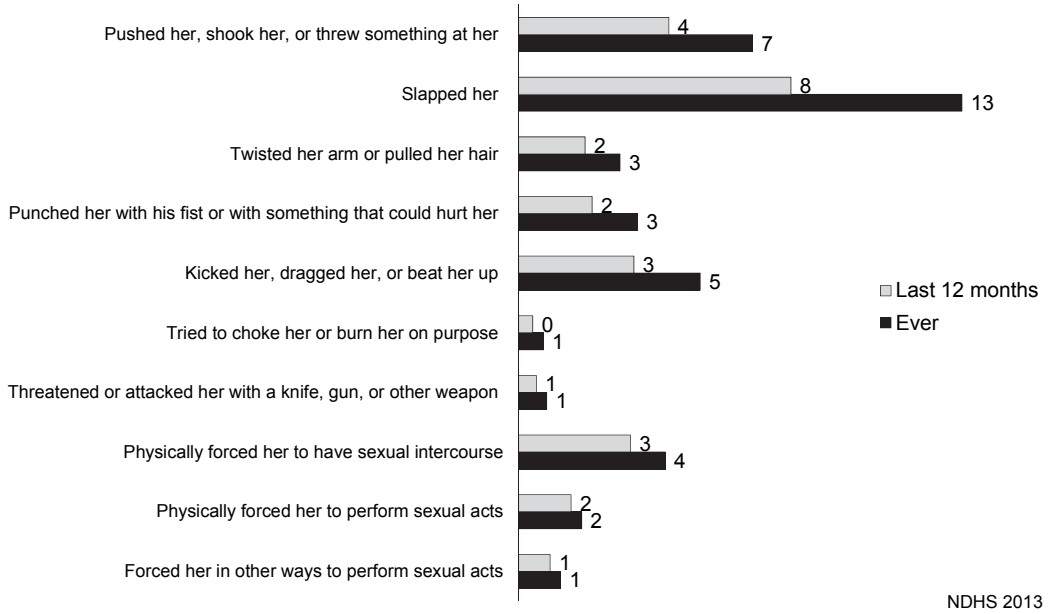
Table 16.9 shows that the most common form of spousal physical violence reported by women is slapping (13 percent), followed by pushing, shaking, or throwing something at them (7 percent) and kicking, dragging, or beating them up (5 percent). Nine percent of women reported that they had experienced at least one of these violent acts from their husband or partner in the 12 months preceding the survey.

Four percent of women said that their husband or partner had forced them to have sex against their will, and 2 percent reported that they had been forced to perform sexual acts they did not want to do. The proportions of women who reported experiencing these acts of sexual violence by their husband or partner in the past 12 months are similar.

The most common form of emotional spousal violence is a spouse insulting or making his wife feel bad about herself (16 percent), followed by humiliating her in front of others (11 percent) and threatening to harm her or someone she cares about (6 percent). The percentages of women experiencing these forms of emotional violence during the 12 months preceding the survey were similar to those of women who had ever experienced them.

Overall, 25 percent of women have ever experienced emotional, physical, or sexual violence by their husbands or partners, and 19 percent have experienced such violence in the past 12 months. Sixteen percent of women have ever experienced either physical or sexual violence, and 11 percent experienced physical or sexual violence in the 12 months preceding the survey.

Figure 16.1 **Specific forms of physical and sexual violence committed by spouse**



16.11 SPOUSAL VIOLENCE BY BACKGROUND CHARACTERISTICS

Table 16.10 shows the percentage of ever-married women age 15-49 who have experienced emotional, physical, or sexual spousal violence by selected background characteristics. Women age 15-19 are less likely to have experienced any of the three types of spousal violence. Women in the 30-39 age group are more likely than women in other age groups to have experienced the three types of violence. The highest proportion of women who have experienced physical, sexual, or emotional violence is found among Catholics (40 percent), followed by other Christians and traditionalists (36 percent each). Women who are divorced, separated, or widowed are more likely to have experienced any of the three different forms of spousal violence than currently married women or those living together with a partner.

Urban women are more likely than their rural counterparts to have ever experienced any of the three types of spousal abuse (27 percent and 23 percent, respectively). Among the zones, women in the South South were most likely to report physical, sexual, or emotional abuse (36 percent), and women in the North West were least likely (12 percent). The proportion of women experiencing any of the three forms of violence was highest in Adamawa (74 percent) and lowest in Kano (3 percent).

The relationship between women's experience of violence and education is not consistent. Most forms of violence are more prevalent among women with a primary or secondary education than among women with no education and those with more than a secondary education. Experience of any of the three forms of violence is highest among women in the middle wealth quintile.

Table 16.10 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their husband/partner, by background characteristics, Nigeria 2013

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical, sexual, and emotional	Physical or sexual	Physical, sexual, or emotional	Number of ever-married women
Age								
15-19	11.3	7.8	4.4	1.9	1.6	10.3	14.9	1,633
20-24	18.7	12.9	5.2	2.9	2.4	15.3	23.4	3,278
25-29	19.6	14.4	5.3	3.5	3.1	16.2	24.8	4,323
30-39	21.2	16.5	4.7	3.3	2.7	17.9	27.2	6,877
40-49	18.9	14.9	4.2	2.8	2.3	16.2	24.4	5,086
Religion								
Catholic	33.4	25.9	8.2	7.1	6.1	27.0	39.6	1,921
Other Christian	27.3	24.9	6.1	4.7	3.9	26.3	36.1	6,531
Islam	12.4	6.9	3.5	1.5	1.3	8.9	15.8	12,398
Traditionalist	30.2	26.0	5.9	5.3	4.8	26.6	36.4	230
Missing	27.6	22.7	2.0	1.0	1.0	23.7	32.8	112
Marital status								
Married or living together	18.2	13.4	4.4	2.7	2.2	15.2	23.5	19,925
Divorced/separated/ widowed	34.2	30.5	9.7	8.3	8.0	31.9	40.7	1,272
Number of living children								
0	12.6	9.0	4.4	2.4	2.1	11.0	16.5	2,130
1-2	19.0	14.7	4.8	3.0	2.5	16.5	24.6	6,649
3-4	21.1	15.7	4.6	3.1	2.7	17.2	26.7	6,415
5+	19.6	14.7	5.0	3.3	2.7	16.5	25.0	6,002
Employment								
Employed for cash	20.2	15.4	4.4	2.8	2.5	16.9	25.7	14,121
Employed not for cash	35.8	28.3	12.8	8.2	7.2	32.9	45.5	1,077
Not employed	13.8	9.7	4.2	2.6	2.0	11.3	18.0	5,952
Residence								
Urban	21.4	16.3	3.9	2.5	2.1	17.7	27.4	7,883
Rural	17.9	13.3	5.3	3.4	2.9	15.2	22.8	13,313
Zone								
North Central	25.6	19.6	5.7	4.7	4.1	20.6	31.4	2,929
North East	26.4	14.8	12.7	6.6	5.8	21.0	32.4	3,476
North West	9.8	5.1	1.4	0.5	0.5	6.0	11.6	7,519
South East	30.0	18.9	5.7	4.8	4.1	19.8	33.6	1,870
South South	24.9	27.2	5.8	4.9	3.7	28.1	35.8	2,182
South West	17.3	19.9	1.7	1.3	1.0	20.3	26.9	3,220
State								
North Central								
FCT-Abuja	8.1	14.3	1.5	0.9	0.6	15.0	17.6	146
Benue	54.9	50.8	17.1	14.7	13.5	53.2	65.2	665
Kogi	9.8	4.9	0.9	0.4	0.4	5.3	10.7	336
Kwara	20.8	6.5	0.3	0.3	0.3	6.5	22.7	294
Nasarawa	22.0	17.7	3.4	2.6	2.3	18.4	29.4	311
Niger	13.6	6.0	2.3	1.8	1.1	6.4	16.7	848
Plateau	28.5	22.6	5.7	4.2	3.2	24.1	37.6	330
North East								
Adamawa	69.1	27.3	32.5	15.8	15.1	44.0	73.8	447
Bauchi	20.0	11.3	13.7	5.5	4.9	19.6	27.0	734
Borno	4.9	9.1	1.1	1.1	0.3	9.1	11.0	848
Gombe	20.7	9.2	13.9	3.2	1.9	19.8	29.3	336
Taraba	62.0	34.7	22.5	15.7	14.2	41.5	70.9	500
Yobe	6.8	4.5	4.7	3.0	2.8	6.2	8.7	612
North West								
Jigawa	5.8	3.3	2.3	0.9	0.7	4.7	7.1	920
Kaduna	40.2	16.3	3.3	0.4	0.4	19.3	43.1	1,262
Kano	2.5	1.0	0.7	0.4	0.4	1.3	3.0	1,899
Katsina	2.4	3.0	0.5	0.1	0.1	3.4	5.1	1,031
Kebbi	7.4	6.0	1.3	0.6	0.5	6.8	11.3	804
Sokoto	2.9	2.8	2.0	1.5	1.5	3.3	3.7	717
Zamfara	2.2	3.4	0.2	0.2	0.1	3.4	4.4	885
South East								
Abia	12.9	11.7	1.1	1.1	1.1	11.7	15.1	234
Anambra	20.0	9.2	1.5	1.1	0.9	9.6	21.9	447
Ebonyi	34.3	29.7	10.1	8.2	7.8	31.6	40.1	458
Enugu	47.4	24.0	7.8	7.4	5.7	24.4	51.3	378
Imo	29.8	16.6	6.1	4.8	3.7	17.8	33.5	352

Continued…

Table 16.10—*Continued*

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical, sexual, and emotional	Physical or sexual	Physical, sexual, or emotional	Number of ever-married women
South South								
Akwa Ibom	18.4	25.0	6.0	5.0	3.9	26.0	31.3	355
Bayelsa	26.3	22.1	5.6	5.0	3.9	22.7	33.8	172
Cross River	29.2	38.6	12.2	11.2	7.7	39.7	47.4	341
Delta	7.5	10.0	0.8	0.7	0.6	10.1	11.7	432
Edo	49.2	34.8	3.2	3.0	2.8	35.1	54.4	303
Rivers	26.1	32.1	7.1	5.3	4.0	33.9	40.6	580
South West								
Ekiti	16.2	21.9	3.0	3.0	1.7	21.9	25.9	153
Lagos	19.2	23.5	1.1	0.8	0.6	23.8	31.0	951
Ogun	6.8	13.5	1.0	1.0	0.8	13.5	13.8	518
Ondo	11.4	25.9	2.7	2.0	1.1	26.6	28.5	401
Osun	8.7	7.9	0.8	0.6	0.6	8.1	11.5	374
Oyo	28.7	22.0	2.6	1.8	1.6	22.8	36.7	823
Education								
No education	12.9	7.5	4.0	2.0	1.7	9.4	16.2	9,980
Primary	26.5	23.5	6.7	5.3	4.3	24.9	34.5	4,176
Secondary	25.3	21.2	5.3	3.7	3.2	22.8	32.6	5,472
More than secondary	17.9	11.1	2.8	1.2	0.9	12.7	22.6	1,569
Wealth quintile								
Lowest	12.2	8.2	4.4	2.6	2.2	10.1	15.4	4,695
Second	19.9	14.0	6.0	4.2	3.7	15.8	24.6	4,498
Middle	23.0	17.9	6.4	4.2	3.4	20.1	29.3	3,926
Fourth	21.2	17.2	3.7	2.5	2.1	18.4	27.7	3,956
Highest	20.7	16.1	3.2	1.8	1.3	17.5	27.2	4,120
Total	19.2	14.4	4.8	3.0	2.6	16.2	24.5	21,196

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 46 cases with missing information on employment.

16.12 VIOLENCE BY SPOUSAL CHARACTERISTICS AND WOMEN'S EMPOWERMENT INDICATORS

Table 16.11 presents information on ever-married women's experience of emotional, physical, or sexual violence according to husbands' or partners' characteristics and women's empowerment indicators. Women whose husbands have no education are less likely than other women to have experienced any of the three types of spousal violence. For example, 16 percent of women whose husband has no education have experienced emotional, physical, or sexual violence, as compared with 33 percent of women whose husband has a primary education.

Women who say their husband or partner gets drunk often were more likely to report emotional, physical, or sexual violence (69 percent) than women whose husband drinks but does not get drunk (40 percent) and women whose husband does not drink (19 percent). There are no clear patterns between spousal violence and spousal age difference; however, women who are older than their husband are more likely than other women to experience emotional, physical, or sexual violence.

Controlling behaviours are strongly associated with spousal violence. For example, 12 percent of women whose husbands exhibit none of the controlling behaviours have experienced emotional, physical, or sexual violence, as compared with 61 percent of women whose husbands exhibit three to four and five to six of the controlling behaviours. Each of the three types of spousal violence increases as the number of controlling behaviours engaged in by the husband increases.

The three empowerment indicators do not appear to have a consistent relationship with spousal violence. Decision making does not have the expected association with spousal violence: women who participate in the smallest number of decisions are least likely to experience spousal violence. On the other hand, as expected, women who agree with none of the five reasons justifying wife beating are less likely to experience each of the three types of spousal violence than other women.

It is often stated that violence perpetuates violence. As can be seen in Table 16.11, a family history of domestic violence is associated with a respondent's own experience of domestic violence. Among women whose fathers beat their mothers, 54 percent have experienced emotional, physical, or sexual violence, as compared with 21 percent of women whose fathers did not beat their mothers.

Table 16.11 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their husband/partner, by husband's characteristics and women's empowerment indicators, Nigeria 2013

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical, sexual, and emotional	Physical or sexual	Physical, sexual, or emotional	Number of ever-married women
Husband's/partner's education								
No education	12.5	7.2	3.6	2.0	1.7	8.8	15.5	8,216
Primary	25.4	20.9	6.2	4.4	3.6	22.7	32.7	3,858
Secondary	23.3	20.5	5.5	4.0	3.3	22.1	31.2	5,993
More than secondary	21.1	13.6	4.6	2.3	2.1	15.9	25.8	2,935
Don't know/missing	18.9	15.4	5.4	4.0	3.7	16.8	21.9	194
Husband's/partner's alcohol consumption								
Does not drink	14.6	9.4	3.6	1.9	1.6	11.1	18.9	17,255
Drinks/never gets drunk	32.1	25.8	5.0	3.8	3.3	27.0	40.4	915
Gets drunk sometimes	37.4	36.0	9.6	7.6	6.6	37.9	47.8	2,295
Gets drunk very often	58.6	56.0	17.6	16.2	14.7	57.4	68.7	652
Don't know/missing	12.6	15.2	5.1	0.2	0.2	20.1	22.9	79
Spousal education difference								
Husband better educated	23.2	18.2	6.1	3.9	3.3	20.3	29.6	7,271
Wife better educated	24.7	19.9	5.6	4.2	3.7	21.3	31.6	2,763
Both equally educated	22.5	19.8	4.5	3.2	2.6	21.1	30.1	3,520
Neither educated	11.6	6.1	3.2	1.6	1.3	7.8	14.3	7,369
Don't know/missing	18.7	15.0	5.6	4.4	4.2	16.2	21.5	272
Spousal age difference[1]								
Wife older	23.8	25.9	10.9	7.7	6.9	29.1	35.0	191
Wife is same age	14.5	13.4	2.6	1.4	1.2	14.6	19.4	271
Wife is 1-4 years younger	20.7	17.0	4.6	2.9	2.3	18.7	27.8	3,212
Wife is 5-9 years younger	19.0	14.7	4.5	3.0	2.5	16.2	24.6	6,784
Wife is 10+ years younger	16.7	11.0	4.2	2.3	1.9	12.9	21.1	9,340
Missing	16.6	15.5	7.7	7.2	7.2	15.9	19.4	127
Number of marital control behaviours displayed by husband/partner[2]								
0	7.7	7.4	1.3	0.8	0.6	7.9	11.7	7,645
1-2	19.0	12.6	3.8	2.0	1.5	14.5	24.4	10,791
3-4	51.1	39.1	17.0	11.8	10.8	44.2	60.5	2,293
5-6	54.3	50.4	23.0	20.5	18.4	52.9	61.1	467
Number of decisions in which women participate[3]								
0	12.5	8.1	4.0	2.2	1.8	9.8	15.8	9,540
1-2	24.8	19.0	6.6	4.0	3.2	21.6	32.5	4,117
3	22.5	17.9	3.8	2.7	2.2	19.0	29.3	6,268
Number of reasons for which wife beating is justified[4]								
0	16.1	12.4	3.0	2.0	1.7	13.5	20.8	13,433
1-2	24.1	17.9	6.8	4.2	3.5	20.4	30.9	3,181
3-4	31.2	22.4	8.9	6.1	5.3	25.2	37.7	2,366
5	17.9	13.5	7.9	4.7	3.8	16.7	23.7	2,215
Woman's father beat her mother								
Yes	43.1	37.1	12.8	10.3	8.7	39.7	54.0	1,761
No	16.4	11.8	3.9	2.3	1.9	13.4	21.1	17,935
Don't know/missing	24.0	19.9	5.1	3.0	2.9	21.9	31.4	1,500
Woman afraid of husband/partner								
Afraid most of the time	32.6	29.9	11.7	9.7	8.9	31.8	39.3	2,096
Sometimes afraid	23.2	16.0	5.9	3.5	3.0	18.4	28.7	9,576
Never afraid	12.3	9.6	2.1	1.1	0.7	10.6	17.3	9,292
Missing	4.1	4.7	1.3	0.9	0.6	5.1	7.4	232
Total	19.2	14.4	4.8	3.0	2.6	16.2	24.5	21,196

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.
[1] Includes only women who have been married only once
[2] According to the wife's report. See Table 16.8 for list of behaviours.
[3] According to the wife's report. See Table 15.6.1 for list of decisions.
[4] According to the wife's report. See Table 15.7.1 for list of reasons.

16.13 RECENT SPOUSAL VIOLENCE

Recent experience of spousal violence is an indicator of the extent to which domestic violence is a current problem. Table 16.12 shows that, overall, 11 percent of ever-married women experienced physical violence perpetrated by their current or most recent husband in the 12 months preceding the survey. Women's experience of physical or sexual violence in the past 12 months is highest among those age 20-24 (13 percent) and lower in the youngest and oldest age groups. Ever-married women in the traditional, Catholic, and other Christian religious groups were more likely to have experienced recent physical or sexual violence than Islamic women.

The data show that 15 percent of divorced, separated, or widowed women experienced physical or sexual violence by their current or most recent husband or partner in the past 12 months. Women who were employed but not earning cash were more likely than those who were employed for cash and those who were unemployed to have experienced violence in the past 12 months. There is no variation in the experience of physical and sexual violence among women in urban and rural areas. An analysis of the zones shows that the South South has the highest percentage (17 percent) of women who reported experiencing physical or sexual violence in the 12 months preceding the survey and that the North West has the lowest percentage (4 percent). Women in Benue (40 percent), Adamawa (38 percent), Taraba (26 percent), Edo (25 percent), and Cross River (25 percent) were most likely to have experienced these forms of spousal violence in the 12 months preceding the survey. Similarly, women with a primary or a secondary education were more likely than women with no education and those with more than a secondary education to have experienced recent physical or sexual violence.

Table 16.12 Physical or sexual violence in the past 12 months by any husband/partner

Percentage of ever-married women who experienced physical or sexual violence by any husband/partner in the past 12 months, by background characteristics, Nigeria 2013

Background characteristic	Percentage of women who experienced physical or sexual violence in the past 12 months from any husband/partner	Number of ever-married women
Age		
15-19	8.9	1,633
20-24	12.6	3,278
25-29	12.0	4,323
30-39	11.8	6,877
40-49	8.5	5,086
Religion		
Catholic	18.5	1,921
Other Christian	16.9	6,531
Islam	6.5	12,398
Traditionalist	20.8	230
Missing	13.9	112
Marital status		
Married or living together	10.7	19,925
Divorced/separated/widowed	15.3	1,272
Number of living children		
0	8.7	2,130
1-2	11.9	6,649
3-4	11.1	6,415
5+	10.6	6,002
Employment		
Employed for cash	11.1	14,121
Employed not for cash	21.3	1,077
Not employed	8.7	5,952
Residence		
Urban	11.0	7,883
Rural	11.0	13,313

Continued…

Table 16.12—*Continued*

Background characteristic	Percentage of women who experienced physical or sexual violence in the past 12 months from any husband/partner	Number of ever-married women
Zone		
North Central	14.4	2,929
North East	16.1	3,476
North West	4.3	7,519
South East	14.3	1,870
South South	17.1	2,182
South West	11.8	3,220
State		
North Central		
FCT-Abuja	7.9	146
Benue	40.2	665
Kogi	4.4	336
Kwara	3.5	294
Nasarawa	12.1	311
Niger	4.5	848
Plateau	12.5	330
North East		
Adamawa	38.3	447
Bauchi	15.3	734
Borno	6.7	848
Gombe	16.4	336
Taraba	25.6	500
Yobe	5.8	612
North West		
Jigawa	3.3	920
Kaduna	13.5	1,262
Kano	1.2	1,899
Katsina	2.1	1,031
Kebbi	5.3	804
Sokoto	2.8	717
Zamfara	1.7	885
South East		
Abia	9.6	234
Anambra	6.2	447
Ebonyi	19.3	458
Enugu	21.3	378
Imo	13.7	352
South South		
Akwa Ibom	19.1	355
Bayelsa	15.0	172
Cross River	24.6	341
Delta	7.0	432
Edo	25.0	303
Rivers	15.4	580
South West		
Ekiti	14.0	153
Lagos	12.9	951
Ogun	6.6	518
Ondo	18.8	401
Osun	5.0	374
Oyo	13.1	823
Education		
No education	7.0	9,980
Primary	16.1	4,176
Secondary	15.5	5,472
More than secondary	6.7	1,569
Wealth quintile		
Lowest	7.4	4,695
Second	11.7	4,498
Middle	14.3	3,926
Fourth	11.5	3,956
Highest	10.5	4,120
Woman afraid of husband/ partner		
Afraid most of the time	24.2	2,096
Sometimes afraid	12.9	9,576
Never afraid	6.1	9,292
Missing	3.5	232
Total	11.0	21,196

Note: Any husband/partner includes all current, most recent, and former husbands/partners. Total includes 46 cases with missing information on employment.

16.14 ONSET OF SPOUSAL VIOLENCE

To obtain information on the duration of marital violence, the 2013 NDHS asked currently married women who had been married only once and had experienced physical or sexual spousal violence when the first episode of violence took place. Table 16.13 shows the interval between marriage and the first episode of physical or sexual violence by the current husband or partner.

Fourteen percent of women who had been married for five to nine years first experienced spousal physical or sexual violence during their fifth year of marriage. Twelve percent of women who had been married for more than 10 years first experienced violence during their tenth year of marriage, and 9 percent of women who had been married for two to four years first experienced spousal physical or sexual violence during their second year of marriage. The results show that the majority of women have not experienced physical or sexual violence by their husbands or partners (85 percent).

Table 16.13 Experience of spousal violence by duration of marriage

Among currently married women age 15-49 who have been married only once, the percentage who first experienced physical or sexual violence committed by their current husband/partner by specific exact years since marriage according to marital duration, Nigeria 2013

Duration of marriage	Percentage who first experienced spousal physical or sexual violence by exact marital duration:				Percentage who have not experienced spousal sexual or physical violence	Number of currently married women who have been married only once
	Before marriage	2 years	5 years	10 years		
Years since marriage						
<2	1.5	na	na	na	89.6	1,624
2-4	1.0	9.0	na	na	85.8	2,477
5-9	0.8	5.5	13.9	na	83.9	3,583
10+	0.4	2.8	8.2	12.1	84.7	9,979
Total	0.7	4.8	10.3	12.9	85.1	17,664

na = Not applicable

16.15 TYPES OF INJURIES CAUSED BY SPOUSAL VIOLENCE

Table 16.14 presents information on the types of injuries sustained by ever-married women age 15-49 as a result of spousal violence, according to whether they had ever experienced spousal violence or had experienced spousal violence in the 12 months preceding the survey. The results show very little difference in the prevalence of injuries by whether violence had been experienced at any time or within the past 12 months. For all specified types of spousal violence, the most commonly resulting injuries are cuts, bruises, or aches, followed by eye injuries, sprains, dislocations, or burns.

Table 16.14 Injuries to women due to spousal violence

Percentage of ever-married women age 15-49 who have experienced specific types of spousal violence by types of injuries resulting from the violence, according to the type of violence and whether they experienced the violence ever and in the 12 months preceding the survey, Nigeria 2013

Type of violence	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married women who have ever experienced any physical or sexual violence
Experienced physical violence[1]					
Ever[2]	26.5	11.8	6.0	30.2	3,062
In the past 12 months	28.8	13.3	6.6	33.0	1,969
Experienced sexual violence					
Ever[2]	23.4	13.0	7.2	28.6	1,008
In the past 12 months	21.8	12.9	7.1	27.3	782
Experienced physical or sexual violence[1]					
Ever[2]	24.1	10.7	5.4	27.4	3,425
In the past 12 months	25.2	11.6	5.7	29.0	2,314

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.
[1] Excludes women who reported violence only in response to a direct question on violence during pregnancy
[2] Includes violence in the past 12 months

Among women who had ever experienced physical violence, 30 percent sustained any of these injuries; 27 percent had cuts, bruises, or aches, and 12 percent had eye injuries, sprains, dislocations, or burns. Among women who had ever experienced sexual violence, 29 percent sustained any of these injuries, with 23 percent having cuts, bruises, or aches and 13 percent having eye injuries, sprains, dislocations, or burns. Seven percent of women had deep wounds, broken bones, broken teeth, or another serious injury. Overall, 27 percent of women who had ever experienced spousal physical or sexual violence suffered one or more of these injuries.

16.16 VIOLENCE BY WOMEN AGAINST THEIR SPOUSE

In cases of domestic violence, either the man or the woman can be the instigator of violent behaviour. Ever-married women age 15-49 were asked about instances when they said or did something to physically harm their husband or partner at times when he was not already physically hurting them. Table 16.15 shows the percentage of ever-married women who committed physical violence against their husband or partner when he was not already harming them, by selected characteristics. Overall, 2 percent of ever-married women reported that they had initiated physical violence against their husband or partner when he was not already beating or physically hurting them.

Table 16.15 Women's violence against their spouse

Percentage of ever-married women age 15-49 who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to women's own experience of spousal violence and background characteristics, Nigeria 2013

Background characteristic	Percentage who have committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	In the past 12 months	
Woman's experience of spousal physical violence			
Ever[1]	9.3	6.0	3,062
In the past 12 months	9.4	7.5	1,969
Never	0.4	0.3	18,135
Age			
15-19	1.0	0.8	1,633
20-24	1.1	1.0	3,278
25-29	1.5	1.0	4,323
30-39	2.2	1.3	6,877
40-49	2.0	1.0	5,086
Religion			
Catholic	4.2	2.5	1,921
Other Christian	3.2	2.1	6,531
Islam	0.6	0.4	12,398
Traditionalist	2.1	0.9	230
Missing	0.9	0.6	112
Marital status			
Married or living together	1.5	0.9	19,925
Divorced/separated/ widowed	6.0	3.3	1,272
Number of living children			
0	1.0	0.9	2,130
1-2	1.8	1.2	6,649
3-4	1.8	1.1	6,415
5+	1.8	1.0	6,002
Employment			
Employed for cash	1.8	1.1	14,121
Employed not for cash	4.9	2.7	1,077
Not employed	1.0	0.8	5,952
Residence			
Urban	1.9	1.1	7,883
Rural	1.6	1.1	13,313

Continued…

Table 16.15—*Continued*

Background characteristic	Percentage who have committed physical violence against their husband/partner: Ever[1]	In the past 12 months	Number of ever-married women
Zone			
North Central	1.5	1.0	2,929
North East	3.9	2.6	3,476
North West	0.2	0.1	7,519
South East	3.2	1.6	1,870
South South	3.4	2.3	2,182
South West	1.2	0.7	3,220
State			
North Central			
FCT-Abuja	0.7	0.3	146
Benue	1.9	1.2	665
Kogi	0.2	0.0	336
Kwara	0.4	0.3	294
Nasarawa	3.3	1.7	311
Niger	0.8	0.8	848
Plateau	3.7	1.9	330
North East			
Adamawa	13.2	9.4	447
Bauchi	0.2	0.2	734
Borno	1.0	0.8	848
Gombe	0.6	0.5	336
Taraba	12.5	7.5	500
Yobe	0.2	0.2	612
North West			
Jigawa	0.2	0.0	920
Kaduna	0.6	0.6	1,262
Kano	0.0	0.0	1,899
Katsina	0.0	0.0	1,031
Kebbi	0.0	0.0	804
Sokoto	0.1	0.0	717
Zamfara	0.5	0.5	885
South East			
Abia	0.7	0.3	234
Anambra	2.7	1.3	447
Ebonyi	3.3	0.7	458
Enugu	5.4	3.9	378
Imo	3.1	1.7	352
South South			
Akwa Ibom	3.1	2.4	355
Bayelsa	2.6	0.9	172
Cross River	0.5	0.2	341
Delta	5.1	4.1	432
Edo	5.0	3.7	303
Rivers	3.5	1.7	580
South West			
Ekiti	0.9	0.3	153
Lagos	1.3	0.6	951
Ogun	0.7	0.5	518
Ondo	1.2	1.0	401
Osun	0.3	0.3	374
Oyo	1.8	0.9	823
Wealth quintile			
Lowest	1.2	0.9	4,695
Second	1.7	1.1	4,498
Middle	2.1	1.4	3,926
Fourth	2.0	1.1	3,956
Highest	1.8	1.1	4,120
Total	1.7	1.1	21,196

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 46 cases with missing information on employment.
[1] Includes violence in the past 12 months

Nine percent of women who had experienced physical violence by their husband or partner reported committing physical violence against their husband or partner when he was not already beating or physically hurting them. Women age 25 and older are slightly more likely than younger women to have initiated physical violence against their current or most recent husband or partner. Women age 15-19 are

least likely to have initiated marital violence (1 percent). Catholic and other Christian women are more likely to initiate physical violence against their husband or partner than women in other religious groups. The proportion of women who have initiated spousal violence is higher among those who are divorced, separated, or widowed than among those who are married or living together with a partner. The proportion is also higher among women who are employed but not earning cash.

There is no variation in the proportion of women's use of violence against their husband or partner by rural-urban residence or number of living children. The South South and South East have the highest percentages of women who have ever initiated physical violence against their husband or partner (3 percent), while the North West has the lowest percentage (less than 1 percent).

Table 16.16 shows that women whose husband or partner gets drunk often are more likely to initiate physical violence than women whose husband does not drink (9 percent and 1 percent, respectively). Women who are older than their husband or have more education than their husband are more likely than other women to initiate physical violence. Women's use of violence against their husbands rises somewhat with increases in the number of marital control behaviours displayed by the husband or partner and increases in the number of decisions in which the women participate. The proportion of women who have initiated spousal violence varies inconsistently with the number of reasons for which wife beating is justified. Women who report that their father beat their mother are more likely to initiate violence.

Table 16.16 Women's violence against their spouse by husband's characteristics

Percentage of ever-married women age 15-49 who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to their husband's characteristics, Nigeria 2013

Background characteristic	Percentage who have committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	In the past 12 months	
Husband's/partner's education			
No education	0.7	0.6	8,216
Primary	2.7	1.8	3,858
Secondary	2.3	1.3	5,993
More than secondary	2.1	1.0	2,935
Don't know/missing	3.8	2.7	194
Husband's/partner's alcohol consumption			
Does not drink	0.9	0.6	17,255
Drinks/never gets drunk	2.9	1.0	915
Gets drunk sometimes	5.6	3.6	2,295
Gets drunk very often	9.0	5.7	652
Don't know/missing	0.7	0.7	79
Spousal education difference			
Husband better educated	2.3	1.5	7,271
Wife better educated	2.6	1.6	2,763
Both equally educated	2.2	1.1	3,520
Neither educated	0.6	0.5	7,369
Don't know/missing	3.5	2.2	272
Spousal age difference[2]			
Wife older	4.4	3.2	191
Wife is same age	1.5	1.2	271
Wife is 1-4 years younger	2.3	1.5	3,212
Wife is 5-9 years younger	1.6	0.9	6,784
Wife is 10+ years younger	1.0	0.7	9,340
Missing	2.2	2.2	127
Number of marital control behaviours displayed by husband/partner[3]			
0	0.7	0.5	7,645
1-2	1.4	0.9	10,791
3-4	5.6	3.8	2,293
5-6	6.6	2.6	467

Continued…

Table 16.16—*Continued*

Background characteristic	Percentage who have committed physical violence against their husband/partner: Ever[1]	In the past 12 months	Number of ever-married women
Number of decisions in which women participate[4]			
0	0.7	0.6	9,540
1-2	2.0	1.2	4,117
3	2.2	1.4	6,268
Number of reasons for which wife beating is justified[5]			
0	1.3	0.8	13,433
1-2	2.5	1.4	3,181
3-4	3.0	1.9	2,366
5	2.1	1.4	2,215
Woman's father beat her mother			
Yes	6.4	3.9	1,761
No	1.2	0.8	17,935
Don't know/missing	2.4	1.2	1,500
Woman afraid of husband/ partner			
Afraid most of the time	2.8	2.0	2,096
Sometimes afraid	2.1	1.4	9,576
Never afraid	1.1	0.5	9,292
Missing	0.7	0.5	232
Total	1.7	1.1	21,196

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women.
[1] Includes violence in the past 12 months
[2] Includes only women who have been married only once
[3] According to the wife's report. See Table 16.8 for list of behaviours.
[4] According to the wife's report. See Table 15.6.1 for list of decisions.
[5] According to the wife's report. See Table 15.7.1 for list of reasons.

16.17 HELP-SEEKING BEHAVIOUR BY WOMEN WHO EXPERIENCE VIOLENCE

Table 16.17 shows the percent distribution of women who have ever experienced physical violence committed by anyone, according to whether they sought help to stop the violence and, among those who did not seek help, whether or not they told anyone about the violence. Overall, 45 percent of women who have experienced any type of physical or sexual violence have never sought help and never told anyone about the violence. Twelve percent never sought help but told someone that they were victims of violence. Only 31 percent of women in Nigeria who have ever experienced any form of physical or sexual violence have sought help from any source. Women who have experienced only sexual violence are more likely not to have sought help (51 percent) than women who have experienced only physical violence (47 percent).

Help-seeking behaviour varies inconsistently with age and number of children. A much higher proportion of divorced, separated, or widowed women (48 percent) than currently married women (32 percent) have ever sought help to stop violence. There are only minimal differences in help-seeking behaviour among urban and rural women (32 percent and 31 percent, respectively). Among the zones, the proportion of women seeking help varies from a maximum of 37 percent in the South East to a minimum of 23 percent in the North East. Among the states, the proportion varies from a maximum of 66 percent in Osun to a minimum of 14 percent in Borno. The data suggest that neither education nor wealth results in a greater likelihood of women seeking help: the most educated women and those in the highest wealth quintile are less likely to seek help than less educated or less wealthy women.

Table 16.17 Help seeking to stop violence

Percent distribution of women age 15-49 who have ever experienced physical or sexual violence by their help-seeking behaviour, according to type of violence and background characteristics, Nigeria 2013

Background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Missing/don't know	Total	Number of women who have ever experienced any physical or sexual violence
Type of violence experienced						
Physical only	28.3	11.9	46.8	13.0	100.0	6,126
Sexual only	25.9	8.3	50.5	15.3	100.0	484
Physical and sexual	44.6	11.9	38.3	5.2	100.0	1,556
Age						
15-19	23.8	10.6	52.0	13.5	100.0	1,534
20-24	30.2	11.8	44.4	13.6	100.0	1,500
25-29	32.2	13.2	42.7	12.0	100.0	1,486
30-39	34.9	10.9	44.1	10.1	100.0	2,280
40-49	33.8	12.4	44.0	9.8	100.0	1,366
Religion						
Catholic	34.6	9.9	46.3	9.2	100.0	1,384
Other Christian	32.7	10.9	44.7	11.7	100.0	4,522
Islam	25.4	14.5	46.5	13.6	100.0	2,112
Traditionalist	33.2	13.3	48.9	4.5	100.0	97
Marital status						
Never married	25.2	12.2	47.6	15.0	100.0	2,382
Married or living together	32.2	11.5	45.5	10.7	100.0	5,219
Divorced/separated/ widowed	48.0	11.1	34.6	6.4	100.0	566
Number of living children						
0	25.6	11.9	47.6	14.9	100.0	2,646
1-2	33.5	12.2	43.0	11.3	100.0	2,171
3-4	34.5	11.2	45.2	9.1	100.0	1,850
5+	34.0	11.1	45.0	9.8	100.0	1,500
Employment						
Employed for cash	33.7	11.7	44.1	10.5	100.0	4,880
Employed not for cash	35.5	13.1	44.3	7.1	100.0	782
Not employed	25.3	11.2	48.3	15.1	100.0	2,489
Residence						
Urban	32.0	13.0	44.0	11.1	100.0	3,990
Rural	30.6	10.5	46.7	12.2	100.0	4,177
Zone						
North Central	34.0	5.7	47.6	12.7	100.0	1,251
North East	23.0	16.2	49.8	11.0	100.0	1,341
North West	29.0	8.4	35.9	26.7	100.0	690
South East	37.1	9.4	46.6	6.9	100.0	1,273
South South	30.5	7.3	47.7	14.5	100.0	1,895
South West	33.2	20.4	40.6	5.8	100.0	1,717
State						
North Central						
FCT-Abuja	24.9	16.0	50.4	8.7	100.0	93
Benue	34.3	5.4	55.5	4.8	100.0	650
Kogi	39.5	2.2	42.0	16.3	100.0	101
Kwara	27.2	11.5	45.5	15.8	100.0	39
Nasarawa	38.6	7.0	43.2	11.2	100.0	104
Niger	32.5	0.0	43.1	24.4	100.0	84
Plateau	34.2	4.2	25.3	36.4	100.0	179
North East						
Adamawa	25.9	4.2	66.7	3.2	100.0	416
Bauchi	18.2	15.8	51.2	14.8	100.0	224
Borno	14.1	16.6	44.5	24.8	100.0	162
Gombe	18.2	19.1	50.9	11.9	100.0	104
Taraba	28.7	30.1	33.1	8.2	100.0	368
Yobe	19.3	9.5	44.0	27.2	100.0	68
North West						
Jigawa	22.8	4.8	48.5	23.9	100.0	93
Kaduna	34.8	6.9	34.6	23.7	100.0	335
Kano	*	*	*	*	100.0	31
Katsina	(0.9)	(5.5)	(36.0)	(57.6)	100.0	56
Kebbi	16.2	16.4	29.3	38.2	100.0	87
Sokoto	(27.6)	(17.8)	(33.5)	(21.0)	100.0	44
Zamfara	(57.8)	(7.6)	(16.7)	17.8)	100.0	44

Continued…

Table 16.17—*Continued*

Background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Missing/don't know	Total	Number of women who have ever experienced any physical or sexual violence
South East						
Abia	50.6	6.1	33.9	9.4	100.0	88
Anambra	20.7	4.5	69.9	4.9	100.0	306
Ebonyi	52.3	11.8	29.6	6.3	100.0	360
Enugu	33.5	11.5	48.3	6.8	100.0	339
Imo	35.1	10.4	44.0	10.6	100.0	181
South South						
Akwa Ibom	24.3	3.7	44.9	27.2	100.0	366
Bayelsa	31.9	11.9	53.6	2.6	100.0	152
Cross River	39.3	2.6	46.5	11.6	100.0	327
Delta	22.5	4.5	24.1	48.9	100.0	170
Edo	22.4	7.2	66.8	3.6	100.0	400
Rivers	38.4	13.0	41.2	7.4	100.0	480
South West						
Ekiti	22.3	21.9	47.2	8.6	100.0	65
Lagos	37.8	12.6	40.0	9.7	100.0	620
Ogun	40.1	5.2	51.7	3.1	100.0	151
Ondo	30.2	7.9	57.2	4.7	100.0	258
Osun	65.6	15.6	9.5	9.3	100.0	80
Oyo	24.1	40.1	34.2	1.7	100.0	542
Education						
No education	29.0	12.6	45.2	13.2	100.0	1,407
Primary	35.8	10.7	43.9	9.6	100.0	1,839
Secondary	31.2	11.4	46.6	10.9	100.0	3,976
More than secondary	26.5	13.7	43.3	16.5	100.0	945
Wealth quintile						
Lowest	28.5	14.0	45.1	12.4	100.0	734
Second	31.9	11.6	44.6	11.9	100.0	1,334
Middle	33.5	9.6	46.6	10.3	100.0	1,699
Fourth	33.3	10.9	42.4	13.3	100.0	1,960
Highest	28.7	13.1	47.3	10.9	100.0	2,439
Total	31.3	11.7	45.4	11.7	100.0	8,167

Note: Women can report more than one source from which they sought help. Total includes 16 cases with missing information on employment and 51 cases with missing information on religion. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

16.18 SOURCES OF HELP

In the 2013 NDHS, information was collected from women age 15-49 who ever experienced physical or sexual violence and sought help to stop the violence. Table 16.18 shows the sources of help women sought to stop violence according to type of violence committed. The majority of women who had experienced physical or sexual violence sought help from their family (72 percent), while 28 percent sought help from their husband or partner's family and 9 percent sought help from a friend. Seven percent sought help from neighbours, 4 percent sought help from a religious leader, and 3 percent sought help from a doctor or medical personnel. Notably few women sought help from the police (2 percent). Ten percent of women who experienced only sexual violence sought help from a doctor or medical personnel.

Table 16.18 Sources for help to stop violence

Percentage of women age 15-49 who have experienced physical or sexual violence and sought help by sources from which they sought help, according to the type of violence that women reported, Nigeria 2013

Source	Type of violence experienced			
	Physical only	Sexual only	Physical and sexual	Total
Own family	73.5	62.9	68.5	71.6
Husband/partner's family	27.5	9.5	31.3	27.6
Husband/partner	1.4	1.5	1.0	1.3
Boyfriend	0.2	0.0	0.1	0.2
Friend	8.3	13.6	10.9	9.2
Neighbour	7.5	4.1	6.9	7.2
Religious leader	3.1	6.3	5.7	3.9
Doctor/medical personnel	2.4	9.7	2.5	2.8
Police	1.5	7.4	3.8	2.4
Lawyer	0.3	0.6	0.7	0.4
Social work organization	2.0	3.0	1.5	1.9
Other	1.8	3.8	3.5	2.4
Number of women who have experienced violence and sought help	1,734	125	695	2,554

16.19 DOMESTIC VIOLENCE FACED BY WIDOWED WOMEN

Table 16.19 shows the percent distribution of widowed women who had ever experienced any form of violence from their late husband's relatives according to whether they were blamed for his death, they were physically or verbally abused, they were maltreated, their children were maltreated, or the husband's relatives demanded that they carry out cultural practices to prove themselves innocent of his death. Overall, 15 percent of women reported that they had been maltreated by their husband's relatives. Twelve percent of women reported that they experienced physical or verbal abuse, and 11 percent reported that their children had been maltreated by the late husband's relatives.

Table 16.19 Domestic violence faced by women after the death of their husbands

Percentage of widowed women age 15-49 facing domestic violence after the death of their husbands by specific type of violence, according to background characteristics, Nigeria 2013

Background characteristic	Percentage of widowed women facing violence					Number of widowed women
	Late husband's relatives blame her for his death	Late husband's relatives physically or verbally abuse her	Late husband's relatives maltreat her	Late husband's relatives maltreat her children	Late husband's relatives demand that she carry out cultural practices to prove herself innocent of his death	
Age						
15-19	*	*	*	*	*	10
20-24	*	*	*	*	*	15
25-29	11.0	11.4	21.4	14.5	9.5	42
30-39	9.7	14.6	12.9	8.3	6.5	191
40-49	6.1	10.7	16.0	11.9	5.5	434
Religion						
Catholic	10.2	10.2	13.6	12.0	5.6	125
Other Christian	9.2	15.4	19.7	14.2	8.3	381
Islam	2.3	5.2	6.7	3.3	0.8	176
Traditionalist	*	*	*	*	*	9
Residence						
Urban	8.5	13.1	17.6	12.5	7.8	338
Rural	6.7	10.3	13.0	9.4	4.0	354
Zone						
North Central	3.0	13.4	17.7	16.7	2.6	102
North East	10.8	10.4	12.8	9.2	3.0	87
North West	5.0	5.6	6.4	6.6	2.4	95
South East	7.3	8.3	19.2	10.8	6.9	152
South South	7.0	11.5	12.6	7.9	9.3	131
South West	11.9	20.0	19.7	14.0	8.2	125
Education						
No education	4.3	4.7	7.0	4.5	3.1	213
Primary	7.6	10.9	17.3	11.2	5.4	228
Secondary	12.0	19.1	21.7	16.4	10.0	205
More than secondary	3.1	14.8	14.5	14.4	2.2	46
Wealth quintile						
Lowest	7.2	1.0	7.8	0.9	4.0	61
Second	4.6	9.0	12.2	10.4	2.2	138
Middle	4.9	5.6	12.9	6.9	6.0	185
Fourth	7.8	13.1	16.3	16.1	6.7	182
Highest	14.8	26.8	24.4	14.8	9.4	125
Total	7.6	11.7	15.3	10.9	5.8	692

Note: Husband refers to the most recent husband. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. State-level disaggregation is not shown due to the small number of cases.

Maltreatment of women and maltreatment of their children by the late husband's relatives are most pronounced among women age 25-29 (21 percent and 15 percent, respectively). The prevalence of all forms of domestic violence faced by women from the late husband's relatives is higher among Catholic and other Christian women than among women in the other religious groups. In addition, women's experience of such violence is consistently higher in urban areas than in rural areas. The proportions of women who report verbal abuse and maltreatment are highest among those in the South West, while the proportion who report maltreatment of their children is highest in the North Central zone. Maltreatment of women by their late husband's relatives increases with increasing wealth.

ORPHANS AND VULNERABLE CHILDREN 17

Key Findings

- Six percent of children under age 18 in Nigeria have one or both parents deceased and are considered orphans.
- Overall, 9 percent of children are orphans or are vulnerable due to illnesses among adult household members.
- Orphans and vulnerable children (OVCs) are more likely to be attending school than non-OVCs.
- Non-OVCs are more likely to be underweight than OVCs (34 percent and 29 percent, respectively).
- In general, female OVCs are more likely than male OVCs to engage in sexual activity before age 15 (16 percent and 5 percent, respectively).
- Ninety-five percent of OVCs do not receive any type of medical, emotional, social, or material assistance or any school-related assistance.

Until recently, the response in Nigeria to the crisis of orphans and vulnerable children (OVCs) brought about by HIV/AIDS and other causes was largely driven by communities, with this extended family system providing care and support for affected children. However, the needs of OVCs often overwhelm the capacity of the community to care for them, and the national response has not been commensurate with the magnitude of the problem. The Nigerian government has become more committed to the issue of orphans and vulnerable children, establishing an OVC division in the Federal Ministry of Women Affairs and Social Development. This division is charged with coordinating the national response to the issue in collaboration with other relevant ministries, departments, and agencies and nongovernmental organisations.

Apart from HIV and AIDS, other causes of orphanhood and vulnerability in Nigeria include but are not limited to road accidents, maternal mortality, ethnic and sectarian crises, poverty, and gender inequality. The situation is worsened by the generally poor health and nutrition status of the country's children.

As part of the country's response to the OVC crisis, a national priority agenda was developed in 2005 to assure and improve the quality of services provided for the well-being, protection, and development of the children considered most vulnerable in Nigeria. In 2007, the Federal Ministry of Women Affairs and Social Development developed national guidelines and standards of practice for care of vulnerable children. These guidelines and standards focus on seven programme areas, including food security and nutrition, with the aim of strengthening existing safety nets and providing additional resources without undermining the capacity of communities and families to care for and protect vulnerable children (Federal Ministry of Women Affairs and Social Development, 2007).

This chapter examines the upsurge in orphaned and vulnerable children in Nigeria. It assesses the extent to which children who are orphaned and vulnerable are disadvantaged relative to other children on several key indices of children's welfare, including school attendance. The chapter also examines information on support and care extended to households in which there are orphaned and vulnerable children.

When considering the results of the 2013 NDHS, it is important to note that the survey included only orphans and vulnerable children living in households. The results do not include children who are living in institutions or other non-household settings.

17.1 ORPHANS AND VULNERABLE CHILDREN

As in 2008, the 2013 NDHS defines an orphan as a child under age 18 with one or both parents deceased. A vulnerable child is defined as a child under age 18 who has a very sick parent (sick for three or more consecutive months during the past 12 months) or who lives in a household where an adult was very sick or died during the 12 months preceding the survey.

17.1.1 Children's Living Arrangements and Orphanhood

The 2013 NDHS collected information on the living arrangements of children and on orphanhood. Information on the survival status of children's parents was also collected. Table 17.1 presents the proportion of children under age 18 who are not living with one or both parents, either because the parent(s) died or for other reasons.

Table 17.1 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, the percentage of children not living with a biological parent, and the percentage of children with one or both parents dead, according to background characteristics, Nigeria 2013

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/mother				
Age														
0-4	82.9	10.2	1.1	1.9	0.2	3.1	0.2	0.2	0.1	0.2	100.0	3.5	1.7	30,108
<2	84.6	12.6	0.8	0.6	0.1	0.8	0.1	0.0	0.0	0.2	100.0	1.0	1.1	12,042
2-4	81.8	8.6	1.2	2.8	0.3	4.6	0.2	0.2	0.1	0.2	100.0	5.1	2.1	18,066
5-9	75.0	7.0	2.4	5.5	0.9	7.2	0.5	1.0	0.2	0.2	100.0	9.0	5.0	28,849
10-14	67.4	6.8	4.2	6.3	1.5	10.3	0.8	1.6	0.7	0.3	100.0	13.5	8.8	21,691
15-17	54.0	6.3	6.0	5.4	1.5	19.9	1.2	2.5	1.2	2.0	100.0	24.9	12.7	9,790
Sex														
Male	74.9	7.7	2.9	5.0	1.0	6.4	0.5	1.0	0.4	0.2	100.0	8.3	5.8	45,638
Female	72.2	8.2	2.6	4.0	0.7	9.6	0.6	1.0	0.4	0.6	100.0	11.7	5.5	44,796
Residence														
Urban	69.8	10.1	3.7	4.0	0.8	8.8	0.7	1.3	0.5	0.3	100.0	11.3	7.0	33,812
Rural	75.8	6.7	2.2	4.8	0.9	7.5	0.5	0.9	0.4	0.4	100.0	9.2	4.9	56,626
Zone														
North Central	72.2	6.4	3.0	5.1	0.9	9.5	0.7	1.2	0.5	0.4	100.0	12.0	6.4	13,758
North East	78.2	4.5	1.5	6.3	1.0	6.4	0.5	1.0	0.3	0.3	100.0	8.2	4.3	14,947
North West	82.9	4.0	1.6	3.9	0.8	5.3	0.3	0.5	0.2	0.5	100.0	6.3	3.5	31,660
South East	59.8	14.4	7.0	3.0	0.9	11.0	0.8	1.8	0.8	0.5	100.0	14.4	11.3	8,293
South South	60.6	14.7	4.7	4.9	0.8	10.2	0.8	1.8	0.8	0.6	100.0	13.6	9.0	9,046
South West	64.5	14.4	2.8	4.0	0.8	11.1	0.8	1.1	0.4	0.2	100.0	13.3	5.9	12,734
State														
North Central														
FCT-Abuja	78.2	3.4	2.7	5.2	1.0	7.5	0.2	0.6	0.4	0.8	100.0	8.8	5.0	616
Benue	65.0	7.5	4.8	5.4	1.4	11.6	0.9	2.1	1.0	0.3	100.0	15.6	10.2	3,091
Kogi	51.8	17.2	4.3	8.1	0.8	14.2	1.3	1.5	0.3	0.6	100.0	17.3	8.2	1,509
Kwara	65.3	12.0	2.2	4.4	0.3	14.0	0.6	0.9	0.1	0.2	100.0	15.7	4.2	1,307
Nasarawa	69.3	5.3	3.8	7.0	1.2	9.4	0.8	2.1	0.6	0.4	100.0	13.0	8.6	1,456
Niger	86.1	1.5	1.0	3.3	0.6	6.2	0.4	0.3	0.2	0.4	100.0	7.1	2.5	4,289
Plateau	74.0	5.1	4.1	5.5	1.0	7.2	0.4	1.5	1.0	0.1	100.0	10.2	8.0	1,490
North East														
Adamawa	65.3	10.0	3.1	8.8	0.8	8.8	0.8	1.5	0.6	0.4	100.0	11.6	6.8	1,989
Bauchi	81.8	2.1	0.5	6.1	1.5	5.6	0.4	1.4	0.3	0.3	100.0	7.8	4.1	3,404
Borno	81.7	2.5	1.5	6.2	0.7	5.5	0.5	0.8	0.2	0.4	100.0	7.0	3.7	3,257
Gombe	80.6	2.7	1.3	6.4	1.9	5.3	0.2	0.8	0.2	0.6	100.0	6.5	4.4	1,595
Taraba	68.2	10.8	2.3	6.5	1.4	8.0	0.6	1.4	0.3	0.4	100.0	10.4	6.1	1,979
Yobe	84.9	2.1	1.0	4.5	0.2	6.5	0.3	0.3	0.1	0.1	100.0	7.2	1.9	2,723

Continued…

Table 17.1—*Continued*

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/ mother				
North West														
Jigawa	74.2	10.8	0.4	5.1	0.7	7.3	0.3	0.7	0.1	0.5	100.0	8.3	2.2	3,715
Kaduna	86.4	2.6	1.8	1.5	0.5	6.0	0.2	0.5	0.1	0.4	100.0	6.9	3.1	4,653
Kano	82.1	4.9	2.6	3.2	0.8	5.1	0.5	0.4	0.2	0.1	100.0	6.2	4.5	8,704
Katsina	82.8	1.7	1.4	6.0	1.4	4.4	0.3	0.2	0.3	1.4	100.0	5.1	3.7	4,356
Kebbi	83.8	2.6	1.5	2.8	1.3	5.9	0.4	1.0	0.2	0.4	100.0	7.4	4.4	3,578
Sokoto	85.7	1.8	1.2	5.3	0.6	4.0	0.1	0.6	0.2	0.4	100.0	4.9	2.7	2,961
Zamfara	86.5	2.4	0.8	4.3	0.6	4.3	0.4	0.5	0.1	0.2	100.0	5.2	2.4	3,694
South East														
Abia	65.3	12.9	7.5	3.0	0.7	8.3	0.3	1.2	0.7	0.2	100.0	10.5	10.3	917
Anambra	70.4	8.1	4.0	2.5	0.3	11.3	0.5	1.2	0.4	1.2	100.0	13.4	6.5	1,896
Ebonyi	54.6	16.3	8.7	2.8	1.1	11.8	0.7	2.8	1.0	0.2	100.0	16.4	14.3	2,229
Enugu	59.7	14.7	8.8	1.0	1.1	9.8	1.5	1.9	1.0	0.5	100.0	14.1	14.3	1,659
Imo	51.1	19.8	6.0	6.1	1.1	12.4	0.8	1.4	0.9	0.4	100.0	15.5	10.2	1,592
South South														
Akwa Ibom	55.5	11.7	7.6	4.7	1.7	11.5	1.2	3.7	1.8	0.6	100.0	18.1	16.0	1,626
Bayelsa	55.6	18.2	2.8	6.0	0.2	13.2	0.9	1.5	1.4	0.1	100.0	17.0	6.9	740
Cross River	56.3	19.0	3.2	5.8	0.7	11.5	0.1	1.7	0.9	0.7	100.0	14.1	6.6	1,570
Delta	67.4	13.6	3.5	4.0	0.6	8.6	0.8	0.7	0.2	0.6	100.0	10.3	5.7	1,702
Edo	62.3	13.8	5.3	4.6	0.8	11.2	0.4	1.3	0.2	0.1	100.0	13.1	8.0	1,364
Rivers	63.1	14.2	5.0	4.8	0.4	7.6	1.3	1.9	0.6	1.0	100.0	11.5	9.3	2,044
South West														
Ekiti	54.7	19.2	2.9	5.7	0.9	13.3	1.2	2.0	0.0	0.1	100.0	16.5	7.0	600
Lagos	67.8	11.1	2.9	3.4	0.7	11.0	1.3	1.1	0.3	0.4	100.0	13.8	6.4	3,576
Ogun	60.6	20.9	3.7	4.0	0.6	8.1	0.5	0.8	0.6	0.2	100.0	10.0	6.3	1,985
Ondo	62.7	16.2	3.7	4.0	0.8	9.7	0.4	1.4	0.7	0.3	100.0	12.3	7.1	1,646
Osun	68.6	11.0	2.9	1.4	0.6	12.9	0.3	1.5	0.7	0.1	100.0	15.3	6.0	1,450
Oyo	64.2	13.7	1.5	5.4	1.2	12.3	0.5	0.7	0.2	0.1	100.0	13.8	4.2	3,476
Wealth quintile														
Lowest	82.8	3.7	0.9	4.3	0.9	5.8	0.3	0.6	0.2	0.4	100.0	6.9	2.9	20,336
Second	74.7	7.0	3.1	4.8	1.0	7.3	0.5	0.9	0.3	0.5	100.0	9.0	5.8	19,180
Middle	69.2	9.5	3.9	4.6	0.9	9.1	0.7	1.2	0.6	0.5	100.0	11.5	7.3	17,961
Fourth	68.7	10.4	3.6	5.0	0.8	8.9	0.6	1.2	0.5	0.3	100.0	11.2	6.8	17,250
Highest	70.5	10.2	2.6	3.8	0.8	9.3	0.7	1.4	0.4	0.4	100.0	11.8	5.9	15,712
Total <15	75.9	8.1	2.4	4.4	0.8	6.5	0.5	0.9	0.3	0.2	100.0	8.1	4.8	80,648
Total <18	73.6	7.9	2.8	4.5	0.9	8.0	0.6	1.0	0.4	0.4	100.0	9.9	5.7	90,438

Note: Table is based on de jure household members (i.e., usual residents). Total includes 5 children with missing information on sex.
[1] Includes children with father dead, mother dead, both dead, and one parent dead but missing information on the survival status of the other parent

About one quarter of Nigerian children under age 18 are not living with both parents. One in 10 children are not living with either parent. Six percent of children under age 18 are orphaned (that is, one or both parents are dead). The percentage of orphaned children increases rapidly with age, from 2 percent among children under age 5 to 13 percent among children age 15-17. Urban children (7 percent) are more likely to be orphaned than rural children (5 percent). The South East has the highest proportion of orphaned children (11 percent), while the North West and North East have the lowest (4 percent each).

17.1.2 Orphaned and Vulnerable Children

Children whose parents are severely ill for a long period of time or who live in households where other adults suffer from chronic illnesses can experience significant hardship, as critical illness may reduce the resources available to meet their basic needs and educational requirements. The 2013 NDHS included a number of questions to determine if any adult in the household (including the child's parents) had been chronically ill during the 12 months period preceding the survey. Adult household members age 18-59 were considered to be severely ill if they had been very sick (i.e., too sick to work or do normal activities) for a period of at least three months during the 12-month period preceding the survey. Questions were included for children whose parents were not living in the same household at the time of the survey to determine if the parent(s) had been severely sick in the 12 months before the survey.

Table 17.2 shows the proportion of children considered vulnerable because of the acute illness of a parent or other adults during the 12-month period prior to the 2013 NDHS. Also, the table shows the overall proportion of children identified in the NDHS as orphaned or vulnerable. As mentioned above, 6 percent of children under age 18 are orphaned.

Table 17.2 Orphans and vulnerable children

Percentage of de jure children under age 18 who are orphans or are vulnerable due to illnesses among adult household members (OVC), according to background characteristics, Nigeria 2013

	Orphan children	Percentage of children who:				OVC children	
Background characteristic	Percentage of children with one or both parents dead	Have a very sick parent (sick for at least 3 months in the past 12 months)[1]	Live in a household where at least 1 adult has been very sick for at least 3 months in the past 12 months[2]	Live in a household where at least 1 adult died in the past 12 months and had been very sick for at least 3 months before he/she died[2]	Percentage of children who have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months (vulnerable children)	Percentage of children who are orphans and/or vulnerable	Number of children
Age							
0-4	1.7	1.5	1.9	0.6	2.7	4.2	30,108
<2	1.1	1.4	1.8	0.5	2.5	3.6	12,042
2-4	2.1	1.5	1.9	0.6	2.8	4.7	18,066
5-9	5.0	1.9	2.0	0.8	3.3	7.9	28,849
10-14	8.8	2.0	2.3	0.9	3.7	11.8	21,691
15-17	12.7	2.4	2.5	0.9	4.2	16.1	9,790
Sex[3]							
Male	5.8	1.8	2.1	0.8	3.3	8.6	45,638
Female	5.5	1.8	2.1	0.7	3.3	8.3	44,796
Residence							
Urban	7.0	1.7	1.9	0.6	2.9	9.4	33,812
Rural	4.9	1.9	2.2	0.9	3.5	7.9	56,626
Zone							
North Central	6.4	2.2	2.5	1.0	4.0	9.8	13,758
North East	4.3	1.8	2.4	0.8	3.5	7.5	14,947
North West	3.5	1.5	1.8	0.5	2.6	5.9	31,660
South East	11.3	3.4	3.4	1.2	5.5	15.8	8,293
South South	9.0	2.5	2.8	1.4	4.9	12.7	9,046
South West	5.9	0.8	0.5	0.3	1.3	6.9	12,734
State							
North Central							
FCT-Abuja	5.0	0.6	0.7	1.5	2.6	7.5	616
Benue	10.2	4.2	5.1	1.8	7.4	16.4	3,091
Kogi	8.2	1.5	2.4	2.1	4.7	12.3	1,509
Kwara	4.2	0.4	0.4	0.8	1.3	4.8	1,307
Nasarawa	8.6	4.0	3.9	0.6	5.6	13.8	1,456
Niger	2.5	0.5	0.3	0.2	0.7	3.0	4,289
Plateau	8.0	4.5	4.8	0.7	6.8	14.1	1,490
North East							
Adamawa	6.8	0.5	1.0	0.6	1.8	8.2	1,989
Bauchi	4.1	4.4	5.9	0.6	6.9	10.7	3,404
Borno	3.7	0.9	1.9	0.2	2.5	5.8	3,257
Gombe	4.4	1.8	1.2	3.0	5.2	8.8	1,595
Taraba	6.1	1.0	0.7	1.5	2.7	8.4	1,979
Yobe	1.9	0.9	1.3	0.0	1.5	3.4	2,723
North West							
Jigawa	2.2	5.4	5.8	0.9	7.6	9.5	3,715
Kaduna	3.1	1.0	1.2	0.5	1.8	4.8	4,653
Kano	4.5	0.4	0.6	0.6	1.3	5.7	8,704
Katsina	3.7	1.1	1.0	0.5	1.8	5.4	4,356
Kebbi	4.4	1.3	2.7	0.1	3.4	7.5	3,578
Sokoto	2.7	1.3	1.9	0.6	2.5	4.9	2,961
Zamfara	2.4	1.6	1.6	0.2	2.2	4.4	3,694
South East							
Abia	10.3	2.5	1.7	2.8	5.7	14.8	917
Anambra	6.5	2.8	2.8	0.5	3.8	9.7	1,896
Ebonyi	14.3	2.2	2.9	1.6	4.8	17.8	2,229
Enugu	14.3	5.6	6.4	0.8	8.1	21.4	1,659
Imo	10.2	3.9	2.7	1.2	5.5	15.2	1,592
South South							
Akwa Ibom	16.0	4.4	5.3	4.1	10.5	23.3	1,626
Bayelsa	6.9	0.6	1.0	1.2	2.2	8.6	740
Cross River	6.6	2.8	3.8	0.8	5.4	11.6	1,570
Delta	5.7	3.2	3.0	0.1	3.4	8.9	1,702
Edo	8.0	1.9	2.1	1.0	3.4	10.4	1,364
Rivers	9.3	1.3	1.1	1.0	3.0	11.2	2,044

Continued…

Table 17.2—*Continued*

Background characteristic	Orphan children	Percentage of children who:				OVC children	
	Percentage of children with one or both parents dead	Have a very sick parent (sick for at least 3 months in the past 12 months)[1]	Live in a household where at least 1 adult has been very sick for at least 3 months in the past 12 months[2]	Live in a household where at least 1 adult died in the past 12 months and had been very sick for at least 3 months before he/she died[2]	Percentage of children who have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months (vulnerable children)	Percentage of children who are orphans and/or vulnerable	Number of children
South West							
Ekiti	7.0	1.3	0.9	0.1	1.8	8.7	600
Lagos	6.4	0.7	0.5	0.2	1.0	7.2	3,576
Ogun	6.3	0.8	0.3	1.5	2.3	8.2	1,985
Ondo	7.1	1.1	1.6	0.2	2.2	9.0	1,646
Osun	6.0	0.4	0.2	0.0	0.4	6.4	1,450
Oyo	4.2	0.8	0.2	0.0	0.8	4.8	3,476
Wealth quintile							
Lowest	2.9	1.9	2.2	0.5	3.1	5.8	20,336
Second	5.8	2.0	2.4	0.8	3.4	8.8	19,180
Middle	7.3	1.9	2.3	1.0	3.9	10.6	17,961
Fourth	6.8	1.9	1.9	0.9	3.3	9.5	17,250
Highest	5.9	1.5	1.7	0.6	2.6	8.1	15,712
Total	5.7	1.8	2.1	0.8	3.3	8.5	90,438

Note: Table is based only on children who usually live in the household. Very sick means that the person was too sick to work or do normal activities.
[1] Whether or not the parent lives in the same household as the child
[2] Person age 18-59
[3] Excludes 5 cases with missing information on sex

Among children under age 18, 2 percent have a parent who was very ill for at least three months during the past year. Two percent of children live in households in which at least one adult (either a parent or another adult household member) was severely ill during the past year, and 3 percent live in households in which at least one adult was seriously ill or died during the 12 months prior to the survey. Nine percent of children under age 18 are considered to be vulnerable; that is, they are orphaned, they live in a household in which at least one adult was very ill during the past year, or they have at least one parent living in the household or elsewhere who has been severely ill.

The percentage of children under age 18 who are orphaned or vulnerable rises with age, from 4 percent among children under age 2 to 16 percent among children age 15-17. Urban children (9 percent) are slightly more likely to be orphaned or vulnerable than rural children (8 percent). At the zonal level, the South East (16 percent) has the highest proportion of orphaned and vulnerable children, and the North West (6 percent) has the lowest.

17.2 Social and Economic Situation of Orphaned and Vulnerable Children

Information collected in the 2013 NDHS is useful in assessing several important aspects of orphaned and vulnerable children's economic and social status, including school attendance, possession of items recognised as basic for meeting a child's material needs, whether children live with their siblings, and nutritional status.

17.2.1 School Attendance

Orphans and vulnerable children may be at greater risk of dropping out of school for a number of reasons, such as an inability to pay school fees or the need to help care for a sick parent or younger siblings. Table 17.3 presents data on school attendance rates and parental survivorship among children age 10-14 in the de jure household population. The table contrasts the situation among children whose parents are both dead (double orphans) with that among children whose parents are both alive and the child is living with at least one parent. It also compares school attendance for the entire population of orphaned and vulnerable children with that of children who are neither orphaned nor vulnerable.

The results indicate that 88 percent of children whose parents are both deceased are attending school, as compared with 72 percent of children whose parents are both alive and who are living with at least one parent. School attendance is higher in urban than rural areas in all groups of children. The Community-Based Support Project for Orphans and Vulnerable Children in Nigeria, a five-year project implemented to address the needs of OVCs, places education of these children as a high priority (Management Sciences for Health and USAID, 2011).

Table 17.3 School attendance by survivorship of parents and by OVC status

Among de jure children age 10-14, the percentage attending school by parental survival and by OVC status and the ratios of the percentages attending for parental survival and OVC status, according to background characteristics, Nigeria 2013

	Percentage attending school by survivorship of parents					OVC		Non-OVC		
Background characteristic	Both parents deceased	Number	Both parents alive and living with at least one parent	Number	Ratio[1]	Percentage attending school (OVC)	Number (OVC)	Percentage attending school (non-OVC)	Number (non-OVC)	Ratio[2]
Sex[3]										
Male	87.8	77	74.4	9,023	1.18	83.1	1,321	75.5	9,743	1.10
Female	87.4	74	68.4	8,458	1.28	81.8	1,228	70.2	9,398	1.16
Residence										
Urban	99.4	76	91.4	6,587	1.09	92.1	1,136	91.5	7,475	1.01
Rural	75.7	75	59.5	10,894	1.27	74.8	1,414	61.0	11,666	1.23
Zone										
North Central	(83.4)	33	82.8	2,897	(1.01)	87.2	489	82.9	3,268	1.05
North East	*	10	49.2	2,794	*	68.8	326	50.4	2,947	1.37
North West	*	21	54.7	6,361	*	61.3	592	55.0	6,506	1.11
South East	(97.3)	31	96.8	1,359	(1.00)	97.2	427	96.8	1,628	1.00
South South	(94.2)	29	98.5	1,640	(0.96)	94.3	401	98.1	1,871	0.96
South West	*	27	95.2	2,430	*	94.2	314	94.9	2,921	0.99
Wealth quintile										
Lowest	*	13	28.0	4,132	*	43.5	341	28.5	4,224	1.53
Second	*	28	62.8	3,445	*	74.0	542	63.5	3,688	1.16
Middle	(86.9)	36	86.2	3,476	(1.01)	90.7	607	86.3	3,838	1.05
Fourth	(94.6)	35	94.7	3,431	(1.00)	94.0	567	94.8	3,860	0.99
Highest	(100.0)	40	98.0	2,999	(1.02)	95.4	492	97.4	3,531	0.98
Total	87.6	151	71.5	17,482	1.23	82.5	2,550	72.9	19,141	1.13

Note: Table is based only on children who usually live in the household. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Ratio of the percentage with both parents deceased to the percentage with both parents alive and living with at least one parent
[2] Ratio of the percentage for OVCs to the percentage for non-OVCs
[3] Excludes 1 case with missing information on sex

17.2.2 Basic Material Needs

The 2013 NDHS also collected information on whether the minimum basic material needs of children age 5-17 are being met. Basic material needs are considered to be met if the child has a pair of shoes, two sets of clothes, and a blanket. Table 17.4 shows that minimum basic material needs are met for 74 percent of all children age 5-17. With respect to basic items, children are least likely to have a blanket (75 percent) and most likely to have at least two sets of clothes (92 percent). OVCs are slightly less likely than non-OVCs to possess all three basic needs (70 percent and 74 percent, respectively).

Table 17.4 shows that urban OVCs are more likely than rural OVCs to have all three minimum basic material needs met (79 percent and 63 percent, respectively). There are differences by zone in the likelihood that OVCs' basic needs are met; children in the South West zone are most likely to have their needs met (94 percent), while those in the North Central zone are least likely (52 percent). Nearly all orphaned and vulnerable children in Osun have their basic needs met, as compared with only 18 percent in Plateau.

Households' wealth status is closely related to whether or not basic needs are met for all children, including OVCs. The percentage of OVCs with all three basic needs met rises from 66 percent among children in the lowest wealth quintile to 84 percent in the highest wealth quintile.

Table 17.4 Possession of basic material needs by orphans and vulnerable children

Among de jure children age 5-17, the percentage possessing three minimum basic material needs, the percentages of OVCs and non-OVCs who possess all three basic material needs, and the ratio of the percentage for OVCs to the percentage for non-OVCs, according to background characteristics, Nigeria 2013

	Among children age 5-17, percentage possessing:					OVC		Non-OVC		
Background characteristic	Shoes	Two sets of clothes	Blanket	All three basic needs[1]	Number of children	Percentage possessing all three basic needs (OVC)[1]	Number (OVC)	Percentage possessing all three basic needs (non-OVC)[1]	Number (non-OVC)	Ratio[2]
Age										
5-9	88.9	91.4	73.5	72.4	28,849	66.0	2,276	72.9	26,573	0.91
10-14	91.4	93.4	75.4	74.3	21,691	70.4	2,550	74.8	19,141	0.94
15-17	90.1	91.7	76.9	76.1	9,790	74.6	1,578	76.4	8,212	0.98
Sex[3]										
Male	90.3	92.5	74.4	73.3	30,460	69.2	3,290	73.8	27,170	0.94
Female	89.7	91.8	75.1	74.1	29,867	70.6	3,112	74.5	26,755	0.95
Residence										
Urban	92.8	93.7	81.8	81.1	22,942	78.8	2,594	81.4	20,348	0.97
Rural	88.3	91.2	70.4	69.1	37,388	63.3	3,410	69.7	33,978	0.91
Zone										
North Central	83.9	89.5	65.2	63.3	9,597	52.0	1,143	64.8	8,453	0.80
North East	90.7	92.4	72.1	71.5	9,776	73.8	890	71.3	8,885	1.04
North West	91.9	93.0	77.3	76.5	20,687	79.1	1,545	76.3	19,142	1.04
South East	89.5	91.1	72.2	69.7	5,592	69.3	1,077	69.8	4,515	0.99
South South	85.3	89.9	60.5	59.4	6,158	53.7	962	60.5	5,197	0.89
South West	94.8	95.2	94.3	94.0	8,520	94.0	787	93.9	7,733	1.00
State										
North Central										
FCT-Abuja	95.7	95.8	94.0	93.3	413	98.5	39	92.7	374	1.06
Benue	59.6	82.6	43.2	36.9	2,206	40.0	430	36.2	1,776	1.10
Kogi	93.7	95.1	81.0	79.6	1,114	71.4	160	81.0	954	0.88
Kwara	96.7	96.8	96.8	96.7	909	96.0	55	96.8	854	0.99
Nasarawa	92.5	93.9	70.5	70.0	1,004	64.1	168	71.1	837	0.90
Niger	89.5	89.4	73.6	73.3	2,953	69.5	114	73.5	2,839	0.95
Plateau	84.7	85.0	25.3	23.8	998	17.5	178	25.2	819	0.70
North East										
Adamawa	94.9	95.6	81.8	81.6	1,297	74.9	137	82.4	1,160	0.91
Bauchi	87.6	92.0	65.6	64.8	2,144	74.0	272	63.5	1,872	1.16
Borno	90.3	90.3	88.2	88.0	2,181	95.2	153	87.4	2,028	1.09
Gombe	90.5	91.2	51.8	51.1	1,041	42.9	114	52.1	927	0.82
Taraba	88.0	90.8	75.5	74.5	1,284	77.4	139	74.1	1,145	1.04
Yobe	94.0	94.8	62.9	62.2	1,829	68.4	76	61.9	1,754	1.10
North West										
Jigawa	92.9	93.5	77.7	76.7	2,291	82.1	260	76.0	2,030	1.08
Kaduna	91.5	94.4	74.8	72.7	3,196	70.0	192	72.9	3,004	0.96
Kano	93.5	95.4	79.9	79.5	5,853	88.6	430	78.8	5,424	1.12
Katsina	88.1	87.3	76.8	75.7	2,742	71.3	198	76.0	2,544	0.94
Kebbi	93.0	92.9	64.8	64.4	2,420	71.0	227	63.7	2,192	1.11
Sokoto	87.6	87.8	83.5	83.1	1,902	81.4	114	83.2	1,787	0.98
Zamfara	94.7	95.2	82.5	82.2	2,283	79.1	123	82.4	2,161	0.96
South East										
Abia	92.6	85.6	90.3	81.3	607	82.2	113	81.2	494	1.01
Anambra	88.6	89.6	51.9	50.9	1,279	40.9	150	52.2	1,128	0.78
Ebonyi	89.6	91.9	81.6	80.8	1,506	76.5	330	82.0	1,176	0.93
Enugu	89.7	93.9	64.8	63.2	1,124	61.2	286	63.9	838	0.96
Imo	88.8	91.9	80.5	76.6	1,077	83.1	198	75.2	879	1.11
South South										
Akwa Ibom	88.2	89.2	60.5	59.3	1,158	47.3	324	63.9	835	0.74
Bayelsa	90.1	96.5	71.1	70.9	513	63.7	55	71.7	458	0.89
Cross River	88.1	92.5	50.3	49.3	1,033	50.9	144	49.0	889	1.04
Delta	82.9	84.0	75.6	73.3	1,148	73.7	130	73.2	1,019	1.01
Edo	93.3	93.9	68.8	68.1	964	72.2	117	67.6	847	1.07
Rivers	75.4	88.2	45.2	45.0	1,342	38.9	192	46.0	1,150	0.85
South West										
Ekiti	98.3	98.3	97.9	97.8	406	97.9	48	97.8	358	1.00
Lagos	92.9	92.9	92.2	92.2	2,342	92.2	230	92.2	2,112	1.00
Ogun	92.2	92.2	92.2	92.2	1,266	93.4	140	92.1	1,126	1.01
Ondo	92.8	96.0	90.5	88.3	1,101	87.0	128	88.5	973	0.98
Osun	97.8	97.1	97.5	97.1	996	99.5	88	96.8	909	1.03
Oyo	97.2	97.2	97.2	97.2	2,408	98.9	153	97.0	2,255	1.02
Wealth quintile										
Lowest	88.3	90.2	70.4	69.5	13,440	65.9	943	69.7	12,498	0.94
Second	86.6	90.6	68.0	66.3	12,381	59.0	1,374	67.2	11,008	0.88
Middle	89.1	92.3	72.3	71.0	12,158	67.7	1,594	71.5	10,564	0.95
Fourth	93.0	94.4	80.0	79.2	11,771	74.6	1,392	79.8	10,379	0.94
Highest	93.6	93.8	85.1	84.7	10,579	84.1	1,101	84.8	9,477	0.99
Total	90.0	92.1	74.7	73.7	60,330	69.9	6,404	74.1	53,926	0.94

Note: Table is based only on children who usually live in the household.
[1] Shoes, two sets of clothing, and a blanket
[2] Ratio of the percentage for OVCs to the percentage for non-OVCs
[3] Excludes 3 children with missing information on sex

17.2.3 Orphans Living with Siblings

Sibling connections may be particularly close in cases where a parent has died. Maintaining these family ties can be helpful in assisting children to deal with the loss of a parent. Table 17.5 examines the success of families and communities in keeping orphaned siblings together.

The 2013 NDHS results show that more than half (55 percent) of orphans are not living with all of their siblings. The South East (70 percent) has the highest proportion of orphans not living with their siblings, while the North West (40 percent) has the lowest. Results by state show that Osun has the lowest proportion (17 percent) of OVCs not living with all of their siblings and Delta the highest (88 percent).

Table 17.5 Orphans not living with siblings

Among orphans under age 18 who have one or more siblings under age 18, the percentage who do not live with all of their siblings under age 18, by background characteristics, Nigeria 2013

Background characteristic	Percentage of orphans not living with all siblings	Number of orphans with one or more siblings
Age		
0-4	45.5	282
5-9	52.3	906
10-14	56.8	1,252
15-17	57.5	763
Sex[1]		
Male	52.5	1,664
Female	57.1	1,537
Orphanhood status		
Maternal orphan	56.1	758
Paternal orphan	52.0	2,236
Both parents deceased	78.6	210
Residence		
Urban	53.6	1,545
Rural	55.8	1,658
Zone		
North Central	55.7	587
North East	61.6	397
North West	40.2	675
South East	69.7	567
South South	59.4	491
South West	45.8	487
State		
North Central		
FCT-Abuja	(43.0)	17
Benue	54.9	233
Kogi	52.7	94
Kwara	64.8	45
Nasarawa	47.2	80
Niger	67.7	71
Plateau	57.6	46
North East		
Adamawa	53.4	74
Bauchi	74.9	93
Borno	(70.3)	74
Gombe	39.5	55
Taraba	64.3	71
Yobe	(54.1)	30
North West		
Jigawa	(56.1)	36
Kaduna	(50.7)	80
Kano	31.5	311
Katsina	58.4	58
Kebbi	32.2	73
Sokoto	23.9	47
Zamfara	63.1	70
South East		
Abia	77.3	44
Anambra	81.0	57
Ebonyi	73.5	222
Enugu	64.3	176
Imo	56.9	68

Continued…

Table 17.5—*Continued*

Background characteristic	Percentage of orphans not living with all siblings	Number of orphans with one or more siblings
South South		
Akwa Ibom	44.6	147
Bayelsa	78.6	41
Cross River	(70.6)	36
Delta	88.4	60
Edo	49.8	83
Rivers	59.7	124
South West		
Ekiti	44.1	30
Lagos	50.8	112
Ogun	48.0	75
Ondo	53.5	97
Osun	17.4	60
Oyo	48.1	112
Wealth quintile		
Lowest	59.1	359
Second	56.2	707
Middle	54.5	845
Fourth	48.7	750
Highest	58.4	543
Total	54.7	3,203

Note: Table is based only on children who usually live in the household. Figures in parentheses are based on 25-49 unweighted cases.
[1] Excludes 2 children with missing information on sex

17.2.4 Nutritional Status

Table 17.6 assesses the impact of orphanhood and vulnerability on the nutritional status of children under age 5. There is a slight difference in the proportion of OVCs and non-OVCs who are underweight (29 percent and 33 percent, respectively). Among OVCs, the South East (12 percent) has the lowest proportion of underweight children, while the North West (54 percent) has the highest proportion. OVCs in rural areas are more likely to be underweight than their urban counterparts (32 percent and 26 percent, respectively). Similarly, orphans and vulnerable children living in households in the lowest wealth quintile (46 percent) are more likely to be underweight than those living in households in the fourth (21 percent) and highest (25 percent) quintiles.

Table 17.6 Underweight orphans and vulnerable children

Percentage of de jure children under age 5 who slept in the household the night before the survey who are underweight, total and by OVC status, according to background characteristics, Nigeria 2013

	Children under age 5		OVC		Non-OVC		
Background characteristic	Percentage of children under 5 who are underweight[1]	Number of children	Percentage underweight[1]	Number of OVCs	Percentage underweight[1]	Number of non-OVCs	Ratio[2]
Age							
<1	21.5	5,261	29.2	163	21.3	5,097	1.37
1-2	40.9	10,106	33.1	409	41.2	9,696	0.80
3-4	31.9	10,733	26.3	524	32.2	10,209	0.82
Sex							
Male	33.8	13,112	29.5	561	33.9	12,550	0.87
Female	32.8	12,987	29.0	535	33.0	12,453	0.88
Residence							
Urban	26.5	9,658	26.0	421	26.5	9,238	0.98
Rural	37.3	16,441	31.3	676	37.5	15,765	0.83
Zone							
North Central	22.6	3,733	17.2	180	22.9	3,552	0.75
North East	35.5	4,257	43.2	188	35.2	4,068	1.23
North West	52.9	9,113	52.8	258	52.9	8,855	1.00
South East	15.0	2,438	13.9	215	15.1	2,223	0.92
South South	15.7	2,589	13.6	163	15.8	2,426	0.86
South West	18.7	3,970	22.2	92	18.6	3,878	1.19

Continued…

Table 17.6—*Continued*

Background characteristic	Children under age 5		OVC		Non-OVC		
	Percentage of children under 5 who are underweight[1]	Number of children	Percentage underweight[1]	Number of OVCs	Percentage underweight[1]	Number of non-OVCs	Ratio[2]
State							
North Central							
FCT-Abuja	17.5	184	*	8	17.5	176	1.06
Benue	14.8	834	10.6	76	15.3	758	0.69
Kogi	18.1	360	(10.3)	26	18.7	334	0.55
Kwara	17.3	374	*	8	17.7	365	0.14
Nasarawa	24.6	384	(30.9)	27	24.1	357	1.29
Niger	31.0	1,184	*	13	31.0	1,171	0.94
Plateau	23.2	413	(28.8)	23	22.9	390	1.26
North East							
Adamawa	27.7	634	(24.3)	22	27.8	612	0.87
Bauchi	46.8	1,022	60.1	76	45.7	947	1.32
Borno	26.1	727	*	28	26.5	699	0.69
Gombe	36.3	475	(42.3)	23	36.0	452	1.17
Taraba	29.2	674	(39.6)	26	28.8	648	1.37
Yobe	41.1	725	*	13	41.2	711	0.95
North West							
Jigawa	49.3	1,150	51.3	68	49.1	1,082	1.04
Kaduna	62.0	1,071	*	24	62.1	1,047	0.95
Kano	63.3	2,414	(64.4)	48	63.3	2,366	1.02
Katsina	52.4	1,357	(59.7)	28	52.3	1,329	1.14
Kebbi	44.6	898	(47.2)	30	44.5	868	1.06
Sokoto	43.3	923	(50.1)	25	43.1	898	1.16
Zamfara	42.2	1,299	(36.4)	34	42.3	1,265	0.86
South East							
Abia	14.6	295	(16.1)	24	14.5	272	1.11
Anambra	16.0	497	(23.9)	22	15.7	475	1.52
Ebonyi	16.7	671	14.8	65	16.9	606	0.88
Enugu	11.0	487	14.7	65	10.4	423	1.41
Imo	15.7	487	(4.2)	39	16.7	448	0.25
South South							
Akwa Ibom	20.1	412	13.6	47	20.9	364	0.65
Bayelsa	13.2	209	*	8	13.3	201	0.81
Cross River	17.0	514	(23.5)	36	16.5	478	1.43
Delta	17.3	483	(16.5)	21	17.4	461	0.95
Edo	9.8	344	*	17	10.0	327	0.54
Rivers	14.4	627	(5.9)	33	14.9	594	0.40
South West							
Ekiti	11.6	185	*	3	11.8	183	0.00
Lagos	16.6	1,126	*	28	16.6	1,098	0.99
Ogun	22.1	677	*	23	21.6	653	1.73
Ondo	16.6	518	(19.9)	20	16.5	498	1.20
Osun	15.7	425	*	5	15.9	420	0.00
Oyo	22.2	1,038	*	12	22.1	1,026	1.09
Wealth quintile							
Lowest	47.5	5,721	44.5	176	47.6	5,544	0.94
Second	40.1	5,745	30.2	274	40.6	5,471	0.74
Middle	30.1	5,046	28.8	275	30.2	4,772	0.96
Fourth	26.0	4,933	19.1	210	26.3	4,722	0.73
Highest	18.6	4,655	25.0	161	18.4	4,494	1.36
Total	33.3	26,099	29.3	1,096	33.5	25,003	0.87

Note: Table is based only on children who usually live in the household and who also slept in the household the night preceding the interview. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Two or more standard deviations below the mean on the WHO child growth standards for weight for age
[2] Ratio of the percentage for OVCs to the percentage for non-OVCs

17.2.5 Sex Before Age 15

Teenage orphans and vulnerable children may be at high risk of early sexual activity because they often lack the guidance and supervision of adults to help them protect themselves. There is evidence that this situation applies in Nigeria. Table 17.7 shows that among both boys and girls age 15 to 17, OVCs are slightly more likely than non-OVCs to indulge in sexual activity before age 15.

Five percent of male OVCs initiate sexual activity before age 15, as compared with 2 percent of male non-OVCs. The difference between female OVCs and female non-OVCs is slim (16 percent versus

15 percent). In general, female OVCs are more likely than male OVCs to engage in sexual activity before age 15.

Table 17.7 Sexual intercourse before age 15 among orphans and vulnerable children

Percentage of de jure children age 15-17 who had sexual intercourse before exact age 15, total and by OVC status, and ratio of the percentage for OVCs to the percentage for non-OVCs, by sex, Nigeria 2013

	Female children age 15-17		Male children age 15-17	
OVC status	Percentage who had sexual intercourse before exact age 15	Number	Percentage who had sexual intercourse before exact age 15	Number
OVC	16.5	782	4.9	339
Non-OVC	15.2	4,034	2.3	1,926
Total	15.4	4,816	2.6	2,265
Ratio[1]	1.09	na	2.16	na

Note: Table is based only on children who usually live in the household and who also slept in the household the night preceding the interview.
na = Not applicable
[1] Ratio of the percentage for OVCs to the percentage for non-OVCs

17.3 CARE AND SUPPORT FOR ORPHANED AND VULNERABLE CHILDREN

The prevalence of HIV/AIDS in Nigeria has been identified as one of the major factors responsible for the increase in the country's OVC population. Thus, an important challenge is to provide these disadvantaged children with safety nets. The 2013 NDHS included questions designed to determine whether families and communities recognise and attempt to address the need to care for, protect, and support orphaned and vulnerable children.

17.3.1 Widows Dispossessed of Property

Children of widowed women may face several vulnerability-related consequences. In the households interviewed during the 2013 NDHS, women who had ever been widowed were asked if they had been dispossessed of property after their husband died. Table 17.8 shows that 4 percent of women age 15-49 have ever been widowed. Forty-two percent of widows were dispossessed of their property, the same figure reported in the 2008 NDHS. There is no urban-rural difference in the proportion of widowed women who have been dispossessed of their property.

Table 17.8 Widows dispossessed of property

Percentage of de facto women age 15-49 who have been widowed, and the percentage of widowed women who have been dispossessed of property, by background characteristics, Nigeria 2013

Background characteristic	Percentage of ever-widowed women	Number of women	Among ever-widowed women: Percentage who were dispossessed of property[1]	Among ever-widowed women: Number of women
Age				
15-19	0.2	7,820	*	16
20-29	1.1	13,902	56.1	156
30-39	4.3	10,185	42.2	434
40-49	12.4	7,042	38.1	870
Marital status				
Married	1.8	27,830	50.3	509
Widowed	100.0	967	37.2	967
Age of youngest child				
No children	0.6	11,333	39.1	65
<18 years	4.7	27,072	41.7	1,280
18+ years	24.0	543	43.0	130
Residence				
Urban	3.8	16,414	40.9	628
Rural	3.8	22,534	42.4	848
Zone				
North Central	4.1	5,572	59.3	228
North East	4.2	5,766	35.8	244
North West	2.4	11,877	13.7	284
South East	5.4	4,476	35.2	243
South South	4.7	4,942	50.5	233
South West	3.9	6,314	62.1	244
State				
North Central				
FCT-Abuja	2.6	315	*	8
Benue	7.7	1,240	65.7	96
Kogi	5.1	704	(75.9)	36
Kwara	3.1	596	(55.9)	18
Nasarawa	4.0	594	(59.3)	24
Niger	0.8	1,462	*	12
Plateau	5.1	662	(47.0)	34
North East				
Adamawa	5.7	828	63.5	47
Bauchi	3.7	1,161	(32.7)	43
Borno	4.2	1,412	(13.2)	59
Gombe	2.5	550	(36.3)	14
Taraba	6.1	844	52.9	51
Yobe	3.1	971	(12.2)	30
North West				
Jigawa	2.4	1,353	(36.9)	33
Kaduna	1.8	2,136	(23.7)	39
Kano	2.4	3,189	6.5	75
Katsina	2.1	1,525	(4.9)	32
Kebbi	2.5	1,244	(13.4)	31
Sokoto	3.3	1,098	(12.6)	36
Zamfara	2.9	1,332	(6.4)	38
South East				
Abia	4.0	518	(38.5)	21
Anambra	2.9	1,052	(16.3)	31
Ebonyi	7.7	1,122	37.1	86
Enugu	6.5	951	39.8	62
Imo	5.2	833	(37.0)	43
South South				
Akwa Ibom	7.4	864	52.0	64
Bayelsa	2.5	364	(76.6)	9
Cross River	4.9	703	(60.2)	35
Delta	2.3	993	(61.1)	23
Edo	5.0	742	60.0	37
Rivers	5.1	1,276	31.1	65
South West				
Ekiti	3.3	326	(73.6)	11
Lagos	3.4	1,964	70.6	67
Ogun	6.1	883	(58.2)	54
Ondo	4.5	808	(53.9)	36
Osun	3.6	765	(41.8)	28
Oyo	3.1	1,568	(69.7)	49

Continued…

Table 17.8—*Continued*

Background characteristic	Percentage of ever widowed women	Number of women	Among ever-widowed women: Percentage who were dispossessed of property	Among ever-widowed women: Number of women
Education				
No education	4.0	14,729	29.8	589
Primary	6.5	6,734	50.3	439
Secondary	2.6	13,927	50.0	357
More than secondary	2.5	3,558	45.2	90
Wealth quintile				
Lowest	2.9	7,132	31.5	204
Second	4.4	7,428	42.7	327
Middle	5.0	7,486	45.5	373
Fourth	4.1	7,992	42.7	328
Highest	2.7	8,910	42.0	244
Total	3.8	38,948	41.7	1,476

Note: Table is based only on respondents who slept in the household the night preceding the interview. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Dispossessed of property indicates that none of the late husband's assets went to the respondent.

Women in the South West (62 percent) are most likely to be dispossessed of their property, followed by women in the North Central (59 percent) and South South (51 percent) zones. Women living in the North West (14 percent) are least likely to be dispossessed of their property. Lagos has the highest proportion of widowed women who have been dispossessed of their property (71 percent). It is notable that widowed women with no education are less often dispossessed of their property than educated women. Similarly, women in the lowest wealth quintile are less often dispossessed of their property than those in the other wealth quintiles.

17.3.2 External Support for Households with OVCs

The 2013 NDHS collected information on the extent to which free external care and support services were offered to households with orphans and vulnerable children. Table 17.9 shows, among adults age 18-59 who suffered from an acute illness or died due to a chronic illness during the past 12 months, the percentage whose households received certain types of free external support. Four percent of these households received medical support, 6 percent received emotional support, and 4 percent received social or material support. Overall, 10 percent received at least one type of support, while 1 percent received all three types of support. However, 90 percent of households did not receive any medical, emotional, material, or social support. A higher proportion of households in urban areas than rural areas received at least one type of support (13 percent and 8 percent, respectively).

Table 17.9 External support for very sick persons

Percentage of women and men age 18-59 who have been either very sick or who died within the last 12 months after being very sick whose households received certain free basic external support to care for them within the last year, by background characteristics, Nigeria 2013

Background characteristic	Percentage of very sick persons whose households received:						
	Medical support at least once a month during illness	Emotional support in the last 30 days[1]	Social/material support in the last 30 days[2]	Al least one type of support in the last 30 days	All three types of support in the last 30 days	None of the three types of support	Number of persons
Age							
1	4.4	6.7	2.7	9.1	0.5	90.9	258
2	3.4	5.9	3.3	9.4	0.4	90.6	260
3	3.4	5.6	4.6	9.4	0.4	90.6	272
4	4.2	7.2	6.6	10.2	2.1	89.8	318
Sex							
Male	3.5	5.8	4.9	9.4	1.1	90.6	534
Female	4.2	6.9	3.9	9.7	0.8	90.3	574
Residence							
Urban	4.1	8.8	7.2	12.8	1.4	87.2	400
Rural	3.7	5.0	2.8	7.7	0.7	92.3	708
Zone							
North Central	4.2	4.5	4.5	8.1	0.2	91.9	226
North East	6.5	9.0	6.2	14.1	1.8	85.9	159
North West	4.2	2.7	3.4	5.3	1.3	94.7	216
South East	2.9	9.4	6.7	12.6	1.0	87.4	242
South South	1.6	3.5	1.8	5.0	0.4	95.0	197
South West	4.8	16.0	2.9	19.4	1.4	80.6	67
Wealth quintile							
Lowest	2.9	4.3	3.2	6.2	0.5	93.8	176
Second	2.9	4.9	5.0	8.2	1.1	91.8	251
Middle	4.7	5.9	3.5	8.2	1.0	91.8	281
Fourth	4.1	9.4	5.9	14.7	0.7	85.3	230
Highest	4.4	7.4	4.3	10.3	1.3	89.7	170
Total	3.8	6.4	4.4	9.6	0.9	90.4	1,108

Note: Table is based only on women and men who usually live in the household and who were very sick (unable to work or do normal activities) in the last 12 months or who died in the last 12 months and were very sick at least 3 of the 12 months before their death. Support refers to the past 30 days for living persons and in the 30 days preceding death for deceased persons.

[1] Support such as companionship, counselling from a trained counsellor, or spiritual support for which there was no payment

[2] Support such as help with household work, training for a caregiver, legal services, clothing, food, or financial support for which there was no payment

Table 17.10 examines the extent to which free external support and care were received by households with at least one OVC member. The results show that a high proportion of OVCs (95 percent) lived in households that did not receive any type of support. Five percent of orphans and vulnerable children received at least one type of support, with 2 percent receiving emotional support and 2 percent each receiving medical support and social or material support.

There are only minimal urban-rural differences in the proportion of orphans and vulnerable children receiving support. The South West (10 percent) has the highest proportion of OVCs receiving at least one type of support, followed by the South East (8 percent). Orphans and vulnerable children in Osun (38 percent), Imo (19 percent), Niger (13 percent), and Lagos (12 percent) are more likely than those living in other states to receive at least one type of support.

Table 17.10 External support for orphans and vulnerable children

Percentage of orphans and vulnerable children under age 18 whose household received certain free basic external support to care for the child in the last 12 months, by background characteristics, Nigeria 2013

Background characteristics	Percentage of orphans and vulnerable children whose households received:							
	Medical support in the last 12 months[1]	Emotional support in the last 3 months[2]	Social/ material support in the last 3 months[3]	School-related assistance in the last 12 months[4]	At least one type of support[5]	All of the types of support[5]	None of the types of support	Number of OVCs
Age								
0-4	2.7	2.6	1.2	0.0	4.4	0.0	95.6	1,210
5-9	2.0	2.6	1.6	2.2	5.6	0.3	94.4	2,149
10-14	1.6	2.5	1.7	3.1	5.7	0.2	94.3	2,437
15-17	1.2	1.6	1.6	2.4	4.6	0.2	95.4	1,469
Sex								
Male	2.0	2.8	1.7	2.5	5.6	0.3	94.4	3,757
Female	1.6	2.0	1.4	1.8	4.8	0.1	95.2	3,506
Residence								
Urban	1.6	3.0	1.8	3.0	5.9	0.4	94.1	3,057
Rural	1.9	1.9	1.3	1.5	4.8	0.0	95.2	4,208
Zone								
North Central	3.4	3.2	1.6	1.2	6.1	0.0	93.9	1,291
North East	2.2	0.8	1.1	1.1	3.2	0.0	96.8	1,073
North West	0.9	1.5	0.9	0.7	2.6	0.3	97.4	1,707
South East	1.9	2.6	1.8	4.4	8.0	0.0	92.0	1,265
South South	0.7	0.8	0.9	1.8	3.5	0.0	96.5	1,093
South West	2.0	6.5	4.0	5.1	10.0	0.9	90.0	836
State								
North Central								
FCT-Abuja	0.7	0.7	0.7	3.8	3.8	0.7	96.2	44
Benue	2.2	0.2	0.9	0.9	3.6	0.0	96.4	498
Kogi	0.5	8.3	1.3	2.5	11.4	0.0	88.6	183
Kwara	3.2	3.2	3.2	0.0	3.2	0.0	96.8	61
Nasarawa	6.4	3.8	6.2	2.7	10.1	0.0	89.9	183
Niger	13.0	13.0	0.0	0.0	13.0	0.0	87.0	125
Plateau	0.8	0.0	0.0	0.0	0.8	0.0	99.2	195
North East								
Adamawa	3.7	0.0	0.0	2.0	4.8	0.0	95.2	148
Bauchi	0.7	0.4	0.7	0.7	1.7	0.0	98.3	353
Borno	0.7	0.0	0.0	0.0	0.7	0.0	99.3	187
Gombe	2.6	1.0	1.9	1.4	3.4	0.2	96.6	137
Taraba	6.4	3.4	3.9	2.9	9.4	0.0	90.6	159
Yobe	0.0	0.0	0.0	0.0	0.0	0.0	100.0	88
North West								
Jigawa	2.4	3.6	3.0	1.7	5.1	1.7	94.9	316
Kaduna	0.0	0.0	0.0	3.1	3.1	0.0	96.9	212
Kano	0.0	0.0	0.0	0.0	0.0	0.0	100.0	455
Katsina	0.0	0.0	0.0	0.0	0.0	0.0	100.0	185
Kebbi	0.0	0.0	0.0	0.0	0.0	0.0	100.0	255
Sokoto	4.8	3.3	4.1	0.0	7.6	0.0	92.4	128
Zamfara	0.7	7.0	0.0	0.0	7.6	0.0	92.4	156
South East								
Abia	2.2	5.5	3.7	0.0	7.3	0.0	92.7	124
Anambra	1.2	2.0	1.2	0.6	2.6	0.0	97.4	174
Ebonyi	2.2	2.6	1.1	1.2	5.0	0.0	95.0	391
Enugu	2.3	2.1	1.5	3.5	6.9	0.2	93.1	343
Imo	1.4	2.4	3.2	16.5	19.2	0.0	80.8	234
South South								
Akwa Ibom	0.3	0.0	0.0	3.3	3.5	0.0	96.5	360
Bayelsa	0.0	0.5	1.0	1.0	1.6	0.0	98.4	61
Cross River	0.5	3.2	0.0	0.2	3.9	0.0	96.1	174
Delta	0.5	1.2	1.2	1.0	2.8	0.0	97.2	145
Edo	4.1	0.0	4.1	3.1	8.2	0.0	91.8	134
Rivers	0.0	0.7	0.7	0.7	1.4	0.0	98.6	219
South West								
Ekiti	0.6	4.5	2.4	0.6	7.7	0.0	92.3	52
Lagos	1.2	7.0	2.7	4.3	12.0	0.0	88.0	244
Ogun	0.0	0.8	1.3	2.9	2.9	0.0	97.1	156
Ondo	0.5	2.1	0.0	0.0	2.5	0.0	97.5	142
Osun	14.2	26.4	25.7	28.7	37.5	8.7	62.5	91
Oyo	0.0	4.5	0.0	1.1	5.6	0.0	94.4	152
Wealth quintile								
Lowest	1.8	0.4	1.1	0.5	3.0	0.0	97.0	1,073
Second	1.4	1.7	0.9	0.9	3.3	0.0	96.7	1,607
Middle	2.4	2.8	1.6	1.8	6.0	0.0	94.0	1,825
Fourth	1.3	3.3	1.9	4.2	7.4	0.2	92.6	1,569
Highest	2.0	3.1	2.4	3.2	5.8	0.9	94.2	1,191
Total	1.8	2.4	1.6	2.2	5.2	0.2	94.8	7,265

Note: Table is based on de jure household members (i.e., usual household members).
[1] Medical care, supplies, or medicine
[2] Companionship, counselling from a trained counsellor, or spiritual support for which there was no payment
[3] Help with household work, training for a caregiver, legal services, clothing, food, or financial support for which there was no payment
[4] Allowance, free admission, books, or supplies for which there was no payment. Percentage was calculated for children age 5-17.
[5] Four types of support for those age 5-17 and 3 types of support (i.e., excluding school support) for those age 0-4

FEMALE GENITAL CUTTING 18

Key Findings

- Sixty-eight percent of women and 62 percent of men have heard of female circumcision.
- Knowledge of female circumcision is higher among Yoruba women than among women in any other ethnic group in Nigeria.
- One in four women age 15-49 has been circumcised. Traditionalists' women have the highest proportion with 35 percent.
- With respect to type of circumcision, 6 percent of women had cutting with no flesh removed, 63 percent had cutting with flesh removed, and 5 percent had their genital area sewn closed after cutting (a process known as infibulation).
- Female circumcision is more prevalent in the southern zones than in the northern zones.
- Infibulation is more prevalent in Nasarawa, Kaduna, and Bayelsa than in other states.
- Eighty-two percent of women in Nigeria undergo circumcision before age 5.
- The proportion of female circumcision among girls age 0-14 is higher among those whose mothers have also been circumcised.
- The higher a mother's level of education, the less likely her daughter has been circumcised.
- Twenty-six percent of girls age 0-14 whose mothers were infibulated were also circumcised and had their genital area sewn closed.
- Three percent of girls age 0-14 were circumcised and had their genital area sewn closed, as compared with 5 percent of women age 15-49, indicating a slight decline over time in the practice of infibulation.
- Sixty-eight percent of women and 57 percent of men who have heard of female circumcision believe that the practice is not required by their religion.
- Sixty-four percent of women and 62 percent of men think that the practice of female circumcision should not continue.

Female genital cutting (FGC), also known as female circumcision or female genital mutilation, is practiced in many societies in Nigeria and is present throughout the country. In many cultures, FGC is a recognised and accepted practice that is considered important for the socialisation of women, curbing their sexual appetites and preparing them for marriage. This practice is considered part of a ritual initiation into womanhood that includes a period of seclusion and education about the rights and duties of a wife. Despite its cultural importance, FGC has drawn considerable criticism because of the potential for both short- and long-term medical complications, as well as harm to reproductive health and infringement on women's rights (Toubia, 1995).

Female genital mutilation/cutting is "the partial or total removal of the female external genitalia or other injury to the female genital organs for cultural or other non-therapeutic reasons" (WHO, UNICEF, and UNFPA, 1997). WHO classifies female genital mutilation into four main categories:

Type I: Excision of the prepuce with or without excision of part or all of the clitoris.

Type II: Excision of the clitoris with partial or total excision of the labia minora.

Type III: Excision of part or all of the external genitalia and stitching or narrowing of the vaginal opening (infibulation).

Type IV: Other forms, including pricking, piercing, or incising of the clitoris and/or labia; stretching of the clitoris and/or labia; cauterization by burning of the clitoris and surrounding tissue; scraping of tissue surrounding the opening of the vagina (angurya cuts) or cutting of the vagina (gishiri cuts); and introduction of corrosive substances or herbs into the vagina to cause bleeding or to tighten or narrow the vagina.

According to researchers, three major forms of FGC are practiced in Nigeria: female circumcision, hymenectomy (angurya), and gishiri cuts (Mandara, 2004).

The 2008 NDHS showed a higher prevalence of female circumcision than that reported in the 2003 NDHS (30 percent versus 19 percent). However, this increase was actually due to variations in the definition of FGC used in the two surveys. In the 2008 NDHS, some of the field teams included angurya and gishiri cuts in the FGC category while others did not. This was not the case in 2003 NDHS. In the 2013 NDHS, the definition of FGC explicitly followed the WHO definition mentioned above and captured the practice of angurya and gishiri cuts. Any comparisons of FGC data from the 2013 survey with data from these earlier surveys should be made with caution.

The 2013 NDHS collected information about FGC in Nigeria from all women age 15-49. The topics covered included knowledge and prevalence of FGC, type of circumcision, age at circumcision, and attitudes toward the practice of circumcision.

18.1 KNOWLEDGE OF FEMALE CIRCUMCISION

Table 18.1 shows that 68 percent of women and 62 percent of men age 15-49 have heard of female circumcision. More than 7 in 10 women and men age 30-49 have heard of the practice. Seventy-six percent of women in urban areas have knowledge of female circumcision, as compared with 62 percent of rural women. The corresponding proportions among men are 69 percent and 57 percent. There are marked variations in knowledge by zone, ethnicity, education, and wealth quintile. In general, more women and men living in the southern zones have heard of the practice than their counterparts living in the northern zones. These variations by urban-rural residence and zone are a reflection of ethnic differentials. The Igbo and Yoruba, who primarily reside in the southern zones, have greater knowledge of female circumcision than those in the northern zones. The results also show that women at higher educational levels are more likely than other women to have knowledge of female circumcision. For example, 84 percent of women with more than a secondary education have heard of female circumcision, as compared with only 64 percent of women with no education. Women and men in the highest wealth quintile are more likely to have knowledge of female circumcision (78 percent and 73 percent, respectively) than those in the lowest quintile (65 percent and 56 percent, respectively).

Table 18.1 Knowledge of female circumcision

Percentage of women and men age 15-49 who have heard of female circumcision, according to background characteristics, Nigeria 2013

Background characteristic	Women		Men	
	Have heard of female circumcision	Number of respondents	Have heard of female circumcision	Number of respondents
Age				
15-19	51.8	7,820	34.7	3,619
20-24	64.6	6,757	53.7	2,892
25-29	68.9	7,145	65.2	2,757
30-34	72.3	5,467	71.7	2,414
35-39	75.8	4,718	75.5	2,175
40-44	74.6	3,620	79.8	1,777
45-49	79.8	3,422	80.1	1,724
Religion				
Catholic	65.3	4,316	62.1	2,014
Other Christian	69.9	13,922	65.3	6,181
Islam	66.6	20,149	59.9	8,907
Traditionalist	55.7	359	62.1	161
Other	*	10	*	17
Missing	63.2	192	64.8	79
Ethnic group				
Ekoi	(80.2)	22	(80.9)	20
Fulani	54.9	2,565	52.7	953
Hausa	73.4	10,699	58.2	4,719
Ibibio	65.4	841	53.0	419
Igala	28.2	371	37.3	196
Igbo	82.4	5,636	73.7	2,330
Ijaw/Izon	67.3	751	78.4	346
Kanuri/Beriberi	75.5	680	80.9	292
Tiv	28.6	836	41.2	448
Yoruba	85.3	5,482	75.4	2,341
Other	52.2	11,002	57.5	5,247
Don't know/missing	57.3	64	(63.8)	48
Residence				
Urban	75.7	16,414	68.7	7,611
Rural	61.6	22,534	57.0	9,748
Zone				
North Central	34.7	5,572	46.5	2,685
North East	56.4	5,766	66.7	2,515
North West	71.4	11,877	55.7	5,185
South East	83.6	4,476	75.2	1,686
South South	77.0	4,942	69.3	2,445
South West	80.4	6,314	70.3	2,843
State				
North Central				
FCT-Abuja	52.1	315	56.2	175
Benue	36.5	1,240	43.2	616
Kogi	28.0	704	35.3	333
Kwara	84.5	596	89.4	274
Nasarawa	36.6	594	47.1	282
Niger	20.1	1,462	38.8	701
Plateau	16.0	662	39.0	302
North East				
Adamawa	33.1	828	66.4	358
Bauchi	45.9	1,161	68.5	512
Borno	71.6	1,412	84.8	676
Gombe	35.9	550	62.4	255
Taraba	52.0	844	59.4	325
Yobe	82.4	971	42.4	390
North West				
Jigawa	84.7	1,353	64.8	510
Kaduna	55.3	2,136	41.2	1,033
Kano	89.2	3,189	54.9	1,592
Katsina	45.8	1,525	69.1	596
Kebbi	42.3	1,244	44.6	551
Sokoto	96.2	1,098	56.1	424
Zamfara	76.9	1,332	76.2	479
South East				
Abia	92.0	518	60.9	229
Anambra	67.2	1,052	68.7	446
Ebonyi	96.5	1,122	87.2	368
Enugu	70.3	951	80.8	320
Imo	96.6	833	75.0	323

Continued…

Table 18.1—*Continued*

Background characteristic	Women		Men	
	Have heard of female circumcision	Number of respondents	Have heard of female circumcision	Number of respondents
South South				
Akwa Ibom	56.3	864	46.6	451
Bayelsa	74.7	364	86.4	187
Cross River	86.1	703	60.6	310
Delta	88.0	993	85.2	473
Edo	87.5	742	80.3	365
Rivers	71.9	1,276	66.5	658
South West				
Ekiti	91.1	326	86.8	148
Lagos	83.6	1,964	72.8	948
Ogun	55.2	883	50.8	358
Ondo	72.2	808	64.7	404
Osun	95.9	765	57.4	356
Oyo	85.1	1,568	84.8	629
Education				
No education	64.0	14,729	56.9	3,685
Primary	67.0	6,734	63.6	2,907
Secondary	67.2	13,927	58.1	8,281
More than secondary	84.3	3,558	81.5	2,486
Wealth quintile				
Lowest	64.6	7,132	56.1	2,862
Second	61.6	7,428	57.9	2,992
Middle	60.5	7,486	57.3	3,338
Fourth	70.5	7,992	62.0	3,835
Highest	78.0	8,910	72.8	4,332
Total	67.5	38,948	62.1	17,359

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

18.2 PREVALENCE OF FEMALE CIRCUMCISION

Table 18.2 shows the prevalence of FGC by background characteristics. According to the 2013 NDHS findings, 25 percent of Nigerian women are circumcised (although the two surveys are not directly comparable, this proportion is lower than the 30 percent reported in the 2008 NDHS). Twenty-six percent of women do not know what type of procedure they underwent; 6 percent had cutting with no flesh removed, 63 percent had cutting with flesh removed, and 5 percent had their genital area sewn closed after cutting. The proportion of circumcised women is lowest among Muslim women (20 percent) and highest among traditionalist women (35 percent).

Female circumcision is most prevalent among Yoruba women (55 percent), followed by Igbo women (45 percent) (Figure 18.1). Thirty-two percent of urban women are circumcised, as compared with 19 percent of rural women. There are also urban-rural differences in the proportion of women who had cutting with flesh removed (65 percent and 60 percent, respectively). More women in the southern zones than the northern zones are circumcised. Osun has the highest prevalence of circumcised women (77 percent), followed by Ebonyi (74 percent) and Ekiti (72 percent); Katsina has the lowest prevalence (0.1 percent). The practice of sewing the genital area closed after cutting is most prevalent in Nasarawa (22 percent), Kaduna (21 percent), and Bayelsa (20 percent).

Female circumcision is less prevalent among women with no education and those in the lowest wealth quintile. For instance, about one in three women with a primary education or higher are circumcised, as compared with only 17 percent of women with no education. Similarly, 17 percent of women in the lowest wealth quintile are circumcised, compared with 31 percent in the fourth and highest quintiles.

Table 18.2 Prevalence of female circumcision

Percentage of women age 15-49 who have been circumcised and percent distribution of circumcised women by type of circumcision, according to background characteristics, Nigeria 2013

Background characteristic	Percentage of women circumcised	Number of women	Type of circumcision				Total	Number of circumcised women
			Cut, no flesh removed	Cut, flesh removed	Sewn closed	Don't know/ missing		
Age								
15-19	15.3	7,820	5.8	62.8	3.6	27.8	100.0	1,197
20-24	21.7	6,757	6.6	60.4	5.8	27.2	100.0	1,465
25-29	22.9	7,145	6.2	62.5	5.1	26.2	100.0	1,635
30-34	27.4	5,467	5.0	63.5	5.8	25.6	100.0	1,500
35-39	30.4	4,718	6.5	61.8	4.8	26.9	100.0	1,435
40-44	33.0	3,620	5.8	64.3	6.9	23.0	100.0	1,194
45-49	35.8	3,422	4.7	63.2	5.3	26.8	100.0	1,226
Religion								
Catholic	31.4	4,316	5.3	73.2	6.7	14.7	100.0	1,355
Other Christian	29.3	13,922	3.9	69.3	6.5	20.3	100.0	4,081
Islam	20.1	20,149	8.2	51.6	3.6	36.6	100.0	4,051
Traditionalist	34.8	359	1.3	82.3	6.1	10.3	100.0	125
Ethnic group								
Ekoi	(56.9)	22	*	*	*	*	100.0	13
Fulani	13.2	2,565	2.6	57.5	2.0	37.9	100.0	338
Hausa	19.4	10,699	11.9	38.4	3.6	46.2	100.0	2,074
Ibibio	12.8	841	2.1	71.4	9.4	17.2	100.0	108
Igala	0.5	371	*	*	*	*	100.0	2
Igbo	45.2	5,636	5.7	74.9	5.4	14.0	100.0	2,546
Ijaw/Izon	11.0	751	9.2	65.8	18.8	6.2	100.0	82
Kanuri/Beriberi	2.6	680	*	*	*	*	100.0	18
Tiv	0.3	836	*	*	*	*	100.0	3
Yoruba	54.5	5,482	3.2	67.4	3.0	26.4	100.0	2,989
Others	13.4	11,002	3.8	66.0	12.2	18.1	100.0	1,470
Don't know/missing	14.8	64	*	*	*	*	100.0	9
Residence								
Urban	32.3	16,414	4.5	64.7	5.7	25.1	100.0	5,309
Rural	19.3	22,534	7.5	60.0	4.9	27.7	100.0	4,343
Zone								
North Central	9.9	5,572	2.2	59.0	8.4	30.3	100.0	554
North East	2.9	5,766	15.2	51.1	3.9	29.8	100.0	167
North West	20.7	11,877	10.5	38.9	7.2	43.4	100.0	2,463
South East	49.0	4,476	5.9	78.5	5.2	10.5	100.0	2,195
South South	25.8	4,942	3.5	66.8	6.5	23.2	100.0	1,275
South West	47.5	6,314	3.1	69.9	2.9	24.0	100.0	2,998
State								
North Central								
FCT-Abuja	6.1	315	(2.2)	(69.4)	(3.4)	(25.0)	100.0	19
Benue	8.4	1,240	0.0	84.7	12.5	2.7	100.0	104
Kogi	1.7	704	*	*	*	*	100.0	12
Kwara	53.3	596	3.2	50.5	2.5	43.9	100.0	318
Nasarawa	9.0	594	3.5	61.2	22.3	13.0	100.0	53
Niger	2.5	1,462	(0.0)	(60.5)	(16.1)	(23.4)	100.0	37
Plateau	1.7	662	*	*	*	*	100.0	11
North East								
Adamawa	1.0	828	*	*	*	*	100.0	8
Bauchi	5.2	1,161	10.6	59.1	0.0	30.3	100.0	60
Borno	2.3	1,412	*	*	*	*	100.0	33
Gombe	2.9	550	(65.4)	(12.5)	(0.0)	(22.1)	100.0	16
Taraba	2.8	844	(13.2)	(42.9)	(6.5)	(37.4)	100.0	24
Yobe	2.6	971	(9.9)	(45.9)	(1.2)	(43.0)	100.0	26
North West								
Jigawa	39.4	1,353	5.7	74.8	3.3	16.2	100.0	534
Kaduna	25.1	2,136	36.2	37.1	21.1	5.5	100.0	536
Kano	40.9	3,189	1.9	27.0	3.1	67.9	100.0	1,303
Katsina	0.1	1,525	*	*	*	*	100.0	1
Kebbi	2.6	1,244	(10.7)	(14.8)	(19.3)	(55.2)	100.0	32
Sokoto	3.0	1,098	(3.5)	(2.7)	(0.0)	(93.8)	100.0	33
Zamfara	1.7	1,332	*	*	*	*	100.0	23
South East								
Abia	31.9	518	0.3	68.2	13.7	17.8	100.0	165
Anambra	23.4	1,052	6.6	47.6	5.4	40.5	100.0	246
Ebonyi	74.2	1,122	1.9	89.9	3.3	4.9	100.0	833
Enugu	40.3	951	1.1	89.9	5.7	3.3	100.0	384
Imo	68.0	833	16.4	70.2	5.1	8.3	100.0	567

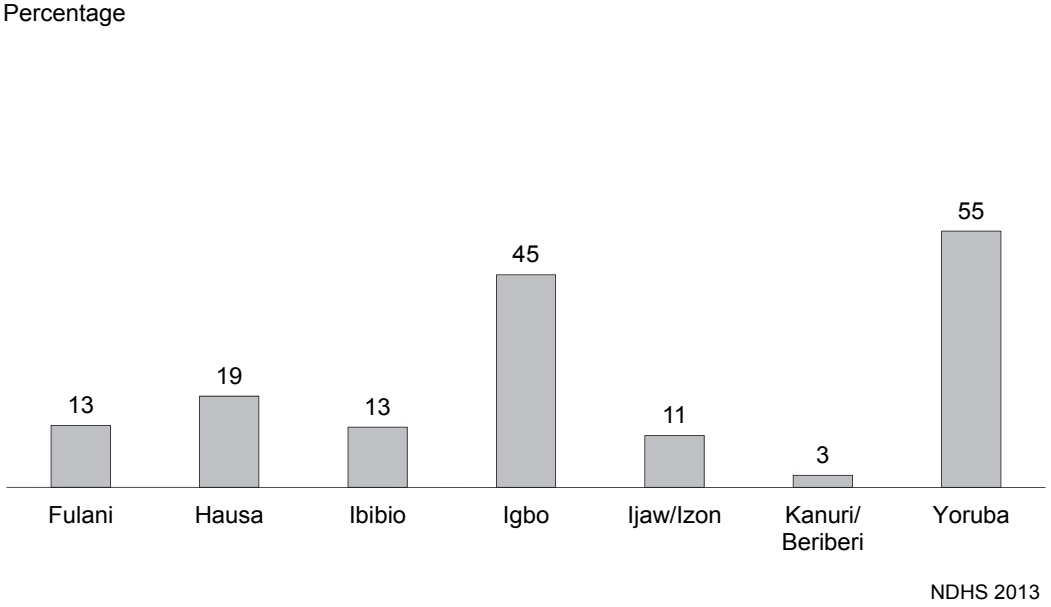
Continued…

Table 18.2—*Continued*

Background characteristic	Percentage of women circumcised	Number of women	Type of circumcision				Total	Number of circumcised women
			Cut, no flesh removed	Cut, flesh removed	Sewn closed	Don't know/ missing		
South South								
Akwa Ibom	11.0	864	2.8	72.0	9.4	15.7	100.0	95
Bayelsa	16.2	364	12.7	63.6	20.1	3.7	100.0	59
Cross River	32.2	703	1.6	73.6	2.7	22.1	100.0	227
Delta	40.3	993	4.3	70.0	7.4	18.4	100.0	400
Edo	41.6	742	1.1	69.6	3.6	25.8	100.0	308
Rivers	14.6	1,276	5.5	45.4	8.2	41.0	100.0	186
South West								
Ekiti	72.3	326	4.9	44.1	2.0	49.0	100.0	236
Lagos	34.8	1,964	2.3	70.8	4.4	22.4	100.0	684
Ogun	11.2	883	19.6	68.8	1.2	10.3	100.0	99
Ondo	45.0	808	4.1	50.2	1.1	44.6	100.0	363
Osun	76.6	765	3.4	85.2	2.9	8.5	100.0	586
Oyo	65.6	1,568	1.2	73.7	2.8	22.3	100.0	1,030
Education								
No education	17.2	14,729	9.8	49.9	3.7	36.5	100.0	2,540
Primary	30.7	6,734	4.7	69.7	5.7	19.9	100.0	2,068
Secondary	28.8	13,927	4.6	66.7	6.0	22.7	100.0	4,010
More than secondary	29.1	3,558	3.3	63.5	5.9	27.3	100.0	1,035
Wealth quintile								
Lowest	16.5	7,132	5.9	51.8	3.2	39.1	100.0	1,175
Second	20.3	7,428	7.7	60.6	4.9	26.8	100.0	1,509
Middle	23.5	7,486	9.4	67.0	4.7	18.9	100.0	1,759
Fourth	30.6	7,992	4.6	66.2	5.3	23.9	100.0	2,447
Highest	31.0	8,910	3.7	62.3	6.8	27.2	100.0	2,762
Total	24.8	38,948	5.8	62.6	5.3	26.3	100.0	9,652

Note: Total includes 40 cases with missing information on religion. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Figure 18.1 Percentage of women age 15-49 circumcised by selected ethnic groups



The 2013 NDHS collected additional information on the different types of circumcision procedures women have undergone, particularly procedures that are unclassified. All women who had been circumcised were asked whether they had experienced angurya cuts, gishiri cuts, or use of corrosive substances.

Table 18.3 shows that 25 percent of circumcised women had angurya cuts (scraping of tissue surrounding the vaginal orifice). This type of procedure was most common among women in the Islamic community (54 percent), those in the Fulani and Hausa ethnic groups (87 percent each), and those living in the North West zone (84 percent). Among the states, the proportion of women with angurya cuts was highest in Kano, Jigawa, and Kaduna (data not shown). Women with no education (70 percent) and those in the lowest wealth quintile (76 percent) were most likely to have had angurya cuts.

Five percent of circumcised women had gishiri cuts, and the same proportion used corrosive substances. More women in the North West zone than in the other zones had gishiri cuts, while use of corrosive substance was most common among Catholic women and women in the Ijaw/Izon ethnic group.

Table 18.3 Unclassified types of female circumcision

Percentage of circumcised women age 15-49 who experienced any unclassified types of circumcision, according to background characteristics, Nigeria 2013

Background characteristic	Unclassified types of female circumcision			Number of circum-cised women
	Angurya	Gishiri	Use of corrosive substance	
Religion				
Catholic	3.2	6.7	9.4	1,355
Other Christian	3.2	5.2	4.8	4,081
Islam	54.4	4.6	3.9	4,051
Traditionalist	13.5	1.7	8.1	125
Ethnic group				
Ekoi	*	*	*	13
Fulani	87.1	4.1	2.5	338
Hausa	86.5	6.3	4.0	2,074
Ibibio	3.9	13.1	7.5	108
Igala	*	*	*	2
Igbo	3.0	3.4	7.6	2,546
Ijaw/Izon	21.6	13.2	11.4	82
Kanuri/Beriberi	*	*	*	18
Tiv	*	*	*	3
Yoruba	0.7	1.2	1.1	2,989
Other	12.9	13.7	10.2	1,470
Residence				
Urban	10.5	4.9	4.0	5,309
Rural	42.6	5.4	6.4	4,343
Zone				
North Central	13.9	6.0	11.3	554
North East	73.3	5.1	16.1	167
North West	84.2	10.2	4.3	2,463
South East	2.6	2.8	8.3	2,195
South South	4.3	8.9	7.6	1,275
South West	0.7	0.9	0.6	2,998
Education				
No education	69.8	6.8	5.6	2,540
Primary	15.7	5.2	6.9	2,068
Secondary	6.9	4.1	4.4	4,010
More than secondary	3.2	4.9	3.2	1,035
Wealth quintile				
Lowest	75.9	5.1	3.9	1,175
Second	49.8	5.3	7.6	1,509
Middle	23.2	6.5	7.3	1,759
Fourth	9.8	4.4	4.6	2,447
Highest	4.2	4.8	3.3	2,762
Total	24.9	5.1	5.1	9,652

Note: Total includes 40 cases with missing information on religion and 9 cases with missing information on ethnicity. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

18.3 AGE AT CIRCUMCISION

In Nigeria, female circumcision occurs mostly during infancy. As shown in Table 18.4, four in five women (82 percent) who have been circumcised had their circumcision before their fifth birthday. Four percent of circumcised women underwent the procedure between age 5 and age 9, 5 percent were circumcised between age 10 and age 14, and 7 percent were circumcised at age 15 or older. The results show variations among ethnic groups in age at circumcision. Ninety-two percent of Hausa women underwent the procedure before age 5, while 38 percent of Ijaw/Izon women were circumcised at age 15 or older. By zone, 90 percent of women in the South East were circumcised before age 5, while 34 percent in the North East were circumcised at age 15 or older (this may be the result of a ritual for initiation into womanhood). Almost all women in Imo, Enugu, and Abia were circumcised before their fifth birthday, as compared with 11 percent in Benue.

Table 18.4 Age at circumcision

Percent distribution of circumcised women age 15-49 by age at circumcision, according to background characteristics, Nigeria 2013

Background characteristic	Age at circumcision					Total	Number of circumcised women
	<5[1]	5-9	10-14	15+	Don't know/ missing		
Age							
15-19	90.2	3.4	4.0	1.4	1.0	100.0	1,197
20-24	84.8	3.7	3.9	5.9	1.7	100.0	1,465
25-29	83.1	4.4	4.0	6.6	1.9	100.0	1,635
30-34	79.7	4.9	4.7	8.0	2.7	100.0	1,500
35-39	78.7	5.6	5.3	8.6	1.8	100.0	1,435
40-44	77.7	4.2	5.3	9.6	3.2	100.0	1,194
45-49	79.8	4.5	4.9	9.2	1.6	100.0	1,226
Religion							
Catholic	82.2	5.6	5.4	4.5	2.4	100.0	1,355
Other Christian	76.3	5.7	5.4	10.5	2.1	100.0	4,081
Islam	88.3	2.6	3.2	4.1	1.8	100.0	4,051
Traditionalist	64.6	6.1	10.3	18.6	0.4	100.0	125
Ethnic group							
Ekoi	*	*	*	*	*	100.0	13
Fulani	88.0	2.2	1.4	6.2	2.2	100.0	338
Hausa	91.6	0.3	2.1	4.6	1.3	100.0	2,074
Ibibio	45.7	9.4	14.3	27.4	3.1	100.0	108
Igala	*	*	*	*	*	100.0	2
Igbo	90.2	2.7	3.7	2.7	0.8	100.0	2,546
Ijaw/Izon	26.9	12.8	18.7	37.8	3.8	100.0	82
Kanuri/Beriberi	*	*	*	*	*	100.0	18
Tiv	*	*	*	*	*	100.0	3
Yoruba	88.7	5.2	2.9	0.8	2.4	100.0	2,989
Others	45.6	11.3	11.9	27.5	3.6	100.0	1,470
Residence							
Urban	83.7	4.0	4.2	6.0	2.2	100.0	5,309
Rural	79.9	4.9	5.0	8.4	1.8	100.0	4,343
Zone							
North Central	62.8	17.4	13.4	3.6	2.8	100.0	554
North East	46.1	8.0	7.6	33.6	4.7	100.0	167
North West	88.7	0.1	2.1	6.7	2.4	100.0	2,463
South East	90.4	2.6	3.9	2.3	0.8	100.0	2,195
South South	54.7	8.5	9.3	25.8	1.7	100.0	1,275
South West	87.4	4.9	3.3	2.0	2.4	100.0	2,998
State							
North Central							
FCT-Abuja	(73.4)	(8.7)	(5.7)	(6.2)	(6.0)	100.0	19
Benue	10.7	48.2	34.1	4.2	2.7	100.0	104
Kogi	*	*	*	*	*	100.0	12
Kwara	83.2	8.7	4.9	1.7	1.5	100.0	318
Nasarawa	36.0	14.7	32.7	14.2	2.4	100.0	53
Niger	(75.7)	(10.1)	(2.5)	(2.2)	(9.6)	100.0	37
Plateau	*	*	*	*	*	100.0	11
North East							
Adamawa	*	*	*	*	*	100.0	8
Bauchi	36.3	2.8	8.2	52.7	0.0	100.0	60
Borno	*	*	*	*	*	100.0	33
Gombe	(9.1)	(6.0)	(18.8)	(57.6)	(8.4)	100.0	16
Taraba	(68.1)	(11.6)	(7.2)	(13.2)	(0.0)	100.0	24
Yobe	(52.1)	(0.7)	(7.7)	(34.6)	(4.9)	100.0	26
North West							
Jigawa	96.1	0.0	0.3	3.1	0.5	100.0	534
Kaduna	63.2	0.0	7.1	22.8	6.9	100.0	536
Kano	97.7	0.0	0.4	1.7	0.3	100.0	1,303
Katsina	*	*	*	*	*	100.0	1
Kebbi	(48.8)	(10.6)	(1.9)	(0.0)	(38.6)	100.0	32
Sokoto	(85.3)	(0.0)	(3.5)	(9.8)	(1.4)	100.0	33
Zamfara	*	*	*	*	*	100.0	23
South East							
Abia	98.4	0.9	0.5	0.0	0.2	100.0	165
Anambra	93.2	0.0	2.1	1.7	3.0	100.0	246
Ebonyi	78.1	6.4	9.4	5.5	0.5	100.0	833
Enugu	98.9	0.3	0.3	0.0	0.4	100.0	384
Imo	99.1	0.0	0.0	0.1	0.7	100.0	567

Continued…

Table 18.4—*Continued*

Background characteristic	Age at circumcision <5[1]	5-9	10-14	15+	Don't know/ missing	Total	Number of circumcised women
South South							
Akwa Ibom	41.2	18.9	13.4	22.7	3.9	100.0	95
Bayelsa	33.8	21.2	26.7	17.7	0.6	100.0	59
Cross River	41.2	24.2	20.9	11.1	2.7	100.0	227
Delta	38.7	1.2	7.0	52.0	1.0	100.0	400
Edo	82.9	0.9	0.5	14.3	1.2	100.0	308
Rivers	72.4	8.3	6.6	10.7	2.0	100.0	186
South West							
Ekiti	89.0	4.3	2.0	1.5	3.1	100.0	236
Lagos	83.5	3.8	4.7	3.7	4.3	100.0	684
Ogun	75.0	3.5	12.3	6.8	2.4	100.0	99
Ondo	91.2	1.8	2.4	3.7	0.8	100.0	363
Osun	86.2	8.5	1.1	1.5	2.8	100.0	586
Oyo	90.2	5.1	3.3	0.2	1.2	100.0	1,030
Education							
No education	83.6	2.8	4.4	7.2	2.0	100.0	2,540
Primary	75.4	6.8	6.6	9.5	1.7	100.0	2,068
Secondary	83.8	4.1	4.1	6.1	2.0	100.0	4,010
More than secondary	84.2	4.8	2.9	5.6	2.5	100.0	1,035
Wealth quintile							
Lowest	87.1	1.9	3.1	5.9	2.0	100.0	1,175
Second	81.6	4.6	5.8	6.5	1.5	100.0	1,509
Middle	76.9	5.9	7.3	8.3	1.7	100.0	1,759
Fourth	81.4	5.4	4.1	7.0	2.1	100.0	2,447
Highest	83.7	3.5	3.2	7.1	2.4	100.0	2,762
Total	82.0	4.4	4.6	7.1	2.0	100.0	9,652

Note: Total includes 40 cases with missing information on religion and 9 cases with missing information on ethnicity. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes women who reported they were circumcised during infancy but did not provide a specific age

18.4 CIRCUMCISION OF DAUGHTERS

The 2013 NDHS gathered information from mothers on whether their daughters had been circumcised and, if so, at what age. Table 18.5 shows that 83 percent of girls age 0-14 have not been circumcised, while 16 percent were circumcised before they celebrated their first birthday. Among the youngest cohort (age 0-4), 15 percent were circumcised before their first birthday.

Table 18.5 Prevalence of circumcision and age at circumcision: Girls age 0-14

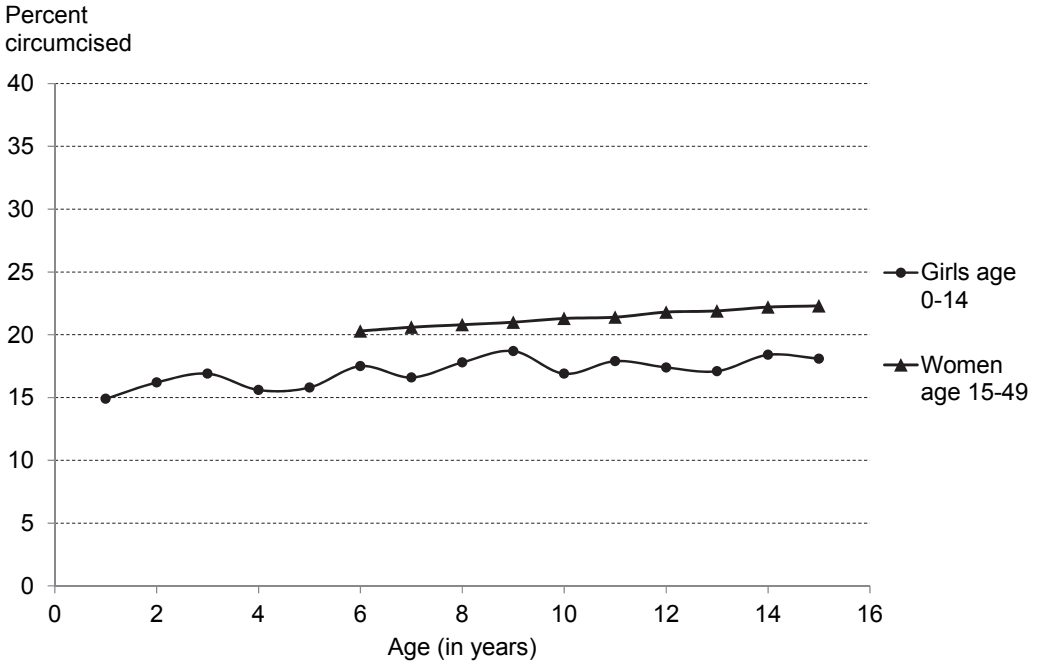
Percent distribution of girls age 0-14 by age at circumcision, and percentage of girls circumcised according to current age, Nigeria 2013

Current age	Age at circumcision <1	1-4	5-9	10-14	Don't know/ missing	Not circum-cised	Total	Number of girls	Percentage circum-cised
0-4	15.1	0.6	na	na	0.2	84.1	100.0	14,440	15.9
5-9	16.3	0.9	0.3	na	0.1	82.5	100.0	12,542	17.5
10-14	16.3	0.7	0.3	0.2	0.2	82.2	100.0	9,325	17.8
Total	15.8	0.7	0.2	0.0	0.2	83.1	100.0	36,308	16.9

Note: The circumcision status of girls is reported by their mothers.
na = Not applicable due to censoring

A comparison of age at circumcision among women age 15-49 and girls age 0-14 by exact age at circumcision indicates that a higher proportion of women than girls were circumcised at each particular age (Figure 18.2).

Figure 18.2 **Percentage of women age 15-49 and girls age 0-14 circumcised by age**



NDHS 2013

Table 18.6 shows the percentage of girls age 0-14 who are circumcised according to age and mother's background characteristics. Twenty percent of girls age 0-4 whose mothers are Muslim have been circumcised. Daughters of women with more than a secondary education are less likely than daughters of women at lower levels of education to have been circumcised. In all age groups, the prevalence of circumcision is higher among girls whose mothers are circumcised than among those whose mothers are not circumcised. Daughters in households in the lowest wealth quintile (19 percent) are more likely to have been circumcised than daughters in households in the highest quintile (13 percent).

Table 18.6 Circumcision of girls age 0-14 by mother's background characteristics

Percentage of girls age 0-14 who are circumcised, according to age and mother's background characteristics, Nigeria 2013

Background characteristic	Current age of girls			All 0-14
	0-4	5-9	10-14	
Religion				
Catholic	9.5	10.3	10.9	10.2
Other Christian	8.6	10.4	13.8	10.6
Islam	20.4	22.0	20.7	21.0
Traditionalist	7.8	10.7	15.3	11.0
Missing	10.2	13.6	(23.0)	13.6
Ethnic group				
Ekoi	*	*	*	(3.0)
Fulani	16.7	16.1	15.1	16.1
Hausa	25.9	27.1	24.6	26.0
Ibibio	0.0	0.0	3.5	0.9
Igbo	16.6	17.9	21.3	18.2
Ijaw/Izon	0.1	0.6	0.3	0.3
Kanuri/Beriberi	3.2	4.0	5.1	4.0
Tiv	0.0	0.3	1.1	0.4
Yoruba	21.6	30.9	37.0	28.9
Others	4.4	4.4	5.4	4.6
Residence				
Urban	14.1	18.0	19.4	16.8
Rural	16.9	17.3	16.8	17.0

Continued…

Table 18.6—*Continued*

Background characteristic	Current age of girls 0-4	5-9	10-14	All 0-14
Zone				
North Central	3.8	3.9	4.8	4.1
North East	5.1	5.1	4.0	4.8
North West	27.0	27.8	25.6	27.0
South East	18.7	20.4	24.2	20.7
South South	5.0	6.6	8.9	6.6
South West	16.9	24.8	29.5	22.9
State				
North Central				
FCT-Abuja	0.7	0.3	1.2	0.7
Benue	0.0	1.3	4.1	1.5
Kogi	0.1	1.0	0.6	0.6
Kwara	23.4	29.5	36.3	28.7
Nasarawa	3.9	4.4	3.6	4.0
Niger	3.4	0.7	0.4	1.7
Plateau	0.4	0.4	0.0	0.3
North East				
Adamawa	0.5	0.0	0.0	0.2
Bauchi	10.8	10.6	8.3	10.1
Borno	2.9	5.2	2.5	3.6
Gombe	0.5	0.4	1.0	0.6
Taraba	6.9	7.4	6.0	6.9
Yobe	4.3	2.8	3.9	3.7
North West				
Jigawa	52.5	42.4	40.7	46.4
Kaduna	23.2	30.3	29.8	27.6
Kano	43.6	45.9	43.4	44.4
Kebbi	4.7	4.2	1.7	3.7
Sokoto	22.1	26.0	25.1	24.2
Zamfara	25.3	25.0	21.8	24.4
South East				
Abia	14.9	16.4	22.3	17.5
Anambra	6.0	8.4	11.1	8.1
Ebonyi	20.9	25.6	34.2	26.2
Enugu	18.2	17.7	25.4	19.7
Imo	34.1	34.7	25.5	32.3
South South				
Akwa Ibom	1.4	0.4	2.2	1.3
Bayelsa	0.2	1.2	1.1	0.8
Cross River	2.7	1.1	4.2	2.5
Delta	8.1	9.7	11.5	9.5
Edo	16.0	20.8	29.0	21.3
Rivers	2.0	3.7	4.5	3.3
South West				
Ekiti	42.8	49.8	53.3	47.8
Lagos	7.6	9.8	13.8	9.9
Ogun	0.2	2.7	2.7	1.7
Ondo	22.2	26.3	38.2	28.0
Osun	25.5	42.1	40.9	35.3
Oyo	28.5	40.9	48.6	38.4
Mother's education				
No education	19.5	19.6	18.7	19.3
Primary	14.4	17.1	17.6	16.3
Secondary	12.0	14.8	17.9	14.2
More than secondary	8.5	10.4	9.5	9.3
Mother's circumcision status				
Circumcised	44.7	49.1	49.1	47.4
Not circumcised	8.7	7.8	7.0	8.0
Don't know/missing	(37.1)	(16.4)	(15.1)	23.4
Wealth quintile				
Lowest	20.5	19.6	17.6	19.4
Second	19.3	20.9	21.4	20.4
Middle	12.8	15.6	17.3	14.9
Fourth	13.8	16.4	17.4	15.6
Highest	10.6	13.6	14.5	12.6
Total	15.9	17.5	17.8	16.9

Note: The circumcision status of girls is reported by their mothers. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

The 2013 NDHS also included questions to ascertain the prevalence of the various types of FGC among daughters. Women who said their daughter was circumcised were asked whether her genital area had been sewn closed (a process known as infibulation). Table 18.7 shows the percent distribution of girls age 0-14 who are circumcised by whether or not they are infibulated, according to mother's background characteristics. Three percent of girls in Nigeria have been circumcised and had their genital area sewn closed. Girls whose mothers are Igbo are most likely to have been infibulated (5 percent). There are no urban-rural differences in the proportion of girls who have been infibulated (3 percent each). Abia has the highest proportion of girls who have been infibulated (19 percent), followed by Kebbi (13 percent). Twenty-six percent of girls age 0-14 whose mothers were infibulated have undergone the procedure themselves.

Table 18.7 Infibulation among circumcised girls age 0-14

Percent distribution of girls age 0-14 who are circumcised by whether or not they are infibulated, according to mother's background characteristics, Nigeria 2013

Background characteristic	Infibulation status			Total	Number
	Sewn closed	Not sewn closed	Don't know/ missing		
Religion					
Catholic	4.3	92.4	3.3	100.0	314
Other Christian	3.1	93.2	3.7	100.0	1,112
Islam	2.4	92.3	5.3	100.0	4,653
Traditionalist	(12.4)	(84.1)	(3.5)	100.0	46
Ethnic group					
Ekoi	*	*	*	100.0	1
Fulani	2.0	94.3	3.7	100.0	476
Hausa	2.0	91.8	6.2	100.0	3,227
Ibibio	*	*	*	100.0	5
Igbo	5.0	93.4	1.5	100.0	711
Ijaw/Izon	*	*	*	100.0	2
Kanuri/Beriberi	(0.0)	94.9)	(5.1)	100.0	27
Tiv	*	*	*	100.0	3
Yoruba	2.2	94.9	3.0	100.0	1,238
Others	5.8	87.6	6.6	100.0	454
Residence					
Urban	2.7	93.4	3.9	100.0	2,192
Rural	2.6	91.9	5.4	100.0	3,958
Zone					
North Central	10.8	86.8	2.4	100.0	209
North East	0.9	92.2	6.8	100.0	295
North West	2.0	92.2	5.7	100.0	3,600
South East	5.1	93.1	1.8	100.0	646
South South	4.1	85.3	10.5	100.0	233
South West	2.0	95.3	2.7	100.0	1,167
State					
North Central					
FCT-Abuja	*	*	*	100.0	2
Benue	*	*	*	100.0	18
Kogi	*	*	*	100.0	3
Kwara	1.6	97.1	1.4	100.0	137
Nasarawa	*	*	*	100.0	21
Niger	*	*	*	100.0	27
Plateau	*	*	*	100.0	2
North East					
Adamawa	*	*	*	100.0	2
Bauchi	0.0	99.0	1.0	100.0	146
Borno	*	*	*	100.0	48
Gombe	*	*	*	100.0	4
Taraba	4.9	63.7	31.4	100.0	55
Yobe	0.0	100.0	0.0	100.0	40
North West					
Jigawa	1.1	98.0	1.0	100.0	761
Kaduna	0.4	99.6	0.0	100.0	529
Kano	3.1	87.1	9.7	100.0	1,575
Kebbi	13.0	82.0	5.0	100.0	57
Sokoto	0.0	94.3	5.7	100.0	287
Zamfara	1.6	91.5	6.9	100.0	390
South East					
Abia	18.7	74.2	7.1	100.0	64
Anambra	5.3	94.7	0.0	100.0	57
Ebonyi	1.2	96.5	2.3	100.0	214
Enugu	10.0	89.7	0.3	100.0	133
Imo	1.1	97.8	1.1	100.0	178

Continued…

Table 18.7—*Continued*

Background characteristic	Infibulation status: Sewn closed	Not sewn closed	Don't know/ missing	Total	Number
South South					
Akwa Ibom	*	*	*	100.0	7
Bayelsa	*	*	*	100.0	2
Cross River	*	*	*	100.0	15
Delta	0.4	92.8	6.7	100.0	64
Edo	4.8	85.5	9.7	100.0	115
Rivers	(10.9)	(68.5)	(20.7)	100.0	28
South West					
Ekiti	3.6	94.8	1.5	100.0	107
Lagos	5.0	90.7	4.3	100.0	140
Ogun	*	*	*	100.0	15
Ondo	1.5	92.1	6.4	100.0	182
Osun	0.9	97.0	2.1	100.0	189
Oyo	1.4	97.1	1.5	100.0	535
Mother's education					
No education	2.6	92.0	5.5	100.0	3,519
Primary	3.7	91.9	4.4	100.0	1,265
Secondary	2.0	93.8	4.2	100.0	1,175
More than secondary	1.8	97.2	1.0	100.0	191
Mother's circumcision status					
Infibulated	26.1	58.2	15.7	100.0	166
Circumcised, not infibulated	1.9	94.7	3.4	100.0	4,367
Not circumcised	2.4	89.8	7.8	100.0	1,617
Wealth quintile					
Lowest	2.6	91.2	6.3	100.0	1,670
Second	3.3	91.4	5.3	100.0	1,634
Middle	3.0	93.4	3.6	100.0	1,047
Fourth	1.8	94.3	3.9	100.0	1,021
Highest	2.2	93.9	3.9	100.0	778
Total	2.7	92.5	4.9	100.0	6,150

Note: The circumcision status of girls is reported by their mothers. Total includes 25 cases with missing information on religion and 5 cases with missing information on ethnicity. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

18.5 PERSON WHO PERFORMED CIRCUMCISION

The 2013 NDHS also included questions on the person who performed the circumcision. Table 18.8 shows the percent distribution of circumcised girls age 0-14 and women age 15-49, according to the person performing the circumcision and type of circumcision. Traditional agents perform the majority of female circumcisions in Nigeria; 87 percent of girls age 0-14 and 80 percent of women age 15-49 were circumcised by a traditional agent. Twelve percent of girls and 13 percent of women were circumcised by a medical professional.

Among the different types of traditional agents, 84 percent of girls age 0-14 were circumcised by a traditional circumciser and 3 percent by a traditional birth attendant. Similarly, 72 percent of women age 15-49 were circumcised by a traditional circumciser and 7 percent by a traditional birth attendant.

Table 18.8 Aspects of circumcision among circumcised girls age 0-14 and women age 15-49

Percent distribution of circumcised girls age 0-14 by current age and women age 15-49, according to person performing the circumcision and type of circumcision, Nigeria 2013

Background characteristic	Current age of girls: 0-4	5-9	10-14	Girls age 0-14	Women age 15-49
Person who performed the circumcision					
Traditional agent	87.8	87.2	84.2	86.6	79.5
Traditional circumciser	84.8	84.7	82.0	84.0	72.2
Traditional birth attendant	2.9	2.4	2.1	2.5	7.0
Other traditional agent	0.1	0.1	0.1	0.1	0.2
Medical professional	10.8	11.3	14.1	11.9	12.7
Doctor	0.8	1.1	1.0	0.9	2.3
Nurse/midwife	9.6	9.6	12.5	10.4	9.9
Other health professional	0.4	0.7	0.6	0.6	0.5
Don't know/missing	1.3	1.5	1.7	1.5	7.9
Total	100.0	100.0	100.0	100.0	100.0
Type of circumcision					
Sewn closed	3.1	2.4	2.4	2.7	5.3
Not sewn closed	92.4	92.4	92.6	92.5	77.4
Don't know/ missing	4.5	5.2	5.0	4.9	17.3
Total	100.0	100.0	100.0	100.0	100.0
Number	2,292	2,200	1,658	6,150	9,652

Note: The circumcision status of girls is reported by their mothers.

Among medical professionals, a nurse/midwife performed most circumcisions of girls age 0-14 and women age 15-49 (10 percent each).

Table 18.8 shows that 3 percent of girls age 0-14 had their genital areas sewn closed, as compared with 5 percent of women age 15-49, indicating a slight change over time in the practice of infibulation.

18.6 ATTITUDES TOWARD FEMALE CIRCUMCISION

In the 2013 NDHS, respondents were asked the following question: "Do you believe that female circumcision is required by your religion?" Table 18.9 shows the percent distribution of women and men age 15-49 who have heard of female circumcision according to their opinion on whether their religion requires this practice, by background characteristics. In Nigeria, 68 percent of women and 57 percent of men who have heard of female circumcision believe that the practice is not required. Overall, men are more likely than women to think that female circumcision is required by their religion (24 percent and 15 percent, respectively). Sixty-four percent of women who are circumcised believe that female circumcision is not required, while 23 percent of circumcised women still believe that the practice is required.

Seventy-three percent of Catholic women and 66 percent of Catholic men who have heard of female circumcision believe that the practice is not required. Among other Christians, 78 percent of women and 73 percent of men believe that female circumcision is not required, while 60 percent of Muslim women and 43 percent of Muslim men believe that the practice is not required. Among traditionalists, 43 percent of women and 54 percent of men believe that the practice is not required by their religion. In all of the religious groups, men are more likely than women to believe that female circumcision is required by their religion.

Women and men in the Hausa ethnic group, those living in rural areas, and those living in the North West are most likely to believe that female circumcision is required by their religion. While the prevalence of circumcision is low in Kebbi (3 percent), most women and men living in that state strongly believe that it is required by their religion (49 percent and 74 percent, respectively). Conversely, while women living in Osun have the highest rate of circumcision (77 percent), 88 percent of women and 94 percent of men living in that state believe that the practice is not required by their religion.

Education and wealth have strong influences on beliefs regarding requirement of female circumcision by one's religion. Women and men at higher levels of education and those in the higher wealth quintiles are least likely to believe that female circumcision is required by their religion. For example, 54 percent of women and 42 percent of men in the lowest wealth quintile believe that female circumcision is not required by their religion, while 76 percent of women and 64 percent of men in the highest quintile believe that the practice is not required.

Table 18.9 Opinions of women and men about whether circumcision is required by their religion

Percent distribution of women and men age 15-49 who have heard of female circumcision, by opinion on whether their religion requires female circumcision, according to background characteristics, Nigeria 2013

Background characteristic	Women					Men				
	Required	Not required	Don't know/ missing	Total	Number of respon-dents	Required	Not required	Don't know/ missing	Total	Number of respon-dents
Female circumcision status										
Circumcised	22.7	64.0	13.3	100.0	9,652	na	na	na	na	na
Not circumcised	9.5	73.5	17.0	100.0	14,912	na	na	na	na	na
Don't know/missing	13.5	64.6	21.9	100.0	88	na	na	na	na	na
Age										
15-19	15.8	64.9	19.3	100.0	4,048	23.8	52.7	23.6	100.0	1,257
20-24	15.6	67.1	17.2	100.0	4,362	25.8	55.1	19.1	100.0	1,554
25-29	14.9	67.8	17.3	100.0	4,923	22.5	58.9	18.6	100.0	1,797
30-34	14.7	68.9	16.3	100.0	3,954	23.3	55.7	21.0	100.0	1,731
35-39	14.8	69.9	15.2	100.0	3,574	22.8	58.9	18.3	100.0	1,643
40-44	13.4	70.3	16.3	100.0	2,702	23.7	57.9	18.4	100.0	1,419
45-49	14.9	69.8	15.3	100.0	2,730	24.1	59.1	16.9	100.0	1,380
Religion										
Catholic	16.0	72.7	11.4	100.0	2,816	22.2	65.5	12.3	100.0	1,251
Other Christian	10.5	78.4	11.2	100.0	9,731	15.5	73.2	11.3	100.0	4,033
Islam	17.8	60.2	22.0	100.0	13,421	30.0	42.9	27.1	100.0	5,336
Traditionalist	33.1	43.1	23.8	100.0	200	39.9	53.8	6.4	100.0	100
Other	*	*	*	100.0	3	*	*	*	100.0	9
Missing	11.1	71.8	17.1	100.0	121	7.8	64.3	28.0	100.0	51
Ethnic group										
Ekoi	(11.9)	(84.2)	(3.9)	100.0	18	(44.3)	(51.3)	(4.4)	100.0	16
Fulani	18.1	54.8	27.1	100.0	1,408	24.6	51.6	23.8	100.0	502
Hausa	21.0	55.6	23.4	100.0	7,854	36.8	34.7	28.4	100.0	2,745
Ibibio	4.9	83.6	11.5	100.0	551	6.9	82.4	10.7	100.0	222
Igala	5.4	71.7	22.9	100.0	104	10.0	77.8	12.2	100.0	73
Igbo	17.4	71.2	11.4	100.0	4,642	26.1	60.0	14.0	100.0	1,719
Ijaw/Izon	11.4	85.1	3.5	100.0	505	3.9	91.2	4.9	100.0	271
Kanuri/Beriberi	5.5	68.0	26.5	100.0	513	20.5	36.6	42.9	100.0	236
Tiv	1.7	88.3	10.0	100.0	239	11.0	87.7	1.3	100.0	185
Yoruba	8.8	81.5	9.6	100.0	4,677	22.8	60.4	16.8	100.0	1,765
Others	11.9	71.4	16.7	100.0	5,744	14.9	68.6	16.5	100.0	3,016
Missing	(13.0)	(69.6)	(17.4)	100.0	37	(17.7)	(76.3)	(6.0)	100.0	31
Residence										
Urban	12.1	73.6	14.3	100.0	12,418	23.0	58.4	18.7	100.0	5,229
Rural	17.6	63.3	19.1	100.0	13,875	24.3	55.7	20.0	100.0	5,552
Zone										
North Central	9.4	77.6	13.0	100.0	1,936	20.2	68.2	11.6	100.0	1,250
North East	11.1	62.2	26.7	100.0	3,254	10.7	62.0	27.3	100.0	1,679
North West	20.5	54.0	25.6	100.0	8,479	36.4	36.2	27.5	100.0	2,890
South East	19.7	69.6	10.6	100.0	3,740	30.9	53.5	15.6	100.0	1,268
South South	13.3	80.3	6.4	100.0	3,805	15.2	74.7	10.1	100.0	1,694
South West	8.1	81.9	9.9	100.0	5,078	20.9	63.2	15.9	100.0	2,000
State										
North Central										
FCT-Abuja	6.8	81.1	12.1	100.0	164	8.1	85.5	6.4	100.0	99
Benue	16.1	78.7	5.2	100.0	453	19.1	80.4	0.5	100.0	266
Kogi	6.5	77.4	16.1	100.0	197	15.2	65.1	19.6	100.0	118
Kwara	5.8	91.1	3.2	100.0	504	37.1	39.4	23.5	100.0	245
Nasarawa	11.8	50.4	37.8	100.0	217	15.3	76.1	8.6	100.0	133
Niger	8.3	76.1	15.6	100.0	294	18.9	66.7	14.3	100.0	272
Plateau	6.6	62.9	30.6	100.0	106	11.4	83.2	5.3	100.0	118
North East										
Adamawa	3.5	57.8	38.7	100.0	274	8.5	72.4	19.2	100.0	238
Bauchi	15.7	50.6	33.7	100.0	533	19.0	65.7	15.3	100.0	351
Borno	5.2	73.7	21.2	100.0	1,011	8.4	33.9	57.7	100.0	573
Gombe	11.2	61.4	27.4	100.0	197	5.3	84.1	10.6	100.0	159
Taraba	14.0	75.8	10.1	100.0	439	2.4	92.9	4.7	100.0	193
Yobe	16.5	49.5	34.0	100.0	800	19.1	78.9	2.0	100.0	166
North West										
Jigawa	29.5	34.7	35.8	100.0	1,146	14.5	29.4	56.0	100.0	331
Kaduna	30.9	33.2	35.9	100.0	1,182	3.2	93.3	3.5	100.0	426
Kano	6.8	74.7	18.5	100.0	2,846	70.5	8.2	21.3	100.0	874
Katsina	0.7	88.5	10.8	100.0	698	3.7	55.6	40.7	100.0	412
Kebbi	48.6	40.2	11.3	100.0	526	74.3	25.7	0.0	100.0	245
Sokoto	26.5	32.8	40.7	100.0	1,056	9.6	21.0	69.4	100.0	238
Zamfara	29.3	47.3	23.4	100.0	1,025	41.8	37.6	20.6	100.0	365

Continued…

Table 18.9—*Continued*

Background characteristic	Women					Men				
	Required	Not required	Don't know/ missing	Total	Number of respon-dents	Required	Not required	Don't know/ missing	Total	Number of respon-dents
South East										
Abia	12.3	74.0	13.6	100.0	476	47.7	45.3	7.1	100.0	139
Anambra	23.6	69.6	6.8	100.0	706	26.8	26.2	47.0	100.0	306
Ebonyi	12.7	80.3	7.0	100.0	1,084	19.2	70.6	10.1	100.0	321
Enugu	7.3	84.2	8.5	100.0	669	5.6	92.9	1.5	100.0	259
Imo	40.6	40.7	18.7	100.0	805	68.9	27.8	3.2	100.0	242
South South										
Akwa Ibom	10.2	75.2	14.6	100.0	487	7.2	83.4	9.4	100.0	210
Bayelsa	10.1	88.9	1.0	100.0	272	7.3	91.7	1.0	100.0	162
Cross River	2.1	94.8	3.1	100.0	605	39.7	54.8	5.6	100.0	188
Delta	7.2	92.0	0.8	100.0	874	10.0	81.1	8.9	100.0	403
Edo	32.0	59.8	8.2	100.0	649	29.1	47.0	23.9	100.0	293
Rivers	15.9	74.4	9.7	100.0	918	6.8	85.4	7.8	100.0	438
South West										
Ekiti	7.4	83.4	9.2	100.0	297	5.2	93.8	1.0	100.0	128
Lagos	7.3	78.7	13.9	100.0	1,641	21.9	59.9	18.3	100.0	690
Ogun	1.1	95.6	3.3	100.0	488	12.8	73.9	13.3	100.0	182
Ondo	10.7	72.8	16.5	100.0	583	27.7	58.8	13.5	100.0	261
Osun	10.7	88.0	1.3	100.0	733	4.3	94.0	1.7	100.0	205
Oyo	9.3	81.2	9.5	100.0	1,335	29.1	47.0	24.0	100.0	534
Education										
No education	20.4	56.6	23.0	100.0	9,422	27.7	41.6	30.7	100.0	2,096
Primary	11.8	74.6	13.6	100.0	4,510	26.4	52.9	20.7	100.0	1,849
Secondary	13.1	73.5	13.4	100.0	9,361	23.9	60.2	15.9	100.0	4,808
More than secondary	8.6	78.2	13.3	100.0	3,000	16.2	69.2	14.6	100.0	2,027
Wealth quintile										
Lowest	20.2	54.4	25.5	100.0	4,608	26.8	41.5	31.6	100.0	1,606
Second	18.6	61.0	20.4	100.0	4,573	26.7	51.7	21.6	100.0	1,732
Middle	15.1	69.6	15.3	100.0	4,529	24.7	60.6	14.7	100.0	1,911
Fourth	13.1	74.8	12.1	100.0	5,636	24.2	59.4	16.5	100.0	2,377
Highest	10.6	75.7	13.7	100.0	6,947	19.3	63.8	16.8	100.0	3,154
Total	15.0	68.2	16.9	100.0	26,293	23.6	57.0	19.3	100.0	10,780

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

Table 18.10 shows that 64 percent of women and 62 percent of men in Nigeria think that the practice of female circumcision should not continue, while only 23 percent of women and 27 percent of men think that it should continue. Among circumcised women, 40 percent think that the practice should be continued, while 50 percent believe that it should not continue. Traditionalist women and men are more likely than those in other religious groups to believe that the practice should be continued (41 percent and 42 percent, respectively). Women in the Fulani (32 percent), Hausa (30 percent), and Yoruba (30 percent) ethnic groups are most likely to believe that female circumcision should continue. More rural (25 percent) than urban (20 percent) women think that female circumcision should be continued; conversely, urban men (29 percent) are more likely than rural men (26 percent) to think that the practice should continue. Women at higher levels of education and those in the higher wealth quintiles think that female circumcision should be discontinued; however, the pattern by wealth among men is not distinct.

Table 18.10 Opinions of women and men about whether the practice of circumcision should continue

Percent distribution of women and men age 15-49 who have heard of female circumcision by their opinion on whether the practice of circumcision should be continued, by background characteristics, Nigeria 2013

Background characteristic	Women					Men				
	Continued	Not continued	Don't know/ missing/ depends	Total	Number of respon-dents	Continued	Not continued	Don't know/ missing/ depends	Total	Number of respon-dents
Female circumcision status										
Circumcised	40.3	50.0	9.7	100.0	9,652	na	na	na	na	na
Not circumcised	11.2	76.2	12.6	100.0	14,912	na	na	na	na	na
Don't know/missing	20.5	60.7	18.8	100.0	88	na	na	na	na	na
Age										
15-19	23.2	63.2	13.5	100.0	4,048	27.5	55.9	16.7	100.0	1,257
20-24	25.5	62.0	12.5	100.0	4,362	28.7	58.8	12.5	100.0	1,554
25-29	22.2	64.9	12.9	100.0	4,923	27.2	63.2	9.6	100.0	1,797
30-34	22.6	64.2	13.2	100.0	3,954	26.8	62.7	10.5	100.0	1,731
35-39	21.1	67.3	11.6	100.0	3,574	26.6	64.6	8.8	100.0	1,643
40-44	23.6	63.6	12.8	100.0	2,702	27.8	63.5	8.7	100.0	1,419
45-49	23.3	65.4	11.3	100.0	2,730	27.2	64.8	8.0	100.0	1,380
Religion										
Catholic	19.6	73.1	7.3	100.0	2,816	29.1	64.1	6.9	100.0	1,251
Other Christian	15.3	75.7	9.0	100.0	9,731	21.5	71.3	7.1	100.0	4,033
Islam	29.2	54.4	16.4	100.0	13,421	31.2	54.9	14.0	100.0	5,336
Traditionalist	40.7	48.3	11.0	100.0	200	41.8	48.6	9.6	100.0	100
Other	*	*	*	100.0	3	*	*	*	100.0	9
Missing	23.2	64.7	12.1	100.0	121	19.4	61.5	19.1	100.0	51
Ethnic group										
Ekoi	(9.9)	(87.0)	(3.1)	100.0	18	(20.4)	(75.5)	(4.1)	100.0	16
Fulani	32.2	47.8	20.0	100.0	1,408	26.1	60.1	13.8	100.0	502
Hausa	29.6	55.4	15.0	100.0	7,854	32.6	54.0	13.3	100.0	2,745
Ibibio	4.3	87.0	8.7	100.0	551	8.8	85.0	6.3	100.0	222
Igala	1.2	76.3	22.5	100.0	104	4.5	84.6	10.8	100.0	73
Igbo	21.8	72.5	5.7	100.0	4,642	35.1	57.7	7.2	100.0	1,719
Ijaw/Izon	1.9	93.3	4.9	100.0	505	4.9	90.3	4.8	100.0	271
Kanuri/Beriberi	11.5	58.1	30.4	100.0	513	17.9	51.4	30.7	100.0	236
Tiv	0.7	97.2	2.0	100.0	239	10.9	86.6	2.5	100.0	185
Yoruba	29.5	59.4	11.1	100.0	4,677	36.8	50.7	12.4	100.0	1,765
Others	13.8	72.1	14.1	100.0	5,744	18.6	73.4	8.0	100.0	3,016
Missing	(30.4)	(56.6)	(13.1)	100.0	37	(32.5)	(54.3)	(13.2)	100.0	31
Residence										
Urban	20.4	68.7	10.9	100.0	12,418	29.2	59.8	11.0	100.0	5,229
Rural	25.4	60.4	14.2	100.0	13,875	25.7	64.2	10.1	100.0	5,552
Zone										
North Central	16.7	76.0	7.4	100.0	1,936	28.1	63.3	8.6	100.0	1,250
North East	17.0	58.3	24.7	100.0	3,254	12.1	72.6	15.3	100.0	1,679
North West	29.8	53.5	16.7	100.0	8,479	32.2	55.1	12.7	100.0	2,890
South East	23.8	72.7	3.5	100.0	3,740	41.2	51.8	7.0	100.0	1,268
South South	11.1	82.8	6.0	100.0	3,805	18.3	77.9	3.8	100.0	1,694
South West	26.6	61.6	11.8	100.0	5,078	31.8	55.5	12.6	100.0	2,000
State										
North Central										
FCT-Abuja	3.6	83.8	12.6	100.0	164	23.9	60.8	15.3	100.0	99
Benue	15.9	83.7	0.3	100.0	453	17.6	81.6	0.8	100.0	266
Kogi	4.0	82.8	13.2	100.0	197	7.5	83.2	9.4	100.0	118
Kwara	31.0	63.3	5.7	100.0	504	70.5	17.3	12.2	100.0	245
Nasarawa	15.1	77.1	7.8	100.0	217	17.0	77.8	5.2	100.0	133
Niger	12.8	74.0	13.2	100.0	294	23.3	61.8	14.9	100.0	272
Plateau	9.9	81.2	8.9	100.0	106	10.9	87.5	1.6	100.0	118
North East										
Adamawa	8.6	88.0	3.5	100.0	274	5.6	91.9	2.5	100.0	238
Bauchi	20.6	53.1	26.3	100.0	533	14.1	66.5	19.4	100.0	351
Borno	12.8	59.1	28.1	100.0	1,011	12.9	57.8	29.3	100.0	573
Gombe	11.8	50.4	37.8	100.0	197	6.8	92.1	1.1	100.0	159
Taraba	9.2	74.6	16.3	100.0	439	1.9	93.4	4.8	100.0	193
Yobe	28.1	43.7	28.2	100.0	800	31.1	66.5	2.4	100.0	166
North West										
Jigawa	46.2	34.4	19.4	100.0	1,146	13.3	76.2	10.5	100.0	331
Kaduna	16.2	43.4	40.3	100.0	1,182	3.0	90.5	6.5	100.0	426
Kano	29.1	65.9	4.9	100.0	2,846	58.3	21.7	20.0	100.0	874
Katsina	0.4	97.0	2.6	100.0	698	3.0	82.5	14.6	100.0	412
Kebbi	77.5	20.5	2.0	100.0	526	75.6	24.4	0.0	100.0	245
Sokoto	27.7	44.7	27.5	100.0	1,056	7.9	89.6	2.5	100.0	238
Zamfara	26.3	48.3	25.4	100.0	1,025	40.5	42.1	17.4	100.0	365

Continued…

Table 18.10—*Continued*

Background characteristic	Women					Men				
	Continued	Not continued	Don't know/ missing/ depends	Total	Number of respon-dents	Continued	Not continued	Don't know/ missing/ depends	Total	Number of respon-dents
South East										
Abia	16.3	82.1	1.7	100.0	476	39.9	52.6	7.5	100.0	139
Anambra	18.2	77.8	4.0	100.0	706	46.1	37.7	16.3	100.0	306
Ebonyi	23.5	74.1	2.4	100.0	1,084	27.6	67.3	5.1	100.0	321
Enugu	13.7	79.9	6.4	100.0	669	27.0	69.5	3.6	100.0	259
Imo	42.1	54.9	3.0	100.0	805	68.9	29.8	1.4	100.0	242
South South										
Akwa Ibom	6.8	85.2	8.0	100.0	487	8.9	85.4	5.7	100.0	210
Bayelsa	1.8	97.7	0.6	100.0	272	3.7	94.5	1.8	100.0	162
Cross River	5.0	91.3	3.7	100.0	605	22.5	75.2	2.4	100.0	188
Delta	14.6	81.3	4.1	100.0	874	27.1	69.8	3.0	100.0	403
Edo	26.9	63.7	9.4	100.0	649	35.9	60.1	4.0	100.0	293
Rivers	5.8	86.5	7.7	100.0	918	6.4	88.7	4.9	100.0	438
South West										
Ekiti	40.7	49.7	9.5	100.0	297	36.4	57.7	5.9	100.0	128
Lagos	13.4	71.9	14.7	100.0	1,641	34.6	52.4	13.0	100.0	690
Ogun	4.8	85.8	9.3	100.0	488	15.4	77.5	7.2	100.0	182
Ondo	31.4	49.9	18.7	100.0	583	39.8	42.5	17.7	100.0	261
Osun	26.3	69.2	4.5	100.0	733	14.0	75.9	10.1	100.0	205
Oyo	45.7	43.8	10.5	100.0	1,335	35.6	50.2	14.2	100.0	534
Education										
No education	29.1	52.8	18.0	100.0	9,422	29.1	56.2	14.7	100.0	2,096
Primary	22.5	68.0	9.5	100.0	4,510	32.1	58.4	9.6	100.0	1,849
Secondary	20.7	69.3	9.9	100.0	9,361	28.6	61.5	9.8	100.0	4,808
More than secondary	12.1	79.0	8.9	100.0	3,000	18.4	72.8	8.8	100.0	2,027
Wealth quintile										
Lowest	31.3	49.2	19.4	100.0	4,608	28.4	56.6	15.0	100.0	1,606
Second	27.9	56.8	15.3	100.0	4,573	25.7	63.6	10.7	100.0	1,732
Middle	22.0	68.5	9.5	100.0	4,529	26.5	65.2	8.3	100.0	1,911
Fourth	21.6	69.3	9.1	100.0	5,636	30.5	60.3	9.2	100.0	2,377
Highest	16.3	72.4	11.3	100.0	6,947	26.0	63.5	10.5	100.0	3,154
Total	23.1	64.3	12.6	100.0	26,293	27.4	62.1	10.5	100.0	10,780

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

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ADDITIONAL TABLES

Appendix A

Table A.2.1 Household drinking water: States

Percent distribution of households and de jure population by source of drinking water and treatment of drinking water, according to state of residence, Nigeria 2013

State of residence	Households					Population				
	Source of drinking water			Percentage using an appropriate treatment method[1]	Number	Source of drinking water			Percentage using an appropriate treatment method[1]	Number
	Improved	Non-improved	Total			Improved	Non-improved	Total		
North Central	54.3	45.4	100.0	5.6	5,942	54.1	45.6	100.0	5.7	27,368
FCT-Abuja	73.3	26.7	100.0	8.6	361	77.0	23.0	100.0	10.5	1,387
Benue	37.3	62.3	100.0	6.2	1,365	38.4	61.3	100.0	5.8	6,089
Kogi	70.1	29.9	100.0	4.5	876	71.5	28.5	100.0	4.8	3,233
Kwara	81.0	19.0	100.0	9.7	617	82.7	17.3	100.0	11.1	2,640
Nasarawa	60.2	39.8	100.0	4.2	550	60.7	39.3	100.0	4.0	2,991
Niger	48.1	51.4	100.0	1.9	1,504	49.6	49.8	100.0	2.3	7,828
Plateau	42.9	57.1	100.0	9.7	669	38.1	61.9	100.0	9.3	3,200
North East	50.2	49.4	100.0	1.7	5,115	48.8	50.8	100.0	1.8	26,927
Adamawa	63.6	36.2	100.0	2.0	726	62.5	37.2	100.0	2.0	3,729
Bauchi	37.4	62.5	100.0	2.6	932	39.9	59.9	100.0	2.5	5,784
Borno	60.4	38.4	100.0	1.0	1,560	60.7	38.2	100.0	1.4	6,401
Gombe	54.2	45.6	100.0	2.8	464	53.2	46.6	100.0	2.7	2,804
Taraba	31.6	68.4	100.0	2.0	634	31.0	69.0	100.0	2.4	3,604
Yobe	45.3	54.7	100.0	0.7	799	43.7	56.3	100.0	0.5	4,605
North West	57.7	42.1	100.0	2.1	9,992	57.2	42.6	100.0	2.0	56,512
Jigawa	73.9	25.7	100.0	2.2	1,152	74.4	25.2	100.0	1.7	6,487
Kaduna	65.8	34.0	100.0	6.0	1,915	64.2	35.6	100.0	5.2	9,074
Kano	70.7	28.9	100.0	1.0	2,606	70.7	28.9	100.0	1.4	15,661
Katsina	49.5	50.4	100.0	0.3	1,257	49.3	50.6	100.0	0.5	7,478
Kebbi	21.9	78.1	100.0	0.5	1,069	21.0	79.0	100.0	0.5	6,324
Sokoto	64.5	35.2	100.0	0.6	898	64.4	35.4	100.0	0.7	5,181
Zamfara	34.0	65.8	100.0	3.1	1,096	35.6	64.3	100.0	3.4	6,308
South East	67.9	31.9	100.0	5.1	4,687	68.6	31.1	100.0	5.6	18,777
Abia	62.6	37.3	100.0	6.5	644	66.5	33.4	100.0	7.6	2,321
Anambra	73.3	26.5	100.0	8.0	1,050	74.7	25.1	100.0	8.6	4,328
Ebonyi	67.7	32.1	100.0	3.2	978	67.9	31.8	100.0	4.3	4,447
Enugu	47.5	52.2	100.0	2.1	920	49.6	50.1	100.0	2.1	3,816
Imo	83.3	16.6	100.0	5.6	1,096	82.8	17.1	100.0	6.0	3,865
South South	69.6	30.2	100.0	7.1	5,239	68.6	31.2	100.0	7.3	19,893
Akwa Ibom	73.5	26.1	100.0	10.3	892	70.1	29.6	100.0	9.5	3,634
Bayelsa	45.4	54.6	100.0	4.9	322	44.9	55.1	100.0	4.9	1,451
Cross River	69.6	30.3	100.0	3.4	848	67.0	32.9	100.0	3.4	3,307
Delta	68.8	31.2	100.0	3.8	946	70.1	29.9	100.0	4.5	3,682
Edo	73.2	26.7	100.0	7.3	702	72.8	27.1	100.0	6.9	2,890
Rivers	71.3	28.5	100.0	9.5	1,529	72.0	27.8	100.0	11.2	4,929
South West	65.5	34.5	100.0	8.5	7,546	67.9	32.1	100.0	9.6	27,486
Ekiti	74.6	25.4	100.0	6.0	376	77.8	22.2	100.0	7.3	1,373
Lagos	57.2	42.8	100.0	11.8	2,240	60.4	39.6	100.0	13.5	8,234
Ogun	70.8	29.2	100.0	2.3	1,355	74.6	25.4	100.0	3.1	4,130
Ondo	55.0	45.0	100.0	9.3	920	55.8	44.2	100.0	10.8	3,556
Osun	80.0	20.0	100.0	9.3	853	82.2	17.8	100.0	9.4	3,210
Oyo	68.6	31.4	100.0	8.7	1,802	70.2	29.8	100.0	8.9	6,984
Total	60.6	39.2	100.0	4.9	38,522	59.6	40.2	100.0	4.7	176,963

Note: Improved drinking water source includes water piped into dwelling/yard/plot, public tap/standpipe, tube well or borehole, protected well/spring, rainwater, and bottled water.

[1] Appropriate water treatment methods include boiling, bleaching, filtering, and solar disinfecting.

Table A.2.2 Household sanitation facilities: States

Percent distribution of households and de jure population by type of toilet/latrine facilities, according to state of residence, Nigeria 2013

State of residence	Households				Population			
	Improved, not shared facility	Non-improved facility[1]	Total	Number	Improved, not shared facility	Non-improved facility[1]	Total	Number
North Central	20.2	79.8	100.0	5,942	21.8	78.2	100.0	27,368
FCT-Abuja	43.0	57.0	100.0	361	44.9	55.1	100.0	1,387
Benue	12.8	87.2	100.0	1,365	15.2	84.8	100.0	6,089
Kogi	16.9	83.1	100.0	876	19.3	80.7	100.0	3,233
Kwara	24.2	75.8	100.0	617	25.9	74.1	100.0	2,640
Nasarawa	34.3	65.7	100.0	550	35.8	64.2	100.0	2,991
Niger	16.6	83.4	100.0	1,504	18.3	81.7	100.0	7,828
Plateau	20.0	80.0	100.0	669	18.8	81.2	100.0	3,200
North East	34.6	65.4	100.0	5,115	38.1	61.9	100.0	26,927
Adamawa	42.2	57.8	100.0	726	46.4	53.6	100.0	3,729
Bauchi	15.0	85.0	100.0	932	18.3	81.7	100.0	5,784
Borno	42.2	57.8	100.0	1,560	50.8	49.2	100.0	6,401
Gombe	66.5	33.5	100.0	464	70.2	29.8	100.0	2,804
Taraba	22.5	77.5	100.0	634	23.2	76.8	100.0	3,604
Yobe	26.8	73.2	100.0	799	31.0	69.0	100.0	4,605
North West	42.2	57.8	100.0	9,992	45.7	54.3	100.0	56,512
Jigawa	49.4	50.6	100.0	1,152	51.0	49.0	100.0	6,487
Kaduna	22.1	77.9	100.0	1,915	26.6	73.4	100.0	9,074
Kano	64.0	36.0	100.0	2,606	66.1	33.9	100.0	15,661
Katsina	42.2	57.8	100.0	1,257	45.8	54.2	100.0	7,478
Kebbi	52.3	47.7	100.0	1,069	55.0	45.0	100.0	6,324
Sokoto	44.0	56.0	100.0	898	46.5	53.5	100.0	5,181
Zamfara	6.9	93.1	100.0	1,096	7.5	92.5	100.0	6,308
South East	36.5	63.5	100.0	4,687	36.6	63.4	100.0	18,777
Abia	42.5	57.5	100.0	644	47.8	52.2	100.0	2,321
Anambra	56.7	43.3	100.0	1,050	56.4	43.6	100.0	4,328
Ebonyi	10.7	89.3	100.0	978	10.9	89.1	100.0	4,447
Enugu	22.5	77.5	100.0	920	25.2	74.8	100.0	3,816
Imo	48.2	51.8	100.0	1,096	48.6	51.4	100.0	3,865
South South	25.8	74.2	100.0	5,239	28.5	71.5	100.0	19,893
Akwa Ibom	36.6	63.4	100.0	892	40.7	59.3	100.0	3,634
Bayelsa	16.9	83.1	100.0	322	16.2	83.8	100.0	1,451
Cross River	10.4	89.6	100.0	848	12.1	87.9	100.0	3,307
Delta	22.4	77.6	100.0	946	24.3	75.7	100.0	3,682
Edo	34.4	65.6	100.0	702	37.9	62.1	100.0	2,890
Rivers	28.0	72.0	100.0	1,529	31.6	68.4	100.0	4,929
South West	17.8	82.2	100.0	7,546	20.0	80.0	100.0	27,486
Ekiti	15.2	84.8	100.0	376	18.4	81.6	100.0	1,373
Lagos	28.1	71.9	100.0	2,240	30.0	70.0	100.0	8,234
Ogun	9.2	90.8	100.0	1,355	10.7	89.3	100.0	4,130
Ondo	18.0	82.0	100.0	920	19.1	80.9	100.0	3,556
Osun	16.1	83.9	100.0	853	19.2	80.8	100.0	3,210
Oyo	13.0	87.0	100.0	1,802	14.7	85.3	100.0	6,984
Total	30.1	69.9	100.0	38,522	34.0	66.0	100.0	176,963

[1] Includes shared facilities that would be considered improved if they were not shared by two or more households

Table A.2.3 Household characteristics: Electricity

Percent distribution of households by access to electricity, according to state of residence, Nigeria 2013

State of residence	Have electricity	No electricity	Missing	Total	Number
North Central	48.7	51.2	0.1	100.0	5,942
FCT-Abuja	77.7	22.0	0.3	100.0	361
Benue	22.1	77.9	0.0	100.0	1,365
Kogi	62.9	37.1	0.0	100.0	876
Kwara	90.6	9.1	0.3	100.0	617
Nasarawa	33.2	66.5	0.3	100.0	550
Niger	51.7	48.2	0.1	100.0	1,504
Plateau	36.3	63.7	0.0	100.0	669
North East	29.3	70.4	0.3	100.0	5,115
Adamawa	37.6	62.2	0.2	100.0	726
Bauchi	29.3	70.3	0.4	100.0	932
Borno	33.0	66.5	0.5	100.0	1,560
Gombe	48.1	51.8	0.1	100.0	464
Taraba	10.9	88.8	0.3	100.0	634
Yobe	18.1	81.7	0.2	100.0	799
North West	42.2	57.7	0.1	100.0	9,992
Jigawa	26.0	74.0	0.0	100.0	1,152
Kaduna	53.5	46.2	0.3	100.0	1,915
Kano	52.1	47.9	0.0	100.0	2,606
Katsina	31.3	68.5	0.2	100.0	1,257
Kebbi	44.4	55.6	0.0	100.0	1,069
Sokoto	38.9	60.9	0.2	100.0	898
Zamfara	29.1	70.6	0.3	100.0	1,096
South East	66.4	33.6	0.0	100.0	4,687
Abia	81.7	18.3	0.0	100.0	644
Anambra	88.1	11.8	0.1	100.0	1,050
Ebonyi	39.2	60.7	0.1	100.0	978
Enugu	55.4	44.6	0.0	100.0	920
Imo	69.9	30.1	0.0	100.0	1,096
South South	68.3	31.3	0.4	100.0	5,239
Akwa Ibom	68.0	31.8	0.2	100.0	892
Bayelsa	52.5	47.3	0.2	100.0	322
Cross River	57.4	41.4	1.2	100.0	848
Delta	78.3	21.6	0.1	100.0	946
Edo	82.4	17.5	0.1	100.0	702
Rivers	65.1	34.5	0.4	100.0	1,529
South West	81.1	18.8	0.1	100.0	7,546
Ekiti	92.7	7.3	0.0	100.0	376
Lagos	99.3	0.5	0.2	100.0	2,240
Ogun	72.0	27.9	0.1	100.0	1,355
Ondo	66.3	33.7	0.0	100.0	920
Osun	89.4	10.6	0.0	100.0	853
Oyo	66.6	33.3	0.1	100.0	1,802
Total	55.6	44.2	0.2	100.0	38,522

Table A.3.7.1 Type of earnings: Women by state

Percent distribution of women age 15-49 who were employed in the 12 months preceding the survey by type of earnings, according to state of residence, Nigeria 2013

State of residence	Type of earnings					Total	Number of women employed during the last 12 months
	Cash only	Cash and in-kind	In-kind only	Not paid	Missing		
North Central	76.5	14.7	1.3	7.3	0.3	100.0	3,942
FCT-Abuja	85.7	7.4	0.0	6.9	0.0	100.0	181
Benue	57.5	37.1	3.6	1.1	0.8	100.0	971
Kogi	85.6	3.1	0.2	11.0	0.1	100.0	505
Kwara	95.7	2.6	0.4	1.4	0.0	100.0	376
Nasarawa	70.2	15.2	1.1	13.4	0.1	100.0	398
Niger	84.1	7.4	0.2	8.1	0.1	100.0	1,165
Plateau	72.7	9.4	1.7	15.9	0.4	100.0	346
North East	64.8	10.9	1.1	22.5	0.6	100.0	2,754
Adamawa	70.5	6.1	0.0	23.2	0.2	100.0	486
Bauchi	71.0	4.2	0.2	24.3	0.3	100.0	653
Borno	79.1	1.5	0.6	17.0	1.8	100.0	431
Gombe	60.4	4.4	1.0	34.0	0.2	100.0	286
Taraba	40.1	27.9	2.6	29.0	0.4	100.0	562
Yobe	71.5	20.4	2.9	4.1	1.1	100.0	335
North West	91.8	6.2	0.3	1.2	0.4	100.0	7,033
Jigawa	91.3	6.3	0.7	1.1	0.5	100.0	739
Kaduna	95.6	3.3	1.0	0.0	0.1	100.0	1,308
Kano	97.8	1.5	0.0	0.4	0.3	100.0	1,795
Katsina	96.6	1.3	0.2	1.1	0.8	100.0	1,015
Kebbi	81.3	11.9	0.0	6.5	0.4	100.0	782
Sokoto	96.1	1.4	0.1	1.4	1.0	100.0	507
Zamfara	75.6	23.7	0.2	0.1	0.4	100.0	887
South East	63.2	18.0	1.0	17.2	0.7	100.0	2,930
Abia	77.4	8.0	0.2	14.4	0.0	100.0	351
Anambra	82.7	8.7	1.0	5.1	2.5	100.0	597
Ebonyi	38.9	30.2	1.1	29.4	0.3	100.0	883
Enugu	64.8	20.6	1.4	12.9	0.3	100.0	609
Imo	70.8	11.2	0.7	17.1	0.2	100.0	489
South South	75.8	10.7	1.3	11.8	0.4	100.0	3,308
Akwa Ibom	70.1	19.3	0.5	9.6	0.5	100.0	539
Bayelsa	91.6	0.0	0.0	8.4	0.0	100.0	234
Cross River	70.8	3.2	0.6	24.8	0.6	100.0	500
Delta	74.4	15.4	0.0	9.7	0.5	100.0	565
Edo	92.4	0.7	0.2	5.9	0.8	100.0	466
Rivers	70.7	14.2	3.5	11.3	0.2	100.0	1,005
South West	89.9	5.9	1.2	2.9	0.1	100.0	4,721
Ekiti	94.4	2.2	1.4	1.7	0.1	100.0	208
Lagos	93.0	2.6	0.7	3.4	0.3	100.0	1,441
Ogun	79.5	18.2	2.0	0.3	0.0	100.0	711
Ondo	84.3	10.8	0.7	3.9	0.3	100.0	557
Osun	96.3	2.8	0.5	0.4	0.0	100.0	549
Oyo	91.0	2.3	1.9	4.7	0.0	100.0	1,256
Total	80.4	10.0	0.9	8.2	0.4	100.0	24,688

Table A.3.7.2 Type of earnings: Men by state

Percent distribution of men age 15-49 who were employed in the 12 months preceding the survey by type of earnings, according to state of residence, Nigeria 2013

State of residence	Type of earnings					Total	Number of men employed during the last 12 months
	Cash only	Cash and in-kind	In-kind only	Not paid	Missing		
North Central	68.8	22.1	2.2	6.9	0.0	100.0	2,267
FCT-Abuja	87.7	10.3	0.2	1.6	0.3	100.0	130
Benue	67.1	24.3	5.8	2.8	0.0	100.0	485
Kogi	81.0	17.0	0.8	1.2	0.0	100.0	241
Kwara	83.7	14.8	0.2	1.3	0.0	100.0	202
Nasarawa	55.4	20.1	0.4	24.1	0.0	100.0	244
Niger	60.3	35.2	2.7	1.9	0.0	100.0	681
Plateau	73.9	4.0	0.0	22.1	0.0	100.0	285
North East	56.5	18.6	6.1	18.1	0.6	100.0	2,232
Adamawa	67.2	1.6	0.3	30.9	0.0	100.0	289
Bauchi	31.7	37.4	4.8	25.6	0.5	100.0	497
Borno	74.2	4.2	10.4	9.6	1.6	100.0	607
Gombe	64.6	7.0	18.5	9.7	0.2	100.0	230
Taraba	45.0	54.2	0.3	0.1	0.4	100.0	278
Yobe	56.2	10.2	1.3	32.2	0.1	100.0	332
North West	69.8	20.6	0.4	9.0	0.3	100.0	4,051
Jigawa	58.4	29.7	0.5	11.4	0.0	100.0	481
Kaduna	52.6	46.3	0.4	0.7	0.0	100.0	813
Kano	79.6	18.5	0.1	1.6	0.2	100.0	1,018
Katsina	81.3	5.6	0.2	11.8	1.1	100.0	508
Kebbi	54.8	18.8	1.4	24.6	0.4	100.0	458
Sokoto	84.5	2.7	0.0	12.2	0.7	100.0	310
Zamfara	83.1	0.6	0.0	16.3	0.0	100.0	462
South East	74.5	14.8	1.6	8.9	0.2	100.0	1,232
Abia	97.2	0.4	0.8	1.6	0.0	100.0	165
Anambra	65.5	34.0	0.0	0.2	0.2	100.0	301
Ebonyi	58.9	11.5	0.7	28.5	0.5	100.0	327
Enugu	74.9	14.1	7.1	3.9	0.0	100.0	224
Imo	93.3	4.6	0.0	2.1	0.0	100.0	215
South South	90.9	5.5	0.8	2.7	0.1	100.0	1,841
Akwa Ibom	86.1	7.9	0.5	5.6	0.0	100.0	331
Bayelsa	97.3	1.2	0.8	0.7	0.0	100.0	141
Cross River	87.1	7.7	0.9	4.3	0.0	100.0	236
Delta	86.6	12.1	0.3	0.8	0.2	100.0	319
Edo	94.7	2.4	0.8	2.0	0.0	100.0	277
Rivers	94.5	1.9	1.3	2.1	0.2	100.0	537
South West	89.2	8.1	0.6	1.9	0.1	100.0	2,254
Ekiti	99.6	0.4	0.0	0.0	0.0	100.0	98
Lagos	93.0	5.2	0.7	0.9	0.3	100.0	807
Ogun	95.6	1.3	0.0	3.1	0.0	100.0	289
Ondo	94.4	3.5	0.0	1.9	0.2	100.0	288
Osun	85.7	11.1	2.2	1.0	0.0	100.0	280
Oyo	76.3	19.4	0.4	3.9	0.0	100.0	493
Total	73.9	16.0	1.8	8.1	0.2	100.0	13,876

Table A.3.7.3 Type of employer: Women by state

Percent distribution of women age 15-49 who were employed in the 12 months preceding the survey by type of employer, according to state of residence, Nigeria 2013

State of residence	Type of employer				Total	Number of women employed during the last 12 months
	Employed by family member	Employed by non-family member	Self-employed	Missing		
North Central	17.4	9.0	73.1	0.5	100.0	3,942
FCT-Abuja	3.6	31.2	64.3	0.9	100.0	181
Benue	19.7	3.6	76.3	0.4	100.0	971
Kogi	16.0	13.7	69.6	0.6	100.0	505
Kwara	0.6	18.2	81.2	0.0	100.0	376
Nasarawa	14.5	9.4	76.2	0.0	100.0	398
Niger	26.1	3.0	70.2	0.7	100.0	1,165
Plateau	12.2	15.2	71.3	1.2	100.0	346
North East	9.7	6.3	83.2	0.8	100.0	2,754
Adamawa	3.6	6.6	89.8	0.0	100.0	486
Bauchi	8.4	1.1	89.2	1.3	100.0	653
Borno	3.3	15.1	79.7	1.9	100.0	431
Gombe	20.8	2.1	76.8	0.3	100.0	286
Taraba	16.8	8.4	74.4	0.4	100.0	562
Yobe	7.8	5.2	86.1	0.9	100.0	335
North West	5.8	2.9	90.5	0.9	100.0	7,033
Jigawa	4.4	2.1	93.4	0.1	100.0	739
Kaduna	3.7	9.4	86.9	0.0	100.0	1,308
Kano	2.2	0.1	97.4	0.3	100.0	1,795
Katsina	18.8	5.0	72.1	4.1	100.0	1,015
Kebbi	6.9	0.0	92.9	0.1	100.0	782
Sokoto	4.3	1.1	92.9	1.6	100.0	507
Zamfara	2.0	0.6	97.0	0.4	100.0	887
South East	11.8	19.2	68.7	0.4	100.0	2,930
Abia	17.6	22.0	60.2	0.2	100.0	351
Anambra	4.2	20.5	74.4	0.9	100.0	597
Ebonyi	15.1	13.9	70.9	0.1	100.0	883
Enugu	12.9	17.1	69.6	0.4	100.0	609
Imo	9.4	27.8	62.5	0.3	100.0	489
South South	11.6	17.6	70.0	0.8	100.0	3,308
Akwa Ibom	4.6	24.8	69.9	0.7	100.0	539
Bayelsa	3.9	12.5	83.5	0.1	100.0	234
Cross River	10.4	12.6	76.4	0.6	100.0	500
Delta	26.2	16.2	55.3	2.3	100.0	565
Edo	5.0	22.3	72.3	0.4	100.0	466
Rivers	12.6	16.2	70.9	0.3	100.0	1,005
South West	3.0	19.7	77.1	0.1	100.0	4,721
Ekiti	0.8	27.2	71.9	0.1	100.0	208
Lagos	1.9	27.0	70.9	0.3	100.0	1,441
Ogun	3.4	12.4	84.1	0.2	100.0	711
Ondo	2.8	15.8	81.2	0.2	100.0	557
Osun	2.2	18.9	78.9	0.0	100.0	549
Oyo	5.0	16.4	78.5	0.0	100.0	1,256
Total	9.0	11.4	79.0	0.6	100.0	24,688

Table A.3.7.4 Continuity of employment: Women by state

Percent distribution of women age 15-49 who were employed in the 12 months preceding the survey by continuity of employment, according to state of residence, Nigeria 2013

State of residence	Continuity of employment				Total	Number of women employed during the last 12 months
	All year	Seasonal	Occasional	Missing		
North Central	80.4	17.0	2.5	0.1	100.0	3,942
FCT-Abuja	81.5	16.3	2.2	0.0	100.0	181
Benue	71.2	27.6	1.2	0.1	100.0	971
Kogi	90.6	5.3	4.0	0.1	100.0	505
Kwara	96.9	2.9	0.2	0.0	100.0	376
Nasarawa	67.1	26.7	6.2	0.0	100.0	398
Niger	90.0	8.5	1.4	0.1	100.0	1,165
Plateau	55.7	37.3	6.8	0.2	100.0	346
North East	57.4	33.5	8.8	0.3	100.0	2,754
Adamawa	58.7	36.4	4.9	0.0	100.0	486
Bauchi	72.2	15.6	12.1	0.2	100.0	653
Borno	55.6	32.5	11.5	0.4	100.0	431
Gombe	57.8	30.1	11.8	0.3	100.0	286
Taraba	34.7	57.0	7.7	0.6	100.0	562
Yobe	67.0	28.7	3.6	0.6	100.0	335
North West	84.5	9.3	5.9	0.3	100.0	7,033
Jigawa	80.3	7.6	12.0	0.0	100.0	739
Kaduna	86.6	8.9	4.4	0.1	100.0	1,308
Kano	83.4	8.0	8.4	0.3	100.0	1,795
Katsina	70.6	22.0	6.7	0.7	100.0	1,015
Kebbi	89.2	7.4	3.2	0.2	100.0	782
Sokoto	92.6	3.4	3.1	0.9	100.0	507
Zamfara	94.4	4.4	1.1	0.1	100.0	887
South East	77.1	18.8	3.8	0.3	100.0	2,930
Abia	94.0	3.3	2.7	0.0	100.0	351
Anambra	90.5	7.2	0.8	1.5	100.0	597
Ebonyi	60.2	31.4	8.3	0.1	100.0	883
Enugu	79.0	20.0	0.9	0.0	100.0	609
Imo	76.4	19.6	4.0	0.0	100.0	489
South South	87.0	9.2	3.6	0.2	100.0	3,308
Akwa Ibom	83.8	13.1	2.5	0.5	100.0	539
Bayelsa	91.6	5.7	2.7	0.0	100.0	234
Cross River	78.2	16.6	5.1	0.1	100.0	500
Delta	93.9	0.6	5.1	0.4	100.0	565
Edo	89.3	7.9	2.7	0.1	100.0	466
Rivers	87.2	9.6	3.2	0.0	100.0	1,005
South West	95.5	3.4	1.0	0.1	100.0	4,721
Ekiti	96.3	2.9	0.7	0.1	100.0	208
Lagos	93.2	4.4	2.2	0.2	100.0	1,441
Ogun	97.7	2.0	0.3	0.0	100.0	711
Ondo	91.6	7.7	0.4	0.3	100.0	557
Osun	96.9	2.7	0.3	0.0	100.0	549
Oyo	97.7	1.6	0.7	0.0	100.0	1,256
Total	82.4	13.2	4.2	0.2	100.0	24,688

Table A.3.7.5 Continuity of employment: Men by state

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by continuity of employment, according to state of residence, Nigeria 2013

State of residence	Continuity of employment				Total	Number of men employed during the last 12 months
	All year	Seasonal	Occasional	Missing		
North Central	83.8	12.6	3.6	0.0	100.0	2,267
FCT-Abuja	89.4	7.6	3.0	0.0	100.0	130
Benue	81.4	15.6	3.0	0.0	100.0	485
Kogi	88.8	7.4	3.8	0.0	100.0	241
Kwara	96.4	3.1	0.5	0.0	100.0	202
Nasarawa	63.6	22.2	14.2	0.0	100.0	244
Niger	97.0	1.2	1.9	0.0	100.0	681
Plateau	57.7	39.9	2.3	0.0	100.0	285
North East	61.6	32.0	6.4	0.0	100.0	2,232
Adamawa	57.6	32.9	9.5	0.0	100.0	289
Bauchi	59.7	36.5	3.8	0.0	100.0	497
Borno	63.3	24.2	12.5	0.0	100.0	607
Gombe	57.4	34.7	7.9	0.0	100.0	230
Taraba	56.8	42.5	0.7	0.0	100.0	278
Yobe	72.1	27.8	0.0	0.1	100.0	332
North West	64.9	31.5	3.4	0.2	100.0	4,051
Jigawa	54.3	37.3	8.2	0.3	100.0	481
Kaduna	75.8	24.2	0.0	0.0	100.0	813
Kano	70.5	28.3	1.0	0.2	100.0	1,018
Katsina	60.7	36.6	2.5	0.3	100.0	508
Kebbi	55.7	40.6	3.4	0.3	100.0	458
Sokoto	68.1	23.7	7.4	0.7	100.0	310
Zamfara	55.9	35.9	8.2	0.0	100.0	462
South East	80.5	13.6	5.9	0.1	100.0	1,232
Abia	91.7	4.4	3.9	0.0	100.0	165
Anambra	93.1	3.5	3.2	0.2	100.0	301
Ebonyi	61.0	29.8	9.2	0.0	100.0	327
Enugu	85.0	11.7	3.2	0.0	100.0	224
Imo	79.1	11.9	9.0	0.0	100.0	215
South South	88.5	6.0	5.4	0.1	100.0	1,841
Akwa Ibom	87.5	5.2	7.3	0.0	100.0	331
Bayelsa	89.8	1.9	8.3	0.0	100.0	141
Cross River	94.6	4.5	0.9	0.0	100.0	236
Delta	86.6	7.7	5.6	0.2	100.0	319
Edo	79.5	13.4	7.1	0.0	100.0	277
Rivers	91.9	3.3	4.6	0.2	100.0	537
South West	91.8	6.3	1.7	0.2	100.0	2,254
Ekiti	98.1	1.7	0.3	0.0	100.0	98
Lagos	86.3	11.2	2.0	0.5	100.0	807
Ogun	94.8	4.1	1.1	0.0	100.0	289
Ondo	96.7	2.3	1.0	0.0	100.0	288
Osun	85.7	8.3	6.0	0.0	100.0	280
Oyo	98.3	1.7	0.0	0.0	100.0	493
Total	76.3	19.4	4.1	0.1	100.0	13,876

SAMPLE DESIGN AND IMPLEMENTATION *Appendix* B

B.1 INTRODUCTION

The 2013 Nigeria Demographic and Health Survey (NDHS) is the fifth DHS in Nigeria, following those implemented in 1990, 1999, 2003, and 2008. A nationally representative sample of 40,320 households from 904 primary sampling units (PSUs) was selected. All women age 15-49 who were usual members of the selected households or who spent the night before the survey in the selected households were eligible for individual interviews. As with previous NDHS surveys, the main objective of the 2013 NDHS was to provide reliable information on fertility and fertility preferences, knowledge and use of family planning methods, maternal and child health, childhood and adult mortality levels, knowledge of and attitudes toward HIV/AIDS and other sexually transmitted infections (STIs), women's empowerment and domestic violence, and knowledge about other illnesses. The survey was designed to produce reliable estimates for key indicators at the national level as well as for urban and rural areas, each of the country's six geographical zones, and each of the 36 states and the Federal Capital Territory (FCT).

In addition to the female survey, a male survey was conducted at the same time in every second household selected for the female survey. In these households, all men age 15-49 who were usual members of the selected households or spent the night before the survey in the selected households were eligible for individual interviews. The survey collected information on their basic demographic status and their knowledge of and attitudes toward HIV/AIDS and other STIs.

B.2 SAMPLING FRAME

Administratively, Nigeria is divided into states. In turn, each state is subdivided into local government areas (LGAs) and each LGA into smaller (secondary and tertiary) localities. Nigeria has 36 states and a Federal Capital Territory (FCT). These states are subdivided into 774 LGAs. Furthermore, the states are regrouped by geographical location to form six zones, as shown in Table B.1. In addition to these administrative units and geographical zones, during the last population census in 2006, each locality was subdivided into convenient areas called census enumeration areas (EAs). The average number of households per EA in the corresponding locality frame was assigned to each EA. Table B.1 provides the basic information summarized from the sampling frame. The EAs in Nigeria are small in size, with an average of 211 inhabitants (equivalent to 48 households). Since these EAs were too small to be DHS clusters, the 2013 NDHS included several EAs per DHS cluster (with a preferred minimum cluster size of 80 households).

Table B.1 Distribution of population and EAs by states

Geographical zone	State	Distribution of population and EAs: Population share	Number of EAs	Average EA size
North Central	Sokoto	0.026	12,779	289
	Zamfara	0.023	17,032	192
	Katsina	0.041	33,316	174
	Jigawa	0.031	21,193	205
	Yobe	0.017	14,923	155
	Borno	0.030	24,086	173
	Adamawa	0.023	12,808	248
North East	Gombe	0.017	9,494	249
	Bauchi	0.033	19,885	233
	Kano	0.067	36,359	258
	Kaduna	0.044	21,792	280
	Kebbi	0.023	16,641	195
	Niger	0.028	23,445	168
North West	FCT Abuja	0.010	3,590	391
	Nasarawa	0.013	9,219	202
	Plateau	0.023	15,879	201
	Taraba	0.016	10,600	216
	Benue	0.030	22,856	186
	Kogi	0.024	15,846	209
	Kwara	0.017	16,271	145
South East	Oyo	0.040	31,106	179
	Osun	0.024	25,907	131
	Ekiti	0.017	11,561	207
	Ondo	0.025	19,255	179
	Edo	0.023	12,793	252
South South	Anambra	0.030	21,907	190
	Enugu	0.023	13,997	233
	Ebonyi	0.015	13,888	156
	Cross River	0.021	16,322	177
	Akwa Ibom	0.028	17,113	228
	Abia	0.020	11,569	245
South West	Imo	0.028	19,573	200
	Rivers	0.037	24,861	209
	Bayelsa	0.012	9,007	189
	Delta	0.029	18,209	225
	Lagos	0.065	25,424	358
	Ogun	0.027	14,493	258
Nigeria		1.000	665,000	211

Source: Sampling frame of 2006 population census

B.3 SAMPLING PROCEDURE

The sample for the 2013 NDHS was a stratified sample, selected independently in three stages from the sampling frame. Stratification was achieved by separating each state into urban and rural areas. In the first stage, 893 localities were selected with probability proportional to size and with independent selection in each sampling stratum.

In the second stage, one EA was randomly selected from most of the selected localities with an equal probability selection. In a few larger localities, more than one EA was selected. In total, 904 EAs were selected. After the selection of the EAs and before the main survey, a household listing operation was carried out in all of the selected EAs. The household listing consisted of visiting each of the 904 selected EAs, drawing a location map and a detailed sketch map, and recording on the household listing forms all occupied residential households found in the EA with the address and the name of the head of the household. If a selected EA included less than 80 households, a neighbouring EA from the selected locality was added to the cluster and listed completely. The resulting list of households served as the sampling frame for the selection of households in the third stage.

In the third stage of selection, a fixed number of 45 households were selected in every urban and rural cluster through equal probability systematic sampling based on the newly updated household listing.

Table B.2 shows the sample allocation of clusters and households by state and by type of residence. The sample allocation features an equal size allocation with small adjustments. Lagos and Kano were assigned the largest sample size, with 40 clusters each; the remaining states had either 23 or 24 clusters each. Among the 904 clusters, 372 were in urban areas and 532 were in rural areas. The total number of households sampled was 40,680, 16,740 from urban areas and 23,940 from rural areas. Table B.3 shows the expected number of female and male interviews by state and residence. The calculations were based on the results of the 2008 NDHS.

Table B.2 Sample allocation of clusters and households by state and by residence

		Number of clusters			Number of households		
Geographical zone	State	Urban	Rural	Total	Urban	Rural	Total
North Central	Sokoto	5	19	24	225	855	1,080
	Zamfara	4	19	23	180	855	1,035
	Katsina	5	19	24	225	855	1,080
	Jigawa	2	22	24	90	990	1,080
	Yobe	6	17	23	270	765	1,035
	Borno	9	15	24	405	675	1,080
	Adamawa	6	17	23	270	765	1,035
North East	Gombe	5	18	23	225	810	1,035
	Bauchi	3	21	24	135	945	1,080
	Kano	15	25	40	675	1,125	1,800
	Kaduna	11	13	24	495	585	1,080
	Kebbi	4	19	23	180	855	1,035
	Niger	6	18	24	270	810	1,080
North West	FCT Abuja	15	8	23	675	360	1,035
	Nasarawa	5	18	23	225	810	1,035
	Plateau	7	17	24	315	765	1,080
	Taraba	4	19	23	180	855	1,035
	Benue	4	20	24	180	900	1,080
	Kogi	8	16	24	360	720	1,080
	Kwara	16	7	23	720	315	1,035
South East	Oyo	17	7	24	765	315	1,080
	Osun	18	6	24	810	270	1,080
	Ekiti	17	6	23	765	270	1,035
	Ondo	11	13	24	495	585	1,080
	Edo	13	10	23	585	450	1,035
South South	Anambra	19	4	23	855	180	1,035
	Enugu	17	7	24	765	315	1,080
	Ebonyi	19	4	23	855	180	1,035
	Cross River	3	20	23	135	900	1,035
	Akwa Ibom	1	23	24	45	1035	1,080
	Abia	6	17	23	270	765	1,035
South West	Imo	11	13	24	495	585	1,080
	Rivers	11	13	24	495	585	1,080
	Bayelsa	6	17	23	270	765	1,035
	Delta	11	13	24	495	585	1,080
	Lagos	40	0	40	1,800	0	1,800
	Ogun	12	12	24	540	540	1,080
Nigeria		372	532	904	16,740	23,940	40,680

Table B.3 Expected number of female and male interviews by state and by residence

Geographical zone	State	Women age 15-49			Men age 15-49		
		Urban	Rural	Total	Urban	Rural	Total
North Central	Sokoto	210	797	1,007	93	352	445
	Zamfara	168	797	965	74	352	426
	Katsina	210	797	1,007	93	352	445
	Jigawa	84	923	1,007	37	408	445
	Yobe	252	713	965	111	315	426
	Borno	378	629	1,007	167	278	445
	Adamawa	252	713	965	111	315	426
North East	Gombe	210	755	965	93	333	426
	Bauchi	126	881	1,007	56	389	445
	Kano	629	1049	1,678	278	463	741
	Kaduna	462	545	1,007	204	241	445
	Kebbi	168	797	965	74	352	426
	Niger	252	755	1,007	111	333	444
North West	FCT Abuja	629	336	965	278	148	426
	Nasarawa	210	755	965	93	333	426
	Plateau	294	713	1,007	130	315	445
	Taraba	168	797	965	74	352	426
	Benue	168	839	1,007	74	371	445
	Kogi	336	671	1,007	148	296	444
	Kwara	671	294	965	296	130	426
South East	Oyo	713	294	1,007	315	130	445
	Osun	755	252	1,007	333	111	444
	Ekiti	713	252	965	315	111	426
	Ondo	462	545	1,007	204	241	445
	Edo	545	420	965	241	185	426
South South	Anambra	797	168	965	352	74	426
	Enugu	713	294	1,007	315	130	445
	Ebonyi	797	168	965	352	74	426
	Cross River	126	839	965	56	371	427
	Akwa Ibom	42	965	1,007	19	426	445
	Abia	252	713	965	111	315	426
South West	Imo	462	545	1,007	204	241	445
	Rivers	462	545	1,007	204	241	445
	Bayelsa	252	713	965	111	315	426
	Delta	462	545	1,007	204	241	445
	Lagos	1,678	0	1,678	741	0	741
	Ogun	503	503	1,006	222	222	444
Nigeria		15,611	22,317	37,928	6,892	9,856	16,748

B.4 SELECTION PROBABILITIES AND SAMPLE WEIGHTS

Due to the non-proportional allocation of the sample to the different states and to their urban and rural areas, as well as the possible differences in response rates across the states, sampling weights will be required for any analysis using data from the 2013 NDHS to ensure the representativeness of the survey results at both the national and domain levels. Since the survey sample is a three-stage stratified cluster sample, sampling weights based on sampling probabilities were calculated separately for each sampling stage and for each cluster. The following notations were used.

P_{1hi}: first-stage sampling probability of the i^{th} locality in stratum h
P_{2hi}: second-stage sampling probability (selection of EAs) within the i^{th} locality in stratum h
P_{3hi}: third-stage selection of households from the selected EAs within the i^{th} locality in stratum h

Let n_h be the number of localities selected in stratum h, M_{hi} the total population according to the sampling frame in the i^{th} locality, and $\sum M_{hi}$ the total population in the stratum h. The probability of selecting the i^{th} locality in the 2013 NDHS sample was calculated as follows:

$$P_{1hi} = \frac{n_h \, M_{hi}}{\sum M_{hi}}$$

Let e_{hi} be the population size in EAs selected (one locality can have more than one EAs selected according to the number of households listed in the ground because a minimum of clusters size, 80 households per cluster, was imposed) in i^{th} locality in stratum h, M_{hi} be the total population in the i^{th} locality. The probability of selecting the EAs in the i^{th} locality was calculated as follows:

$$P_{2hi} = \frac{e_{hi}}{M_{hi}}$$

Let L_{hi} be the number of households listed in the household listing operation in cluster i in stratum h, and let g_{hi} ($g_{hi} = 45$) be the number of households selected in the i^{th} cluster. The third stage's selection probability for each household in the cluster was calculated as follows:

$$P_{3hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster i of stratum h is therefore the product of the three-stage selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi} \times P_{3hi}$$

The design weight for each household in cluster i of stratum h is the inverse of its overall selection probability:

$$W_{hi} = 1/P_{hi}$$

Design weights were adjusted for household non-response as well as for individual non-response to obtain the sampling weights for women and men. The correction for household non-response consists of dividing the household design weight above by the household response rate at the sampling stratum level. Individual sampling weights for women were obtained by further correction for women's individual non-response based on household sampling weights. Men's individual sampling weights were calculated in the same way. Thus, differences in household sampling weights and individual sampling weights were introduced by individual non-response. The final sampling weights were normalized so that the total number of unweighted cases equals the total number of weighted cases at the national level for both household weights and individual weights. Normalized weights are relative weights that are valid for estimating means, proportions, and ratios; they are not valid for estimating population totals or for pooled data. Four sets of weight were calculated: one set for all households selected for the survey, one set for individual female surveys, one set for households selected for male surveys, and one set for individual male surveys.

B.5 SAMPLE IMPLEMENTATION

Tables B.4 and B.5 present response rates for women and men, respectively, by urban and rural areas and by region. The male subsample constituted one in three of the households selected for the women's sample.

Table B.4 Sample implementation: Women

Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall women response rates, according to urban-rural residence and region (unweighted), Nigeria 2013

	Residence		Zone						
Result	Urban	Rural	North Central	North East	North West	South East	South South	South West	Total
Selected households									
Completed (C)	95.0	95.9	92.6	94.6	97.2	94.7	96.5	97.2	95.5
Household present but no competent respondent at home (HP)	0.7	0.5	1.3	0.7	0.2	0.7	0.6	0.3	0.6
Postponed (P)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refused (R)	0.4	0.1	0.4	0.3	0.0	0.3	0.1	0.4	0.3
Dwelling not found (DNF)	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Household absent (HA)	2.0	2.1	3.0	2.3	1.2	3.6	1.8	1.1	2.1
Dwelling vacant/address not a dwelling (DV)	1.4	1.0	1.9	1.7	1.2	0.6	0.7	0.8	1.2
Dwelling destroyed (DD)	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Other (O)	0.2	0.1	0.4	0.2	0.0	0.1	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	16,695	23,625	7,335	6,030	8,190	5,265	6,345	7,155	40,320
Household response rate (HRR)[1]	98.7	99.3	98.1	98.8	99.7	99.0	99.2	99.2	99.0
Eligible women									
Completed (EWC)	97.3	97.8	96.0	97.1	98.8	96.6	98.2	98.2	97.6
Not at home (EWNH)	1.4	1.3	2.9	1.5	0.6	1.9	1.0	0.8	1.4
Postponed (EWP)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refused (EWR)	0.6	0.3	0.4	0.6	0.1	0.5	0.3	0.5	0.4
Partly completed (EWPC)	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1
Incapacitated (EWI)	0.4	0.4	0.4	0.4	0.2	0.8	0.3	0.3	0.4
Other (EWO)	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	15,972	23,930	6,511	6,827	9,793	4,620	6,169	5,982	39,902
Eligible women response rate (EWRR)[2]	97.3	97.8	96.0	97.1	98.8	96.6	98.2	98.2	97.6
Overall women response rate (ORR)[3]	96.0	97.1	94.2	96.0	98.5	95.6	97.4	97.4	96.7

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC)
[3] The overall women response rate (OWRR) is calculated as:

$$OWRR = HRR * EWRR/100$$

Table B.5 Sample implementation: Men

Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible men and overall men response rates, according to urban-rural residence and region (unweighted), Nigeria 2013

	Residence		Region						
Result	Urban	Rural	North Central	North East	North West	South East	South South	South West	Total
Selected households									
Completed (C)	95.2	95.9	92.4	94.8	97.2	95.3	96.6	97.3	95.6
Household present but no competent respondent at home (HP)	0.7	0.5	1.3	0.7	0.2	0.5	0.5	0.4	0.6
Refused (R)	0.4	0.2	0.5	0.4	0.1	0.4	0.2	0.3	0.3
Dwelling not found (DNF)	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.0	0.1
Household absent (HA)	1.8	2.1	3.1	2.1	1.1	3.1	1.8	1.0	2.0
Dwelling vacant/address not a dwelling (DV)	1.4	1.0	1.9	1.6	1.3	0.6	0.9	0.8	1.2
Dwelling destroyed (DD)	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.0	0.1
Other (O)	0.2	0.1	0.4	0.2	0.0	0.1	0.0	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	8,529	12,067	3,747	3,080	4,184	2,687	3,241	3,657	20,596
Household response rate (HRR)[1]	98.7	99.2	98.0	98.7	99.7	99.0	99.3	99.3	99.0
Eligible men									
Completed (EMC)	94.6	95.7	93.9	93.9	97.2	94.0	96.3	94.8	95.2
Not at home (EMNH)	2.8	2.2	4.6	3.4	0.6	2.1	1.6	2.9	2.4
Postponed (EMP)	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0
Refused (EMR)	0.6	0.2	0.3	0.2	0.1	0.5	0.5	0.8	0.4
Partly completed (EMPC)	0.2	0.1	0.2	0.1	0.0	0.1	0.0	0.2	0.1
Incapacitated (EMI)	0.4	0.3	0.3	0.3	0.3	1.2	0.2	0.2	0.4
Other (EMO)	1.4	1.5	0.6	1.9	1.8	2.1	1.4	1.0	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	7,553	10,676	3,213	3,028	4,252	1,789	3,150	2,797	18,229
Eligible men response rate (EMRR)[2]	94.6	95.7	93.9	93.9	97.2	94.0	96.3	94.8	95.2
Overall men response rate (ORR)[3]	93.4	94.9	92.1	92.7	96.8	93.1	95.6	94.1	94.3

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible men response rate (EMRR) is equivalent to the percentage of interviews completed (EMC)
[3] The overall men response rate (OMRR) is calculated as:

$$OMRR = HRR * EMRR/100$$

ESTIMATES OF SAMPLING ERRORS *Appendix* C

The estimates from a sample survey are affected by two types of errors: non-sampling errors and sampling errors. Non-sampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2013 Nigeria DHS (NDHS) to minimize this type of error, non-sampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2013 NDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2013 NDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. Sampling errors are computed in either ISSA or SAS, using programs developed by ICF International. These programs use the Taylor linearization method of variance estimation for survey estimates that are means, proportions or ratios. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = \text{var}(r) = \frac{1-f}{x^2}\sum_{h=1}^{H}\left[\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}, \text{ and } z_h = y_h - rx_h$$

where h represents the stratum which varies from 1 to H,

m_h is the total number of clusters selected in the h^{th} stratum,

y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum,

x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum, and

f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2013 NDHS, there were 896 non-empty clusters. Hence, 884 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = \text{var}(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1) r_{(i)}$$

where r is the estimate computed from the full sample of 896 clusters,

$r_{(i)}$ is the estimate computed from the reduced sample of 895 clusters (i^{th} cluster excluded), and

k is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is also calculated. The design effect is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. Relative standard errors and confidence limits for the estimates are also calculated.

Sampling errors for the 2013 NDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the six regions. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table C.1. Tables C.2 through C.10 present the value of the statistic (R), its standard error (SE), the number of un-weighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE), for each selected variable. The DEFT is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1).

The confidence interval (e.g., as calculated for *the number of children ever born for women 40-49 years*) can be interpreted as follows: the overall average from the national sample is 6.315 and its standard error is 0.064. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., 6.315 ± 2×0.064. There is a high probability (95 percent) that the true mean of children ever born for women is between 6.187 and 6.444.

For the total sample, the value of the DEFT, averaged over all variables, is 2.239. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 2.239 over that in an equivalent simple random sample.

Table C.1 List of indicators for sampling errors, Nigeria 2013

Variable	Estimate	Base population
	WOMEN	
Urban residence	Proportion	All women 15-49
Literacy	Proportion	All women 15-49
No education	Proportion	All women 15-49
Secondary or higher education	Proportion	All women 15-49
Never married (never in union)	Proportion	All women 15-49
Currently married (in union)	Proportion	All women 15-49
Married before age 20	Proportion	Women age 20-49
Had first sexual intercourse before age 18	Proportion	Women age 20-49
Currently pregnant	Proportion	All women 15-49
Children ever born	Mean	All women 15-49
Children surviving	Mean	All women 15-49
Children ever born to women age 40-49	Mean	Women age 40-49
Knows any contraceptive method	Proportion	Currently married women 15-49
Knows any modern contraceptive method	Proportion	Currently married women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using a traditional method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using IUD	Proportion	Currently married women 15-49
Currently using condoms	Proportion	Currently married women 15-49
Currently using injectables	Proportion	Currently married women 15-49
Currently using female sterilisation	Proportion	Currently married women 15-49
Currently using rhythm method	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Used public sector source	Proportion	Currently married women 15-49
Want no more children	Proportion	Currently married women 15-49
Want to delay birth at least 2 years	Proportion	Currently married women 15-49
Ideal number of children	Mean	All women 15-49
Mothers received antenatal care for last birth	Proportion	Women with at least 1 live birth in past 5 years
Mothers protected against tetanus for last birth	Proportion	Women with at least 1 live birth in past 5 years
Births with skilled attendant at delivery	Proportion	Women with at least 1 live birth in past 5 years
Had diarrhoea in 2 weeks before survey	Proportion	Births in last 5 years
Treated with ORS	Proportion	Children under 5 years
Sought medical treatment for diarrhoea	Proportion	Children under 5 years with diarrhoea in past two weeks
Vaccination card seen	Proportion	Children under 5 with diarrhoea in past two weeks
Received BCG vaccination	Proportion	Children age 12-23 months
Received DPT vaccination (3 doses)	Proportion	Children age 12-23 months
Received polio vaccination (3 doses)	Proportion	Children age 12-23 months
Received measles vaccination	Proportion	Children age 12-23 months
Received all vaccinations	Proportion	Children age 12-23 months
Height-for-age (below -2SD)	Proportion	Children under 5 years who were measured
Weight-for-height (below -2SD)	Proportion	Children under 5 years who were measured
Weight-for-age (below -2SD)	Proportion	Children under 5 years who were measured
Body Mass Index (BMI) <18.5	Proportion	All women 15-49 who were measured
Abstinence among youth (never had sex)	Proportion	Never-married women 15-24
Sexually active in past 12 months among never married youth	Proportion	Never-married women 15-24
Had an HIV test and received results in past 12 months	Proportion	All women 15-49
Accepting attitudes towards people with HIV	Proportion	All women 15-49
Ever experienced any physical violence since age 15	Proportion	All women 15-49
Ever experienced any sexual violence	Proportion	All women 15-49
Ever experienced any physical or sexual violence by husband/partner	Proportion	All women 15-49
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	Proportion	All women 15-49
Female circumcision	Proportion	All women 15-49
Total Fertility Rate (last 3 years)	Rate	Women years of exposure to child birth
Neonatal mortality*	Rate	Children exposed to the risk of mortality
Post-neonatal mortality*	Rate	Children exposed to the risk of mortality
Infant mortality*	Rate	Children exposed to the risk of mortality
Child mortality*	Rate	Children exposed to the risk of mortality
Under five mortality*	Rate	Children exposed to the risk of mortality
Maternal mortality ratio	Rate	Exposure years in past 6 years
	MEN	
Urban residence	Proportion	All men 15-49
Literacy	Proportion	All men 15-49
No education	Proportion	All men 15-49
Secondary or higher education	Proportion	All men 15-49
Never married (in union)	Proportion	All men 15-49
Currently married (in union)	Proportion	All men 15-49
Had first sexual intercourse before age 18	Proportion	Men age 25-49
Knows any contraceptive method	Proportion	Currently married men 15-49
Knows any modern contraceptive method	Proportion	Currently married men 15-49
Want no more children	Proportion	Currently married men 15-49
Want to delay birth at least 2 years	Proportion	Currently married men 15-49
Ideal number of children	Mean	All men 15-49
Had 2+ sexual partners in past 12 months	Proportion	All men 15-49
Abstinence among never married youth (never had sex)	Proportion	All never married men 15-24
Sexually active in past 12 months among never married youth	Proportion	All never married men 15-24
Paid for sexual intercourse in past 12 months	Proportion	All men 15-49

* Mortality rates are calculated for last 0-4 years before the survey for the national sample, and last 0-9 years before the survey for regional samples.

Table C.2 Sampling errors for national sample, Nigeria 2013

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.421	0.011	38948	38948	4.262	0.025	0.400	0.443
Literacy	0.531	0.011	38948	38948	4.290	0.020	0.509	0.552
No education	0.378	0.011	38948	38948	4.618	0.030	0.355	0.401
Secondary or higher education	0.449	0.010	38948	38948	4.153	0.023	0.428	0.470
Never married (never in union)	0.239	0.005	38948	38948	2.472	0.022	0.229	0.250
Currently married (in union)	0.715	0.006	38948	38948	2.555	0.008	0.703	0.726
Married before age 20	0.602	0.008	31043	31128	2.838	0.013	0.586	0.618
Had first sexual intercourse before age 18	0.530	0.007	31043	31128	2.403	0.013	0.516	0.543
Currently pregnant	0.121	0.003	38948	38948	1.700	0.023	0.115	0.127
Children ever born	3.063	0.032	38948	38948	2.114	0.011	2.998	3.127
Children surviving	2.543	0.023	38948	38948	1.835	0.009	2.497	2.588
Children ever born to women age 40-49	6.315	0.064	7218	7042	1.776	0.010	6.187	6.444
Knows any contraceptive method	0.846	0.008	27274	27830	3.847	0.010	0.829	0.863
Knows any modern contraceptive method	0.828	0.009	27274	27830	3.959	0.011	0.810	0.846
Currently using any method	0.151	0.006	27274	27830	2.595	0.037	0.140	0.163
Currently using a modern method	0.098	0.004	27274	27830	2.367	0.044	0.089	0.106
Currently using a traditional method	0.054	0.003	27274	27830	1.894	0.048	0.049	0.059
Currently using pill	0.018	0.001	27274	27830	1.303	0.058	0.016	0.020
Currently using IUD	0.011	0.001	27274	27830	1.797	0.105	0.008	0.013
Currently using condoms	0.021	0.001	27274	27830	1.531	0.063	0.018	0.024
Currently using injectables	0.032	0.002	27274	27830	2.001	0.067	0.028	0.036
Currently using female sterilisation	0.003	0.001	27274	27830	1.496	0.154	0.002	0.005
Currently using rhythm method	0.022	0.002	27274	27830	1.837	0.075	0.018	0.025
Currently using withdrawal	0.025	0.001	27274	27830	1.555	0.059	0.022	0.028
Used public sector source	0.289	0.011	4103	4014	1.612	0.040	0.266	0.311
Want no more children	0.186	0.005	27274	27830	1.985	0.025	0.177	0.196
Want to delay birth at least 2 years	0.343	0.005	27274	27830	1.766	0.015	0.333	0.353
Ideal number of children	6.534	0.055	36209	36091	3.357	0.008	6.424	6.645
Mothers received antenatal care for last birth	0.606	0.012	20192	20467	3.519	0.020	0.581	0.630
Mothers protected against tetanus for last birth	0.528	0.011	20192	20467	3.106	0.021	0.507	0.550
Births with skilled attendant at delivery	0.381	0.010	31482	31828	2.965	0.027	0.361	0.402
Had diarrhoea in 2 weeks before survey	0.102	0.004	28596	28950	1.939	0.036	0.095	0.110
Treated with ORS	0.337	0.015	2968	2966	1.571	0.044	0.307	0.367
Sought medical treatment for diarrhoea	0.289	0.013	2968	2966	1.480	0.046	0.263	0.316
Vaccination card seen	0.204	0.007	22361	22697	2.249	0.034	0.190	0.218
Received BCG vaccination	0.512	0.013	5834	5900	2.009	0.026	0.485	0.538
Received DPT vaccination (3 doses)	0.382	0.012	5834	5900	1.877	0.032	0.358	0.406
Received polio vaccination (3 doses)	0.536	0.011	5834	5900	1.740	0.021	0.513	0.559
Received measles vaccination	0.421	0.013	5834	5900	1.944	0.030	0.395	0.446
Received all vaccinations	0.254	0.010	5834	5900	1.730	0.039	0.234	0.274
Height-for-age (below -2SD)	0.368	0.006	26306	26190	1.888	0.017	0.356	0.381
Weight-for-height (below -2SD)	0.180	0.006	26306	26190	2.208	0.031	0.169	0.191
Weight-for-age (below -2SD)	0.287	0.007	26306	26190	2.142	0.023	0.274	0.301
Body Mass Index (BMI) <18.5	0.114	0.003	33067	32815	1.765	0.027	0.108	0.120
Abstinence among youth (never had sex)	0.680	0.010	8186	7744	1.904	0.014	0.661	0.700
Sexually active in past 12 months among never married youth	0.255	0.009	8186	7744	1.772	0.033	0.238	0.272
Had an HIV test and received results in past 12 months	0.101	0.003	38948	38948	2.214	0.033	0.094	0.108
Accepting attitudes towards people with HIV	0.115	0.004	35935	36064	2.534	0.037	0.106	0.124
Ever experienced any physical violence since age 15	0.278	0.008	27634	27634	2.952	0.029	0.262	0.294
Ever experienced any sexual violence	0.074	0.003	27634	27634	2.046	0.044	0.067	0.080
Ever experienced any physical or sexual violence by husband/partner	0.162	0.006	22305	21196	2.438	0.037	0.150	0.174
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.110	0.005	22305	21196	2.221	0.042	0.100	0.119
Female circumcision	0.248	0.010	38948	38948	4.476	0.040	0.228	0.267
Total Fertility Rate (last 3 years)	5.547	0.081	na	108607	2.040	0.015	5.386	5.709
Neonatal mortality*	37.280	1.483	31866	32209	1.278	0.040	34.314	40.247
Post-neonatal mortality*	31.271	1.413	32194	32611	1.353	0.045	28.445	34.097
Infant mortality*	68.551	2.133	31988	32336	1.355	0.031	64.285	72.818
Child mortality*	63.88	2.676	31180	31633	1.468	0.042	58.528	69.233
Under five mortality*	128.052	3.689	32806	33168	1.528	0.029	120.675	135.429
Maternal mortality ratio	576	37.979	na	na	1.270	0.066	500	652
MEN								
Urban residence	0.438	0.012	17359	17359	3.058	0.026	0.415	0.461
Literacy	0.752	0.010	17359	17359	3.015	0.013	0.732	0.772
No education	0.212	0.010	17359	17359	3.229	0.047	0.192	0.232
Secondary or higher education	0.620	0.011	17359	17359	2.878	0.017	0.599	0.641
Never married (in union)	0.483	0.007	17359	17359	1.810	0.014	0.469	0.496
Currently married (in union)	0.502	0.007	17359	17359	1.784	0.013	0.489	0.516
Had first sexual intercourse before age 18	0.190	0.006	10811	10848	1.631	0.032	0.177	0.202
Knows any contraceptive method	0.970	0.003	8557	8723	1.838	0.003	0.964	0.977
Knows any modern contraceptive method	0.957	0.005	8557	8723	2.384	0.005	0.947	0.968
Want no more children	0.120	0.005	8557	8723	1.455	0.043	0.110	0.130
Want to delay birth at least 2 years	0.402	0.009	8557	8723	1.769	0.023	0.383	0.421
Ideal number of children	7.955	0.119	16454	16415	2.291	0.015	7.717	8.192
Had 2+ sexual partners in past 12 months	0.039	0.003	6548	6511	1.311	0.080	0.033	0.046
Abstinence among never married youth (never had sex)	0.715	0.010	6123	6027	1.758	0.014	0.694	0.735
Sexually active in past 12 months among never married youth	0.222	0.009	6123	6027	1.686	0.040	0.204	0.240
Paid for sexual intercourse in past 12 months	0.017	0.001	17359	17359	1.333	0.077	0.015	0.020

Table C.3 Sampling errors for urban areas, Nigeria 2013

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Literacy	0.772	0.013	15545	16414	3.831	0.017	0.746	0.797
No education	0.155	0.012	15545	16414	3.962	0.074	0.132	0.178
Secondary or higher education	0.679	0.014	15545	16414	3.797	0.021	0.650	0.707
Never married (never in union)	0.332	0.008	15545	16414	2.128	0.024	0.316	0.348
Currently married (in union)	0.617	0.009	15545	16414	2.197	0.014	0.600	0.634
Married before age 20	0.428	0.011	12381	13106	2.568	0.027	0.405	0.451
Had first sexual intercourse before age 18	0.383	0.009	12381	13106	2.074	0.024	0.365	0.401
Currently pregnant	0.095	0.003	15545	16414	1.353	0.033	0.089	0.101
Children ever born	2.508	0.048	15545	16414	2.156	0.019	2.413	2.604
Children surviving	2.203	0.036	15545	16414	1.907	0.016	2.130	2.275
Children ever born to women age 40-49	5.577	0.106	2808	2876	1.915	0.019	5.365	5.788
Knows any contraceptive method	0.954	0.006	9436	10124	2.928	0.007	0.942	0.967
Knows any modern contraceptive method	0.950	0.007	9436	10124	3.023	0.007	0.936	0.964
Currently using any method	0.268	0.011	9436	10124	2.362	0.040	0.246	0.290
Currently using a modern method	0.169	0.008	9436	10124	2.128	0.049	0.153	0.185
Currently using a traditional method	0.099	0.006	9436	10124	1.850	0.057	0.088	0.110
Currently using pill	0.032	0.002	9436	10124	1.260	0.071	0.027	0.036
Currently using IUD	0.021	0.002	9436	10124	1.646	0.115	0.016	0.026
Currently using condoms	0.044	0.003	9436	10124	1.412	0.067	0.038	0.050
Currently using injectables	0.044	0.004	9436	10124	1.669	0.080	0.037	0.051
Currently using female sterilisation	0.005	0.001	9436	10124	1.284	0.191	0.003	0.007
Currently using rhythm method	0.041	0.004	9436	10124	1.917	0.095	0.033	0.049
Currently using withdrawal	0.048	0.003	9436	10124	1.492	0.068	0.042	0.055
Used public sector source	0.265	0.013	2437	2556	1.448	0.049	0.239	0.291
Want no more children	0.257	0.007	9436	10124	1.629	0.029	0.242	0.271
Want to delay birth at least 2 years	0.319	0.007	9436	10124	1.477	0.022	0.304	0.333
Ideal number of children	5.606	0.086	14756	15581	3.929	0.015	5.433	5.779
Mothers received antenatal care for last birth	0.860	0.012	6790	7278	2.857	0.014	0.836	0.884
Mothers protected against tetanus for last birth	0.769	0.013	6790	7278	2.554	0.017	0.743	0.795
Births with skilled attendant at delivery	0.670	0.018	10351	11126	3.003	0.026	0.634	0.705
Had diarrhoea in 2 weeks before survey	0.092	0.006	9685	10403	1.842	0.062	0.081	0.104
Treated with ORS	0.447	0.022	876	958	1.244	0.049	0.403	0.492
Sought medical treatment for diarrhoea	0.350	0.024	876	958	1.423	0.069	0.302	0.399
Vaccination card seen	0.318	0.012	7582	8158	1.995	0.038	0.294	0.342
Received BCG vaccination	0.763	0.021	1945	2113	2.153	0.027	0.721	0.804
Received DPT vaccination (3 doses)	0.622	0.020	1945	2113	1.844	0.033	0.581	0.662
Received polio vaccination (3 doses)	0.583	0.018	1945	2113	1.592	0.031	0.548	0.619
Received measles vaccination	0.619	0.021	1945	2113	1.897	0.034	0.577	0.660
Received all vaccinations	0.426	0.019	1945	2113	1.659	0.044	0.389	0.463
Height-for-age (below -2SD)	0.260	0.009	9192	9725	1.718	0.033	0.243	0.277
Weight-for-height (below -2SD)	0.176	0.010	9192	9725	2.435	0.060	0.155	0.197
Weight-for-age (below -2SD)	0.229	0.011	9192	9725	2.245	0.049	0.206	0.251
Body Mass Index (BMI) <18.5	0.096	0.005	13621	14313	1.795	0.047	0.087	0.105
Abstinence among youth (never had sex)	0.683	0.014	4240	4361	2.000	0.021	0.654	0.711
Sexually active in past 12 months among never married youth	0.246	0.012	4240	4361	1.872	0.050	0.221	0.271
Had an HIV test and received results in past 12 months	0.143	0.006	15545	16414	2.004	0.039	0.132	0.154
Accepting attitudes towards people with HIV	0.132	0.007	15122	15971	2.723	0.057	0.117	0.147
Ever experienced any physical violence since age 15	0.327	0.012	11015	11628	2.748	0.038	0.302	0.351
Ever experienced any sexual violence	0.068	0.005	11015	11628	2.015	0.071	0.059	0.078
Ever experienced any physical or sexual violence by husband/partner	0.177	0.010	8139	7883	2.356	0.056	0.157	0.197
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.110	0.007	8139	7883	2.063	0.065	0.095	0.124
Female circumcision	0.323	0.014	15545	16414	3.804	0.044	0.295	0.352
Total Fertility Rate (last 3 years)	4.658	0.114	na	45820	2.015	0.025	4.429	4.887
Neonatal mortality*	33.573	1.841	19778	21256	1.285	0.055	29.892	37.255
Post-neonatal mortality*	26.25	1.862	19817	21340	1.469	0.071	22.527	29.973
Infant mortality*	59.823	2.894	19809	21289	1.512	0.048	54.036	65.61
Child mortality*	42.414	2.939	19389	20900	1.704	0.069	36.536	48.292
Under five mortality*	99.7	4.718	19988	21479	1.851	0.047	90.265	109.135
MEN								
Literacy	0.908	0.009	7144	7611	2.552	0.010	0.890	0.925
No education	0.067	0.008	7144	7611	2.544	0.113	0.051	0.082
Secondary or higher education	0.803	0.011	7144	7611	2.441	0.014	0.780	0.826
Never married (in union)	0.554	0.011	7144	7611	1.846	0.020	0.532	0.576
Currently married (in union)	0.434	0.011	7144	7611	1.811	0.024	0.413	0.455
Had first sexual intercourse before age 18	0.204	0.010	4425	4712	1.589	0.047	0.185	0.223
Knows any contraceptive method	0.994	0.002	3083	3302	1.283	0.002	0.990	0.997
Knows any modern contraceptive method	0.991	0.002	3083	3302	1.200	0.002	0.987	0.995
Want no more children	0.175	0.010	3083	3302	1.481	0.058	0.154	0.195
Want to delay birth at least 2 years	0.377	0.015	3083	3302	1.684	0.039	0.348	0.407
Ideal number of children	6.390	0.171	6793	7243	2.510	0.027	6.047	6.733
Had 2+ sexual partners in past 12 months	0.045	0.005	2719	2899	1.225	0.108	0.035	0.055
Abstinence among never married youth (never had sex)	0.703	0.016	2660	2837	1.860	0.023	0.670	0.736
Sexually active in past 12 months among never married youth	0.226	0.014	2660	2837	1.674	0.060	0.199	0.253
Paid for sexual intercourse in past 12 months	0.019	0.002	7144	7611	1.263	0.106	0.015	0.023

Table C.4 Sampling errors for rural areas, Nigeria 2013

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Literacy	0.355	0.013	23403	22534	4.252	0.037	0.328	0.382
No education	0.541	0.015	23403	22534	4.749	0.029	0.510	0.572
Secondary or higher education	0.281	0.012	23403	22534	4.078	0.043	0.257	0.305
Never married (never in union)	0.172	0.006	23403	22534	2.401	0.034	0.160	0.184
Currently married (in union)	0.786	0.007	23403	22534	2.559	0.009	0.772	0.799
Married before age 20	0.729	0.008	18662	18023	2.603	0.012	0.712	0.746
Had first sexual intercourse before age 18	0.636	0.008	18662	18023	2.371	0.013	0.619	0.653
Currently pregnant	0.140	0.004	23403	22534	1.804	0.029	0.132	0.148
Children ever born	3.466	0.040	23403	22534	1.965	0.012	3.386	3.547
Children surviving	2.791	0.027	23403	22534	1.673	0.010	2.737	2.845
Children ever born to women age 40-49	6.825	0.080	4410	4166	1.729	0.012	6.666	6.985
Knows any contraceptive method	0.784	0.012	17838	17705	3.966	0.016	0.759	0.808
Knows any modern contraceptive method	0.758	0.013	17838	17705	4.057	0.017	0.732	0.784
Currently using any method	0.085	0.005	17838	17705	2.589	0.064	0.074	0.096
Currently using a modern method	0.057	0.004	17838	17705	2.474	0.075	0.048	0.066
Currently using a traditional method	0.028	0.002	17838	17705	1.676	0.074	0.024	0.032
Currently using pill	0.011	0.001	17838	17705	1.239	0.090	0.009	0.013
Currently using IUD	0.005	0.001	17838	17705	2.036	0.221	0.003	0.007
Currently using condoms	0.007	0.001	17838	17705	1.497	0.130	0.005	0.009
Currently using injectables	0.025	0.003	17838	17705	2.261	0.106	0.019	0.030
Currently using female sterilisation	0.003	0.001	17838	17705	1.681	0.241	0.001	0.004
Currently using rhythm method	0.011	0.001	17838	17705	1.322	0.096	0.009	0.013
Currently using withdrawal	0.012	0.001	17838	17705	1.475	0.101	0.009	0.014
Used public sector source	0.330	0.021	1666	1458	1.803	0.063	0.288	0.372
Want no more children	0.146	0.006	17838	17705	2.150	0.039	0.135	0.158
Want to delay birth at least 2 years	0.357	0.007	17838	17705	1.902	0.019	0.344	0.371
Ideal number of children	7.240	0.067	21453	20510	3.035	0.009	7.105	7.374
Mothers received antenatal care for last birth	0.465	0.016	13402	13189	3.684	0.034	0.434	0.497
Mothers protected against tetanus for last birth	0.395	0.013	13402	13189	3.143	0.033	0.369	0.422
Births with skilled attendant at delivery	0.227	0.011	21131	20702	2.968	0.048	0.205	0.248
Had diarrhoea in 2 weeks before survey	0.108	0.005	18911	18547	1.992	0.044	0.099	0.118
Treated with ORS	0.284	0.018	2092	2008	1.691	0.064	0.248	0.321
Sought medical treatment for diarrhoea	0.260	0.016	2092	2008	1.519	0.061	0.228	0.291
Vaccination card seen	0.140	0.008	14779	14539	2.359	0.054	0.125	0.155
Received BCG vaccination	0.371	0.015	3889	3787	1.910	0.040	0.341	0.401
Received DPT vaccination (3 doses)	0.249	0.013	3889	3787	1.823	0.051	0.223	0.274
Received polio vaccination (3 doses)	0.510	0.015	3889	3787	1.834	0.029	0.480	0.540
Received measles vaccination	0.310	0.015	3889	3787	1.983	0.048	0.281	0.340
Received all vaccinations	0.158	0.010	3889	3787	1.721	0.064	0.137	0.178
Height-for-age (below -2SD)	0.432	0.008	17114	16465	1.912	0.018	0.416	0.448
Weight-for-height (below -2SD)	0.183	0.006	17114	16465	2.053	0.035	0.170	0.196
Weight-for-age (below -2SD)	0.322	0.008	17114	16465	2.090	0.026	0.305	0.338
Body Mass Index (BMI) <18.5	0.128	0.004	19446	18502	1.714	0.032	0.120	0.137
Abstinence among youth (never had sex)	0.677	0.013	3946	3383	1.723	0.019	0.651	0.703
Sexually active in past 12 months among never married youth	0.267	0.011	3946	3383	1.572	0.042	0.244	0.289
Had an HIV test and received results in past 12 months	0.071	0.004	23403	22534	2.411	0.057	0.063	0.079
Accepting attitudes towards people with HIV	0.102	0.005	20813	20093	2.242	0.046	0.092	0.111
Ever experienced any physical violence since age 15	0.243	0.010	16619	16007	3.087	0.042	0.222	0.263
Ever experienced any sexual violence	0.078	0.004	16619	16007	2.077	0.055	0.069	0.086
Ever experienced any physical or sexual violence by husband/partner	0.152	0.007	14166	13313	2.484	0.049	0.137	0.167
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.110	0.006	14166	13313	2.311	0.055	0.097	0.122
Female circumcision	0.193	0.013	23403	22534	5.223	0.070	0.166	0.220
Total Fertility Rate (last 3 years)	6.185	0.099	na	62787	1.990	0.016	5.987	6.382
Neonatal mortality*	43.676	1.595	41775	41049	1.383	0.037	40.486	46.867
Post-neonatal mortality*	41.908	1.766	41964	41217	1.592	0.042	38.375	45.440
Infant mortality*	85.584	2.612	41881	41150	1.627	0.031	80.361	90.807
Child mortality*	88.646	3.505	41617	41013	1.762	0.04	81.636	95.656
Under five mortality*	166.643	4.836	42517	41791	1.975	0.029	156.972	176.314
MEN								
Literacy	0.631	0.015	10215	9748	3.196	0.024	0.600	0.661
No education	0.326	0.016	10215	9748	3.442	0.049	0.294	0.358
Secondary or higher education	0.477	0.015	10215	9748	3.019	0.031	0.447	0.507
Never married (in union)	0.427	0.008	10215	9748	1.635	0.019	0.411	0.443
Currently married (in union)	0.556	0.008	10215	9748	1.631	0.014	0.540	0.572
Had first sexual intercourse before age 18	0.179	0.008	6386	6136	1.652	0.044	0.163	0.195
Knows any contraceptive method	0.956	0.005	5474	5421	1.900	0.006	0.945	0.967
Knows any modern contraceptive method	0.937	0.008	5474	5421	2.482	0.009	0.920	0.953
Want no more children	0.087	0.005	5474	5421	1.403	0.062	0.076	0.097
Want to delay birth at least 2 years	0.417	0.012	5474	5421	1.827	0.029	0.393	0.442
Ideal number of children	9.190	0.167	9661	9173	2.301	0.018	8.857	9.523
Had 2+ sexual partners in past 12 months	0.035	0.004	3829	3612	1.405	0.119	0.027	0.043
Abstinence among never married youth (never had sex)	0.726	0.013	3463	3190	1.664	0.017	0.700	0.751
Sexually active in past 12 months among never married youth	0.219	0.012	3463	3190	1.698	0.055	0.195	0.243
Paid for sexual intercourse in past 12 months	0.015	0.002	10215	9748	1.390	0.110	0.012	0.019

Table C.5 Sampling errors for North Central zone, Nigeria 2013

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.273	0.022	6251	5572	3.832	0.079	0.230	0.316
Literacy	0.543	0.027	6251	5572	4.315	0.050	0.488	0.597
No education	0.316	0.031	6251	5572	5.192	0.097	0.255	0.378
Secondary or higher education	0.459	0.025	6251	5572	3.984	0.055	0.409	0.509
Never married (never in union)	0.258	0.013	6251	5572	2.368	0.051	0.232	0.284
Currently married (in union)	0.699	0.015	6251	5572	2.533	0.021	0.670	0.728
Married before age 20	0.571	0.019	4980	4418	2.712	0.033	0.533	0.609
Had first sexual intercourse before age 18	0.423	0.016	4980	4418	2.272	0.038	0.391	0.454
Currently pregnant	0.117	0.008	6251	5572	1.939	0.067	0.101	0.133
Children ever born	2.721	0.056	6251	5572	1.686	0.021	2.608	2.833
Children surviving	2.419	0.047	6251	5572	1.572	0.019	2.326	2.512
Children ever born to women age 40-49	5.823	0.125	1014	866	1.639	0.022	5.573	6.074
Knows any contraceptive method	0.786	0.029	4203	3895	4.537	0.037	0.728	0.843
Knows any modern contraceptive method	0.780	0.029	4203	3895	4.527	0.037	0.722	0.838
Currently using any method	0.156	0.014	4203	3895	2.586	0.093	0.127	0.185
Currently using a modern method	0.124	0.011	4203	3895	2.206	0.090	0.102	0.147
Currently using a traditional method	0.032	0.005	4203	3895	1.846	0.157	0.022	0.042
Currently using pill	0.021	0.003	4203	3895	1.321	0.138	0.016	0.027
Currently using IUD	0.010	0.002	4203	3895	1.128	0.177	0.006	0.013
Currently using condoms	0.021	0.004	4203	3895	1.707	0.181	0.013	0.028
Currently using injectables	0.046	0.006	4203	3895	1.873	0.131	0.034	0.058
Currently using female sterilisation	0.010	0.002	4203	3895	1.534	0.237	0.005	0.015
Currently using rhythm method	0.010	0.002	4203	3895	1.549	0.232	0.006	0.015
Currently using withdrawal	0.015	0.003	4203	3895	1.752	0.216	0.009	0.022
Used public sector source	0.356	0.022	799	610	1.326	0.063	0.311	0.401
Want no more children	0.230	0.017	4203	3895	2.655	0.075	0.195	0.264
Want to delay birth at least 2 years	0.336	0.009	4203	3895	1.231	0.027	0.318	0.354
Ideal number of children	5.559	0.115	5769	5011	3.658	0.021	5.330	5.789
Mothers received antenatal care for last birth	0.670	0.026	3095	2890	3.148	0.039	0.618	0.723
Mothers protected against tetanus for last birth	0.568	0.026	3095	2890	2.942	0.046	0.516	0.620
Births with skilled attendant at delivery	0.465	0.026	4614	4340	2.891	0.056	0.413	0.517
Had diarrhoea in 2 weeks before survey	0.073	0.006	4286	4019	1.568	0.087	0.061	0.086
Treated with ORS	0.417	0.052	294	295	1.811	0.124	0.313	0.521
Sought medical treatment for diarrhoea	0.420	0.050	294	295	1.747	0.119	0.320	0.520
Vaccination card seen	0.241	0.019	3388	3180	2.364	0.080	0.203	0.280
Received BCG vaccination	0.627	0.028	864	812	1.680	0.044	0.571	0.682
Received DPT vaccination (3 doses)	0.439	0.031	864	812	1.833	0.070	0.377	0.501
Received polio vaccination (3 doses)	0.455	0.025	864	812	1.450	0.054	0.405	0.504
Received measles vaccination	0.481	0.029	864	812	1.737	0.061	0.422	0.540
Received all vaccinations	0.269	0.026	864	812	1.711	0.095	0.217	0.320
Height-for-age (below -2SD)	0.293	0.013	4116	3764	1.751	0.044	0.268	0.319
Weight-for-height (below -2SD)	0.117	0.009	4116	3764	1.751	0.074	0.100	0.135
Weight-for-age (below -2SD)	0.185	0.013	4116	3764	1.991	0.069	0.160	0.211
Body Mass Index (BMI) <18.5	0.072	0.006	5422	4748	1.811	0.089	0.059	0.085
Abstinence among youth (never had sex)	0.745	0.017	1504	1247	1.484	0.022	0.712	0.779
Sexually active in past 12 months among never married youth	0.194	0.016	1504	1247	1.566	0.082	0.162	0.226
Had an HIV test and received results in past 12 months	0.130	0.009	6251	5572	2.144	0.070	0.111	0.148
Accepting attitudes towards people with HIV	0.158	0.011	5324	4651	2.180	0.069	0.137	0.180
Ever experienced any physical violence since age 15	0.305	0.028	4505	3882	4.092	0.092	0.249	0.361
Ever experienced any sexual violence	0.096	0.010	4505	3882	2.237	0.102	0.076	0.115
Ever experienced any physical or sexual violence by husband/partner	0.206	0.023	3530	2929	3.311	0.110	0.161	0.251
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.144	0.018	3530	2929	3.107	0.128	0.107	0.181
Female circumcision	0.099	0.018	6251	5572	4.841	0.185	0.063	0.136
Total Fertility Rate (last 3 years)	5.277	0.136	na	15532	1.774	0.026	5.004	5.549
Neonatal mortality*	35.090	3.042	8845	8403	1.371	0.087	29.006	41.174
Post-neonatal mortality*	31.229	2.973	8898	8451	1.478	0.095	25.282	37.176
Infant mortality*	66.319	4.358	8859	8419	1.446	0.066	57.602	75.035
Child mortality*	36.398	2.787	8688	8305	1.312	0.077	30.823	41.972
Under five mortality*	100.303	5.602	8918	8480	1.541	0.056	89.099	111.506
MEN								
Urban residence	0.284	0.023	3018	2685	2.825	0.082	0.237	0.330
Literacy	0.823	0.023	3018	2685	3.348	0.028	0.777	0.870
No education	0.125	0.024	3018	2685	3.897	0.188	0.078	0.172
Secondary or higher education	0.723	0.024	3018	2685	2.913	0.033	0.676	0.771
Never married (in union)	0.463	0.017	3018	2685	1.888	0.037	0.429	0.497
Currently married (in union)	0.520	0.017	3018	2685	1.903	0.033	0.485	0.554
Had first sexual intercourse before age 18	0.208	0.017	1958	1687	1.826	0.081	0.175	0.242
Knows any contraceptive method	0.943	0.014	1539	1395	2.447	0.015	0.914	0.972
Knows any modern contraceptive method	0.926	0.021	1539	1395	3.150	0.023	0.884	0.968
Want no more children	0.139	0.013	1539	1395	1.482	0.094	0.112	0.165
Want to delay birth at least 2 years	0.459	0.016	1539	1395	1.252	0.035	0.427	0.491
Ideal number of children	6.665	0.226	2731	2381	2.528	0.034	6.214	7.117
Had 2+ sexual partners in past 12 months	0.029	0.006	1060	997	1.152	0.204	0.017	0.041
Abstinence among never married youth (never had sex)	0.583	0.025	977	891	1.600	0.043	0.533	0.634
Sexually active in past 12 months among never married youth	0.336	0.025	977	891	1.678	0.076	0.285	0.386
Paid for sexual intercourse in past 12 months	0.013	0.003	3018	2685	1.387	0.222	0.007	0.018

Table C.6 Sampling errors for North East zone, Nigeria 2013

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.274	0.026	6630	5766	4.694	0.094	0.222	0.325
Literacy	0.283	0.026	6630	5766	4.763	0.093	0.230	0.336
No education	0.644	0.029	6630	5766	4.971	0.046	0.585	0.702
Secondary or higher education	0.219	0.023	6630	5766	4.451	0.103	0.174	0.265
Never married (never in union)	0.146	0.012	6630	5766	2.795	0.083	0.121	0.170
Currently married (in union)	0.812	0.014	6630	5766	2.972	0.018	0.783	0.840
Married before age 20	0.782	0.014	5322	4576	2.547	0.018	0.753	0.811
Had first sexual intercourse before age 18	0.658	0.014	5322	4576	2.222	0.022	0.629	0.687
Currently pregnant	0.139	0.006	6630	5766	1.434	0.044	0.127	0.151
Children ever born	3.517	0.089	6630	5766	2.230	0.025	3.340	3.695
Children surviving	2.847	0.058	6630	5766	1.825	0.020	2.731	2.963
Children ever born to women age 40-49	7.051	0.217	1165	982	2.125	0.031	6.616	7.485
Knows any contraceptive method	0.732	0.021	5309	4679	3.457	0.029	0.690	0.774
Knows any modern contraceptive method	0.701	0.023	5309	4679	3.705	0.033	0.655	0.748
Currently using any method	0.032	0.004	5309	4679	1.669	0.127	0.024	0.040
Currently using a modern method	0.027	0.004	5309	4679	1.575	0.130	0.020	0.034
Currently using a traditional method	0.004	0.001	5309	4679	1.258	0.259	0.002	0.007
Currently using pill	0.005	0.001	5309	4679	1.117	0.218	0.003	0.007
Currently using IUD	0.001	0.001	5309	4679	1.071	0.398	0.000	0.002
Currently using condoms	0.002	0.001	5309	4679	1.026	0.286	0.001	0.004
Currently using injectables	0.012	0.002	5309	4679	1.367	0.170	0.008	0.016
Currently using female sterilisation	0.003	0.001	5309	4679	1.203	0.300	0.001	0.005
Currently using rhythm method	0.001	0.000	5309	4679	0.873	0.428	0.000	0.001
Currently using withdrawal	0.002	0.001	5309	4679	1.412	0.458	0.000	0.003
Used public sector source	0.609	0.041	213	149	1.231	0.068	0.526	0.691
Want no more children	0.102	0.009	5309	4679	2.127	0.086	0.085	0.120
Want to delay birth at least 2 years	0.357	0.014	5309	4679	2.067	0.038	0.330	0.385
Ideal number of children	8.083	0.124	5426	4522	2.632	0.015	7.835	8.332
Mothers received antenatal care for last birth	0.493	0.031	4001	3434	3.880	0.062	0.431	0.555
Mothers protected against tetanus for last birth	0.407	0.027	4001	3434	3.447	0.066	0.354	0.461
Births with skilled attendant at delivery	0.199	0.018	6517	5578	2.809	0.088	0.164	0.234
Had diarrhoea in 2 weeks before survey	0.211	0.012	5856	5034	2.132	0.057	0.187	0.235
Treated with ORS	0.285	0.024	1264	1061	1.641	0.084	0.237	0.332
Sought medical treatment for diarrhoea	0.244	0.021	1264	1061	1.554	0.086	0.202	0.286
Vaccination card seen	0.141	0.015	4596	3961	2.488	0.103	0.112	0.170
Received BCG vaccination	0.351	0.032	1184	1023	2.280	0.091	0.287	0.415
Received DPT vaccination (3 doses)	0.206	0.022	1184	1023	1.874	0.108	0.161	0.250
Received polio vaccination (3 doses)	0.348	0.027	1184	1023	1.914	0.077	0.294	0.401
Received measles vaccination	0.268	0.026	1184	1023	1.989	0.096	0.217	0.320
Received all vaccinations	0.142	0.018	1184	1023	1.711	0.124	0.107	0.177
Height-for-age (below -2SD)	0.423	0.014	5213	4286	1.825	0.033	0.394	0.451
Weight-for-height (below -2SD)	0.195	0.013	5213	4286	2.044	0.064	0.169	0.220
Weight-for-age (below -2SD)	0.308	0.013	5213	4286	1.805	0.043	0.281	0.334
Body Mass Index (BMI) <18.5	0.159	0.010	5377	4659	1.917	0.060	0.140	0.178
Abstinence among youth (never had sex)	0.838	0.024	920	754	1.974	0.029	0.790	0.886
Sexually active in past 12 months among never married youth	0.127	0.020	920	754	1.801	0.156	0.087	0.166
Had an HIV test and received results in past 12 months	0.081	0.008	6630	5766	2.477	0.103	0.064	0.097
Accepting attitudes towards people with HIV	0.179	0.012	5874	5078	2.422	0.068	0.155	0.203
Ever experienced any physical violence since age 15	0.295	0.023	4467	4079	3.391	0.079	0.248	0.341
Ever experienced any sexual violence	0.157	0.015	4467	4079	2.676	0.093	0.128	0.186
Ever experienced any physical or sexual violence by husband/partner	0.210	0.018	4005	3476	2.749	0.084	0.174	0.245
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.161	0.014	4005	3476	2.427	0.088	0.132	0.189
Female circumcision	0.029	0.004	6630	5766	1.774	0.126	0.022	0.036
Total Fertility Rate (last 3 years)	6.303	0.216	na	16095	2.581	0.034	5.871	6.735
Neonatal mortality*	43.460	2.559	12823	10967	1.170	0.059	38.341	48.578
Post-neonatal mortality*	33.458	2.359	12838	10998	1.308	0.071	28.739	38.176
Infant mortality*	76.917	3.962	12847	10983	1.39	0.052	68.993	84.841
Child mortality*	90.282	6.889	12789	10978	2.055	0.076	76.505	104.059
Under five mortality*	160.255	8.863	13073	11174	2.087	0.055	142.529	177.98
MEN								
Urban residence	0.300	0.029	2843	2515	3.407	0.098	0.241	0.358
Literacy	0.510	0.033	2843	2515	3.507	0.065	0.445	0.576
No education	0.447	0.036	2843	2515	3.809	0.080	0.376	0.519
Secondary or higher education	0.401	0.031	2843	2515	3.372	0.078	0.338	0.463
Never married (in union)	0.426	0.017	2843	2515	1.856	0.040	0.392	0.461
Currently married (in union)	0.558	0.017	2843	2515	1.848	0.031	0.524	0.593
Had first sexual intercourse before age 18	0.114	0.011	1762	1574	1.450	0.096	0.092	0.136
Knows any contraceptive method	0.940	0.010	1557	1404	1.653	0.011	0.920	0.960
Knows any modern contraceptive method	0.912	0.017	1557	1404	2.410	0.019	0.878	0.947
Want no more children	0.031	0.006	1557	1404	1.416	0.200	0.019	0.044
Want to delay birth at least 2 years	0.420	0.026	1557	1404	2.038	0.061	0.369	0.471
Ideal number of children	11.380	0.407	2497	2181	2.377	0.036	10.566	12.195
Had 2+ sexual partners in past 12 months	0.024	0.006	1081	941	1.357	0.263	0.011	0.037
Abstinence among never married youth (never had sex)	0.815	0.023	964	825	1.798	0.028	0.770	0.860
Sexually active in past 12 months among never married youth	0.129	0.017	964	825	1.552	0.130	0.096	0.163
Paid for sexual intercourse in past 12 months	0.017	0.003	2843	2515	1.298	0.183	0.011	0.024

Table C.7 Sampling errors for North West zone, Nigeria 2013

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.286	0.018	9673	11877	3.862	0.062	0.251	0.322
Literacy	0.258	0.022	9673	11877	5.023	0.087	0.213	0.303
No education	0.694	0.024	9673	11877	5.083	0.034	0.646	0.741
Secondary or higher education	0.190	0.020	9673	11877	5.118	0.108	0.149	0.231
Never married (never in union)	0.124	0.010	9673	11877	3.050	0.082	0.104	0.145
Currently married (in union)	0.845	0.011	9673	11877	3.029	0.013	0.823	0.867
Married before age 20	0.868	0.011	7745	9448	2.818	0.013	0.846	0.889
Had first sexual intercourse before age 18	0.769	0.011	7745	9448	2.338	0.015	0.747	0.792
Currently pregnant	0.161	0.007	9673	11877	1.770	0.041	0.148	0.174
Children ever born	3.885	0.066	9673	11877	1.933	0.017	3.753	4.017
Children surviving	3.007	0.042	9673	11877	1.587	0.014	2.924	3.091
Children ever born to women age 40-49	7.606	0.116	1832	2233	1.578	0.015	7.374	7.837
Knows any contraceptive method	0.811	0.015	8319	10034	3.386	0.018	0.782	0.840
Knows any modern contraceptive method	0.784	0.015	8319	10034	3.362	0.019	0.753	0.814
Currently using any method	0.043	0.008	8319	10034	3.789	0.197	0.026	0.059
Currently using a modern method	0.036	0.008	8319	10034	3.961	0.224	0.020	0.053
Currently using a traditional method	0.006	0.001	8319	10034	1.313	0.183	0.004	0.008
Currently using pill	0.005	0.001	8319	10034	1.520	0.229	0.003	0.008
Currently using IUD	0.002	0.001	8319	10034	1.897	0.417	0.000	0.005
Currently using condoms	0.001	0.001	8319	10034	1.618	0.489	0.000	0.003
Currently using injectables	0.018	0.004	8319	10034	3.032	0.245	0.009	0.027
Currently using female sterilisation	0.002	0.001	8319	10034	1.707	0.453	0.000	0.003
Currently using rhythm method	0.001	0.000	8319	10034	1.103	0.429	0.000	0.001
Currently using withdrawal	0.002	0.001	8319	10034	1.237	0.331	0.001	0.003
Used public sector source	0.473	0.050	270	463	1.629	0.105	0.373	0.572
Want no more children	0.079	0.005	8319	10034	1.803	0.068	0.068	0.090
Want to delay birth at least 2 years	0.383	0.010	8319	10034	1.939	0.027	0.362	0.404
Ideal number of children	8.436	0.105	9361	11551	3.140	0.012	8.226	8.645
Mothers received antenatal care for last birth	0.410	0.024	6206	7445	3.750	0.057	0.363	0.457
Mothers protected against tetanus for last birth	0.329	0.019	6206	7445	3.246	0.059	0.290	0.368
Births with skilled attendant at delivery	0.123	0.012	9906	11775	2.996	0.097	0.099	0.147
Had diarrhoea in 2 weeks before survey	0.092	0.005	8760	10485	1.647	0.058	0.081	0.102
Treated with ORS	0.337	0.027	802	961	1.544	0.081	0.282	0.392
Sought medical treatment for diarrhoea	0.287	0.023	802	961	1.367	0.081	0.240	0.333
Vaccination card seen	0.061	0.008	6831	8211	2.586	0.133	0.045	0.077
Received BCG vaccination	0.217	0.019	1780	2100	1.918	0.088	0.179	0.256
Received DPT vaccination (3 doses)	0.139	0.016	1780	2100	1.952	0.117	0.107	0.172
Received polio vaccination (3 doses)	0.611	0.021	1780	2100	1.782	0.034	0.569	0.653
Received measles vaccination	0.223	0.022	1780	2100	2.165	0.098	0.179	0.267
Received all vaccinations	0.096	0.014	1780	2100	1.961	0.146	0.068	0.124
Height-for-age (below -2SD)	0.548	0.011	7530	9049	1.791	0.021	0.525	0.571
Weight-for-height (below -2SD)	0.271	0.013	7530	9049	2.277	0.048	0.245	0.297
Weight-for-age (below -2SD)	0.474	0.013	7530	9049	2.070	0.028	0.448	0.501
Body Mass Index (BMI) <18.5	0.160	0.006	7745	9522	1.535	0.040	0.147	0.172
Abstinence among youth (never had sex)	0.879	0.033	995	1365	3.185	0.038	0.813	0.946
Sexually active in past 12 months among never married youth	0.094	0.028	995	1365	2.995	0.296	0.038	0.150
Had an HIV test and received results in past 12 months	0.039	0.004	9673	11877	2.223	0.113	0.030	0.047
Accepting attitudes towards people with HIV	0.114	0.010	9167	11331	2.931	0.086	0.094	0.133
Ever experienced any physical violence since age 15	0.069	0.009	6668	8531	2.870	0.129	0.052	0.087
Ever experienced any sexual violence	0.023	0.003	6668	8531	1.686	0.136	0.016	0.029
Ever experienced any physical or sexual violence by husband/partner	0.060	0.009	6204	7519	2.814	0.141	0.043	0.078
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.043	0.006	6204	7519	2.301	0.138	0.031	0.055
Female circumcision	0.207	0.019	9673	11877	4.665	0.093	0.169	0.246
Total Fertility Rate (last 3 years)	6.678	0.160	na	33023	2.065	0.024	6.358	6.998
Neonatal mortality*	43.611	2.309	19893	23669	1.335	0.053	38.992	48.230
Post-neonatal mortality*	45.826	2.760	20048	23849	1.572	0.060	40.307	51.345
Infant mortality*	89.437	4.09	19963	23745	1.641	0.046	81.256	97.618
Child mortality*	105.189	5.035	20054	23933	1.581	0.048	95.118	115.26
Under five mortality*	185.218	7.303	20346	24182	1.911	0.039	170.613	199.823
MEN								
Urban residence	0.346	0.024	4131	5185	3.211	0.069	0.298	0.393
Literacy	0.622	0.022	4131	5185	2.953	0.036	0.577	0.666
No education	0.390	0.023	4131	5185	3.065	0.060	0.344	0.437
Secondary or higher education	0.436	0.025	4131	5185	3.285	0.058	0.386	0.487
Never married (in union)	0.442	0.016	4131	5185	2.104	0.037	0.410	0.475
Currently married (in union)	0.549	0.016	4131	5185	2.056	0.029	0.517	0.581
Had first sexual intercourse before age 18	0.086	0.010	2579	3213	1.892	0.122	0.065	0.107
Knows any contraceptive method	0.974	0.005	2301	2846	1.461	0.005	0.964	0.984
Knows any modern contraceptive method	0.960	0.007	2301	2846	1.825	0.008	0.945	0.975
Want no more children	0.022	0.005	2301	2846	1.720	0.239	0.012	0.033
Want to delay birth at least 2 years	0.396	0.021	2301	2846	2.067	0.053	0.353	0.438
Ideal number of children	10.903	0.276	4062	5099	2.168	0.025	10.350	11.455
Had 2+ sexual partners in past 12 months	0.003	0.002	1552	1971	1.034	0.450	0.000	0.006
Abstinence among never married youth (never had sex)	0.958	0.010	1415	1797	1.855	0.010	0.938	0.978
Sexually active in past 12 months among never married youth	0.033	0.009	1415	1797	1.987	0.288	0.014	0.051
Paid for sexual intercourse in past 12 months	0.009	0.002	4131	5185	1.341	0.221	0.005	0.013

Table C.8 Sampling errors for South East zone, Nigeria 2013

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.703	0.031	4462	4476	4.552	0.044	0.641	0.766
Literacy	0.842	0.018	4462	4476	3.266	0.021	0.806	0.878
No education	0.053	0.009	4462	4476	2.608	0.166	0.035	0.070
Secondary or higher education	0.738	0.024	4462	4476	3.669	0.033	0.689	0.786
Never married (never in union)	0.408	0.013	4462	4476	1.815	0.033	0.381	0.435
Currently married (in union)	0.521	0.013	4462	4476	1.758	0.025	0.495	0.547
Married before age 20	0.312	0.016	3574	3582	2.124	0.053	0.279	0.345
Had first sexual intercourse before age 18	0.291	0.013	3574	3582	1.664	0.043	0.266	0.317
Currently pregnant	0.079	0.005	4462	4476	1.212	0.062	0.069	0.088
Children ever born	2.451	0.103	4462	4476	2.356	0.042	2.246	2.656
Children surviving	2.110	0.077	4462	4476	2.076	0.036	1.956	2.263
Children ever born to women age 40-49	5.684	0.208	976	914	2.144	0.037	5.268	6.101
Knows any contraceptive method	0.959	0.007	2351	2333	1.751	0.007	0.945	0.974
Knows any modern contraceptive method	0.954	0.007	2351	2333	1.727	0.008	0.939	0.969
Currently using any method	0.293	0.016	2351	2333	1.695	0.054	0.261	0.324
Currently using a modern method	0.110	0.009	2351	2333	1.468	0.086	0.091	0.129
Currently using a traditional method	0.182	0.011	2351	2333	1.408	0.062	0.160	0.205
Currently using pill	0.018	0.003	2351	2333	1.246	0.190	0.011	0.025
Currently using IUD	0.015	0.005	2351	2333	1.925	0.321	0.005	0.025
Currently using condoms	0.041	0.005	2351	2333	1.170	0.117	0.031	0.050
Currently using injectables	0.022	0.004	2351	2333	1.191	0.162	0.015	0.030
Currently using female sterilisation	0.003	0.001	2351	2333	1.163	0.471	0.000	0.005
Currently using rhythm method	0.079	0.007	2351	2333	1.331	0.094	0.064	0.094
Currently using withdrawal	0.099	0.008	2351	2333	1.306	0.082	0.082	0.115
Used public sector source	0.184	0.022	599	620	1.379	0.119	0.140	0.228
Want no more children	0.315	0.014	2351	2333	1.447	0.044	0.288	0.343
Want to delay birth at least 2 years	0.273	0.012	2351	2333	1.332	0.045	0.248	0.297
Ideal number of children	5.516	0.110	4443	4450	3.778	0.020	5.296	5.736
Mothers received antenatal care for last birth	0.906	0.013	1724	1719	1.912	0.015	0.879	0.933
Mothers protected against tetanus for last birth	0.847	0.018	1724	1719	2.097	0.021	0.811	0.883
Births with skilled attendant at delivery	0.822	0.024	2816	2840	2.546	0.029	0.774	0.870
Had diarrhoea in 2 weeks before survey	0.103	0.011	2553	2585	1.712	0.106	0.081	0.125
Treated with ORS	0.370	0.043	242	266	1.328	0.115	0.285	0.455
Sought medical treatment for diarrhoea	0.275	0.033	242	266	1.100	0.121	0.209	0.341
Vaccination card seen	0.462	0.025	1974	1995	1.959	0.055	0.412	0.513
Received BCG vaccination	0.904	0.019	557	550	1.412	0.021	0.867	0.942
Received DPT vaccination (3 doses)	0.807	0.023	557	550	1.344	0.029	0.760	0.853
Received polio vaccination (3 doses)	0.628	0.027	557	550	1.325	0.044	0.573	0.683
Received measles vaccination	0.722	0.027	557	550	1.381	0.037	0.668	0.776
Received all vaccinations	0.522	0.029	557	550	1.366	0.056	0.463	0.581
Height-for-age (below -2SD)	0.160	0.012	2513	2455	1.525	0.074	0.136	0.184
Weight-for-height (below -2SD)	0.119	0.009	2513	2455	1.393	0.076	0.101	0.137
Weight-for-age (below -2SD)	0.114	0.009	2513	2455	1.414	0.083	0.095	0.133
Body Mass Index (BMI) <18.5	0.070	0.007	3954	3965	1.726	0.100	0.056	0.084
Abstinence among youth (never had sex)	0.611	0.018	1348	1369	1.331	0.029	0.576	0.646
Sexually active in past 12 months among never married youth	0.280	0.017	1348	1369	1.421	0.062	0.245	0.315
Had an HIV test and received results in past 12 months	0.154	0.011	4462	4476	2.119	0.074	0.131	0.177
Accepting attitudes towards people with HIV	0.088	0.008	4416	4432	1.946	0.094	0.071	0.105
Ever experienced any physical violence since age 15	0.383	0.023	3140	3142	2.599	0.059	0.337	0.428
Ever experienced any sexual violence	0.084	0.011	3140	3142	2.158	0.127	0.063	0.106
Ever experienced any physical or sexual violence by husband/partner	0.198	0.020	2114	1870	2.272	0.100	0.159	0.237
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.143	0.017	2114	1870	2.173	0.116	0.110	0.176
Female circumcision	0.490	0.039	4462	4476	5.237	0.080	0.412	0.569
Total Fertility Rate (last 3 years)	4.707	0.202	na	12590	1.699	0.043	4.303	5.111
Neonatal mortality*	37.145	3.353	5360	5376	1.156	0.090	30.439	43.851
Post-neonatal mortality*	44.771	4.431	5366	5391	1.457	0.099	35.908	53.633
Infant mortality*	81.916	5.409	5368	5385	1.292	0.066	71.099	92.733
Child mortality*	53.85	5.629	5181	5175	1.538	0.105	42.593	65.108
Under five mortality*	131.355	8.752	5417	5436	1.609	0.067	113.851	148.859
MEN								
Urban residence	0.680	0.038	1681	1686	3.294	0.055	0.605	0.755
Literacy	0.912	0.011	1681	1686	1.549	0.012	0.891	0.933
No education	0.013	0.004	1681	1686	1.266	0.267	0.006	0.020
Secondary or higher education	0.774	0.020	1681	1686	1.931	0.025	0.734	0.813
Never married (in union)	0.602	0.015	1681	1686	1.289	0.026	0.571	0.632
Currently married (in union)	0.381	0.016	1681	1686	1.318	0.041	0.350	0.413
Had first sexual intercourse before age 18	0.233	0.021	981	986	1.521	0.088	0.192	0.274
Knows any contraceptive method	0.996	0.002	624	643	0.876	0.002	0.991	1.000
Knows any modern contraceptive method	0.993	0.003	624	643	0.838	0.003	0.988	0.999
Want no more children	0.224	0.023	624	643	1.365	0.102	0.179	0.270
Want to delay birth at least 2 years	0.381	0.026	624	643	1.325	0.068	0.330	0.433
Ideal number of children	5.336	0.140	1606	1614	2.066	0.026	5.055	5.616
Had 2+ sexual partners in past 12 months	0.021	0.006	700	700	1.060	0.276	0.009	0.032
Abstinence among never married youth (never had sex)	0.570	0.023	681	681	1.232	0.041	0.523	0.616
Sexually active in past 12 months among never married youth	0.280	0.022	681	681	1.299	0.080	0.236	0.325
Paid for sexual intercourse in past 12 months	0.024	0.004	1681	1686	1.138	0.178	0.015	0.032

Table C.9 Sampling errors for South South zone, Nigeria 2013

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.387	0.027	6058	4942	4.243	0.069	0.334	0.440
Literacy	0.810	0.016	6058	4942	3.127	0.019	0.779	0.842
No education	0.050	0.007	6058	4942	2.500	0.139	0.036	0.065
Secondary or higher education	0.718	0.018	6058	4942	3.061	0.025	0.683	0.753
Never married (never in union)	0.388	0.011	6058	4942	1.710	0.028	0.366	0.409
Currently married (in union)	0.546	0.011	6058	4942	1.658	0.019	0.525	0.567
Married before age 20	0.388	0.016	4682	3909	2.221	0.041	0.356	0.420
Had first sexual intercourse before age 18	0.423	0.015	4682	3909	2.119	0.036	0.392	0.454
Currently pregnant	0.086	0.005	6058	4942	1.422	0.060	0.075	0.096
Children ever born	2.315	0.063	6058	4942	1.909	0.027	2.189	2.442
Children surviving	2.086	0.054	6058	4942	1.831	0.026	1.977	2.194
Children ever born to women age 40-49	5.400	0.104	1052	847	1.372	0.019	5.192	5.608
Knows any contraceptive method	0.977	0.006	3308	2699	2.338	0.006	0.965	0.989
Knows any modern contraceptive method	0.975	0.006	3308	2699	2.288	0.006	0.963	0.988
Currently using any method	0.281	0.014	3308	2699	1.829	0.051	0.252	0.309
Currently using a modern method	0.164	0.010	3308	2699	1.503	0.059	0.144	0.183
Currently using a traditional method	0.117	0.008	3308	2699	1.506	0.072	0.100	0.134
Currently using pill	0.038	0.004	3308	2699	1.134	0.100	0.030	0.045
Currently using IUD	0.010	0.002	3308	2699	1.359	0.233	0.005	0.015
Currently using condoms	0.025	0.004	3308	2699	1.321	0.145	0.017	0.032
Currently using injectables	0.055	0.005	3308	2699	1.294	0.093	0.045	0.065
Currently using female sterilisation	0.005	0.002	3308	2699	1.688	0.404	0.001	0.010
Currently using rhythm method	0.056	0.006	3308	2699	1.410	0.100	0.045	0.068
Currently using withdrawal	0.044	0.006	3308	2699	1.722	0.139	0.032	0.057
Used public sector source	0.219	0.022	975	823	1.624	0.098	0.176	0.262
Want no more children	0.297	0.013	3308	2699	1.670	0.045	0.271	0.324
Want to delay birth at least 2 years	0.306	0.012	3308	2699	1.532	0.040	0.282	0.331
Ideal number of children	4.921	0.062	5674	4605	2.569	0.013	4.797	5.045
Mothers received antenatal care for last birth	0.730	0.018	2500	2002	2.024	0.025	0.694	0.766
Mothers protected against tetanus for last birth	0.730	0.017	2500	2002	1.955	0.024	0.695	0.765
Births with skilled attendant at delivery	0.554	0.025	3747	2935	2.419	0.046	0.503	0.605
Had diarrhoea in 2 weeks before survey	0.045	0.005	3498	2742	1.361	0.117	0.035	0.056
Treated with ORS	0.317	0.054	137	124	1.311	0.170	0.209	0.425
Sought medical treatment for diarrhoea	0.313	0.045	137	124	1.097	0.142	0.224	0.403
Vaccination card seen	0.364	0.019	2736	2152	1.810	0.052	0.326	0.402
Received BCG vaccination	0.847	0.022	735	591	1.622	0.026	0.802	0.891
Received DPT vaccination (3 doses)	0.698	0.027	735	591	1.538	0.038	0.645	0.752
Received polio vaccination (3 doses)	0.645	0.026	735	591	1.451	0.041	0.593	0.697
Received measles vaccination	0.740	0.027	735	591	1.619	0.036	0.686	0.794
Received all vaccinations	0.520	0.030	735	591	1.609	0.058	0.460	0.581
Height-for-age (below -2SD)	0.183	0.010	3359	2619	1.394	0.056	0.163	0.204
Weight-for-height (below -2SD)	0.111	0.008	3359	2619	1.377	0.073	0.095	0.128
Weight-for-age (below -2SD)	0.128	0.008	3359	2619	1.248	0.062	0.112	0.144
Body Mass Index (BMI) <18.5	0.074	0.005	5335	4352	1.465	0.071	0.064	0.085
Abstinence among youth (never had sex)	0.493	0.017	1873	1467	1.514	0.036	0.458	0.528
Sexually active in past 12 months among never married youth	0.437	0.016	1873	1467	1.401	0.037	0.405	0.469
Had an HIV test and received results in past 12 months	0.170	0.013	6058	4942	2.705	0.077	0.144	0.196
Accepting attitudes towards people with HIV	0.099	0.010	5647	4660	2.474	0.100	0.079	0.118
Ever experienced any physical violence since age 15	0.522	0.023	4356	3518	3.008	0.044	0.477	0.568
Ever experienced any sexual violence	0.103	0.009	4356	3518	1.993	0.089	0.085	0.121
Ever experienced any physical or sexual violence by husband/partner	0.281	0.017	3015	2182	2.026	0.059	0.248	0.314
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.171	0.013	3015	2182	1.893	0.076	0.145	0.197
Female circumcision	0.258	0.021	6058	4942	3.779	0.082	0.215	0.300
Total Fertility Rate (last 3 years)	4.273	0.172	na	13647	1.984	0.040	3.929	4.618
Neonatal mortality*	31.893	3.185	7286	5686	1.356	0.100	25.523	38.263
Post-neonatal mortality*	25.675	2.634	7281	5675	1.248	0.103	20.407	30.943
Infant mortality*	57.569	4.248	7297	5693	1.345	0.074	49.073	66.064
Child mortality*	35.063	2.788	7130	5553	1.098	0.08	29.488	40.639
Under five mortality*	90.613	5.507	7340	5723	1.33	0.061	79.6	101.627
MEN								
Urban residence	0.389	0.028	3035	2445	3.108	0.071	0.334	0.444
Literacy	0.931	0.008	3035	2445	1.730	0.009	0.916	0.947
No education	0.011	0.003	3035	2445	1.327	0.227	0.006	0.016
Secondary or higher education	0.815	0.014	3035	2445	2.003	0.017	0.787	0.843
Never married (in union)	0.564	0.012	3035	2445	1.320	0.021	0.540	0.588
Currently married (in union)	0.417	0.012	3035	2445	1.293	0.028	0.394	0.440
Had first sexual intercourse before age 18	0.333	0.016	1851	1548	1.445	0.048	0.302	0.365
Knows any contraceptive method	0.997	0.001	1255	1020	0.860	0.001	0.995	1.000
Knows any modern contraceptive method	0.994	0.002	1255	1020	1.037	0.002	0.990	0.999
Want no more children	0.228	0.014	1255	1020	1.145	0.060	0.201	0.255
Want to delay birth at least 2 years	0.397	0.022	1255	1020	1.558	0.054	0.354	0.440
Ideal number of children	5.410	0.130	2971	2387	2.348	0.024	5.149	5.671
Had 2+ sexual partners in past 12 months	0.096	0.014	1184	896	1.582	0.141	0.069	0.123
Abstinence among never married youth (never had sex)	0.479	0.018	1156	879	1.230	0.038	0.443	0.515
Sexually active in past 12 months among never married youth	0.446	0.019	1156	879	1.310	0.043	0.407	0.484
Paid for sexual intercourse in past 12 months	0.034	0.005	3035	2445	1.501	0.146	0.024	0.043

Table C.10 Sampling errors for South West zone, Nigeria 2013

Variable	Value (R)	Standard error (SE)	Number of cases Unweighted (N)	Number of cases Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits R-2SE	Confidence limits R+2SE
WOMEN								
Urban residence	0.768	0.025	5874	6314	4.560	0.033	0.718	0.818
Literacy	0.820	0.019	5874	6314	3.864	0.024	0.781	0.858
No education	0.084	0.018	5874	6314	5.096	0.220	0.047	0.121
Secondary or higher education	0.722	0.020	5874	6314	3.442	0.028	0.682	0.762
Never married (never in union)	0.290	0.010	5874	6314	1.683	0.034	0.270	0.310
Currently married (in union)	0.663	0.011	5874	6314	1.818	0.017	0.641	0.686
Married before age 20	0.349	0.016	4740	5194	2.294	0.046	0.317	0.381
Had first sexual intercourse before age 18	0.316	0.014	4740	5194	2.033	0.043	0.289	0.343
Currently pregnant	0.090	0.005	5874	6314	1.328	0.055	0.080	0.100
Children ever born	2.420	0.056	5874	6314	1.856	0.023	2.309	2.532
Children surviving	2.166	0.047	5874	6314	1.775	0.022	2.072	2.260
Children ever born to women age 40-49	4.795	0.105	1179	1200	1.687	0.022	4.585	5.005
Knows any contraceptive method	0.964	0.020	3784	4189	6.533	0.021	0.924	1.004
Knows any modern contraceptive method	0.957	0.024	3784	4189	7.166	0.025	0.909	1.004
Currently using any method	0.380	0.015	3784	4189	1.897	0.039	0.350	0.410
Currently using a modern method	0.249	0.011	3784	4189	1.539	0.043	0.228	0.271
Currently using a traditional method	0.131	0.010	3784	4189	1.832	0.077	0.111	0.151
Currently using pill	0.050	0.005	3784	4189	1.272	0.090	0.041	0.059
Currently using IUD	0.040	0.006	3784	4189	1.741	0.139	0.029	0.051
Currently using condoms	0.075	0.006	3784	4189	1.410	0.080	0.063	0.087
Currently using injectables	0.064	0.006	3784	4189	1.411	0.088	0.052	0.075
Currently using female sterilisation	0.002	0.001	3784	4189	1.149	0.475	0.000	0.003
Currently using rhythm method	0.051	0.008	3784	4189	2.135	0.149	0.036	0.067
Currently using withdrawal	0.063	0.005	3784	4189	1.341	0.084	0.052	0.074
Used public sector source	0.250	0.017	1247	1350	1.405	0.069	0.216	0.285
Want no more children	0.354	0.010	3784	4189	1.291	0.028	0.334	0.374
Want to delay birth at least 2 years	0.301	0.009	3784	4189	1.199	0.030	0.283	0.319
Ideal number of children	4.498	0.084	5536	5952	3.649	0.019	4.330	4.666
Mothers received antenatal care for last birth	0.904	0.020	2666	2977	3.499	0.022	0.864	0.944
Mothers protected against tetanus for last birth	0.807	0.022	2666	2977	2.842	0.027	0.764	0.850
Births with skilled attendant at delivery	0.825	0.025	3882	4360	3.319	0.030	0.776	0.874
Had diarrhoea in 2 weeks before survey	0.063	0.007	3643	4084	1.594	0.104	0.050	0.077
Treated with ORS	0.436	0.042	229	259	1.252	0.097	0.352	0.521
Sought medical treatment for diarrhoea	0.338	0.042	229	259	1.325	0.124	0.254	0.422
Vaccination card seen	0.342	0.018	2836	3198	1.794	0.052	0.306	0.377
Received BCG vaccination	0.845	0.025	714	823	1.855	0.029	0.795	0.895
Received DPT vaccination (3 doses)	0.655	0.030	714	823	1.665	0.045	0.596	0.714
Received polio vaccination (3 doses)	0.521	0.027	714	823	1.466	0.052	0.467	0.576
Received measles vaccination	0.625	0.028	714	823	1.536	0.044	0.570	0.681
Received all vaccinations	0.409	0.025	714	823	1.375	0.061	0.359	0.460
Height-for-age (below -2SD)	0.222	0.012	3575	4016	1.632	0.054	0.198	0.246
Weight-for-height (below -2SD)	0.100	0.007	3575	4016	1.327	0.067	0.086	0.113
Weight-for-age (below -2SD)	0.149	0.009	3575	4016	1.472	0.062	0.131	0.167
Body Mass Index (BMI) <18.5	0.098	0.007	5234	5569	1.717	0.072	0.084	0.112
Abstinence among youth (never had sex)	0.614	0.019	1546	1542	1.519	0.031	0.577	0.652
Sexually active in past 12 months among never married youth	0.315	0.018	1546	1542	1.532	0.057	0.279	0.351
Had an HIV test and received results in past 12 months	0.121	0.007	5874	6314	1.690	0.059	0.107	0.136
Accepting attitudes towards people with HIV	0.062	0.005	5507	5911	1.535	0.081	0.052	0.072
Ever experienced any physical violence since age 15	0.371	0.017	4498	4482	2.311	0.045	0.338	0.405
Ever experienced any sexual violence	0.046	0.004	4498	4482	1.328	0.090	0.038	0.055
Ever experienced any physical or sexual violence by husband/partner	0.203	0.011	3437	3220	1.617	0.055	0.181	0.225
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.118	0.009	3437	3220	1.571	0.073	0.101	0.135
Female circumcision	0.475	0.027	5874	6314	4.132	0.057	0.421	0.529
Total Fertility Rate (last 3 years)	4.550	0.142	na	17719	1.705	0.031	4.265	4.835
Neonatal mortality*	39.193	3.475	7346	8204	1.370	0.089	32.242	46.143
Post-neonatal mortality*	21.427	2.399	7350	8193	1.343	0.112	16.629	26.225
Infant mortality*	60.619	4.768	7356	8215	1.506	0.079	51.084	70.155
Child mortality*	31.215	2.732	7164	7969	1.228	0.088	25.751	36.679
Under five mortality*	89.942	5.874	7411	8274	1.531	0.065	78.193	101.691
MEN								
Urban residence	0.775	0.022	2651	2843	2.671	0.028	0.732	0.819
Literacy	0.888	0.017	2651	2843	2.805	0.019	0.853	0.922
No education	0.053	0.015	2651	2843	3.423	0.281	0.023	0.083
Secondary or higher education	0.794	0.019	2651	2843	2.429	0.024	0.756	0.832
Never married (in union)	0.485	0.015	2651	2843	1.578	0.032	0.454	0.515
Currently married (in union)	0.497	0.015	2651	2843	1.562	0.031	0.467	0.528
Had first sexual intercourse before age 18	0.274	0.016	1680	1839	1.466	0.058	0.242	0.306
Knows any contraceptive method	0.988	0.004	1281	1414	1.402	0.004	0.980	0.997
Knows any modern contraceptive method	0.984	0.005	1281	1414	1.446	0.005	0.974	0.994
Want no more children	0.261	0.018	1281	1414	1.430	0.067	0.226	0.297
Want to delay birth at least 2 years	0.355	0.017	1281	1414	1.242	0.047	0.322	0.389
Ideal number of children	4.638	0.091	2587	2754	2.069	0.020	4.455	4.821
Had 2+ sexual partners in past 12 months	0.097	0.011	971	1005	1.171	0.115	0.075	0.119
Abstinence among never married youth (never had sex)	0.613	0.022	930	954	1.358	0.035	0.570	0.657
Sexually active in past 12 months among never married youth	0.306	0.020	930	954	1.313	0.065	0.267	0.346
Paid for sexual intercourse in past 12 months	0.018	0.003	2651	2843	1.260	0.179	0.012	0.025

DATA QUALITY TABLES

Appendix D

Table D.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Nigeria 2013

	Women		Men			Women		Men	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	3,134	3.5	3,030	3.5	37	618	0.7	648	0.7
1	2,881	3.2	3,029	3.5	38	933	1.0	808	0.9
2	2,831	3.2	2,940	3.4	39	518	0.6	449	0.5
3	3,112	3.5	3,143	3.6	40	1,745	1.9	1,917	2.2
4	2,992	3.3	3,045	3.5	41	339	0.4	347	0.4
5	2,644	3.0	2,762	3.2	42	720	0.8	713	0.8
6	3,157	3.5	3,375	3.9	43	496	0.6	459	0.5
7	3,083	3.4	3,041	3.5	44	321	0.4	322	0.4
8	3,194	3.6	3,147	3.6	45	1,228	1.4	1,432	1.6
9	2,187	2.4	2,263	2.6	46	377	0.4	356	0.4
10	3,023	3.4	3,186	3.7	47	368	0.4	421	0.5
11	1,616	1.8	1,580	1.8	48	703	0.8	649	0.7
12	2,491	2.8	2,538	2.9	49	630	0.7	513	0.6
13	2,175	2.4	2,095	2.4	50	789	0.9	796	0.9
14	1,335	1.5	1,624	1.9	51	328	0.4	198	0.2
15	2,050	2.3	1,958	2.3	52	769	0.9	544	0.6
16	1,509	1.7	1,415	1.6	53	607	0.7	441	0.5
17	1,438	1.6	1,428	1.6	54	417	0.5	313	0.4
18	1,904	2.1	1,763	2.0	55	882	1.0	864	1.0
19	1,154	1.3	961	1.1	56	389	0.4	392	0.5
20	2,558	2.9	2,118	2.4	57	279	0.3	326	0.4
21	912	1.0	833	1.0	58	368	0.4	378	0.4
22	1,420	1.6	1,134	1.3	59	149	0.2	217	0.2
23	1,141	1.3	970	1.1	60	1,025	1.1	1,095	1.3
24	940	1.1	759	0.9	61	131	0.1	164	0.2
25	2,680	3.0	2,039	2.3	62	302	0.3	374	0.4
26	1,110	1.2	801	0.9	63	185	0.2	199	0.2
27	1,205	1.3	1,017	1.2	64	122	0.1	130	0.1
28	1,583	1.8	1,188	1.4	65	549	0.6	674	0.8
29	841	0.9	671	0.8	66	92	0.1	105	0.1
30	2,708	3.0	2,375	2.7	67	135	0.2	163	0.2
31	540	0.6	592	0.7	68	230	0.3	226	0.3
32	1,073	1.2	1,018	1.2	69	89	0.1	98	0.1
33	716	0.8	647	0.7	70+	2,018	2.3	2,654	3.0
34	555	0.6	501	0.6	Don't know/				
35	2,087	2.3	2,071	2.4	missing	22	0.0	23	0.0
36	676	0.8	572	0.7	Total	89,529	100.0	87,034	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table D.2.1 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, interviewed women age 15-49; and percent distribution and percentage of eligible women who were interviewed (weighted), by five-year age groups, Nigeria 2013

	Household population of women age	Interviewed women age 15-49		Percentage of eligible women
Age group	10-54	Number	Percentage	interviewed
10-14	10,640	na	na	na
15-19	8,054	7,881	20.3	97.9
20-24	6,971	6,808	17.5	97.7
25-29	7,418	7,248	18.6	97.7
30-34	5,593	5,454	14.0	97.5
35-39	4,832	4,719	12.1	97.7
40-44	3,621	3,525	9.1	97.4
45-49	3,307	3,232	8.3	97.8
50-54	2,910	na	na	na
15-49	39,796	38,868	100.0	97.7

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the household questionnaire.
na = Not applicable

Table D.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-54, interviewed men age 15-49 and percent of eligible men who were interviewed (weighted), by five-year age groups, Nigeria 2013

Age group	Household population of men age 10-54	Interviewed men age 15-49		Percentage of eligible men interviewed
		Number	Percentage	
10-14	5,752	na	na	na
15-19	3,777	3,595	20.8	95.2
20-24	3,008	2,885	16.7	95.9
25-29	2,844	2,745	15.9	96.5
30-34	2,529	2,392	13.8	94.6
35-39	2,271	2,174	12.6	95.7
40-44	1,868	1,759	10.2	94.2
45-49	1,854	1,768	10.2	95.3
50-54	1,075	na	na	na
15-49	18,151	17,317	100.0	95.4

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of men and interviewed men are household weights. Age is based on the household questionnaire.
na = Not applicable

Table D.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Nigeria 2013

Subject	Reference group	Percentage with information missing	Number of cases
Birth date	Births in the 15 years preceding the survey		
Month Only		0.65	85,467
Month and Year		0.09	85,467
Age at Death	Deceased children born in the 15 years preceding the survey	0.04	12,205
Age/date at first union[1]	Ever married women age 15-49	0.88	29,622
	Ever married men age 15-49	0.71	8,981
Respondent's education	All women age 15-49	0.06	38,948
	All men age 15-49	0.01	17,359
Diarrhoea in last 2 weeks	Living children 0-59 months	0.98	28,950
Anthropometry of children	Living children age 0-59 months from the Household Questionnaire		
Height		3.89	30,301
Weight		3.38	30,301
Height or weight		4.06	30,301
Anthropometry of women	Women age 15-49 from the household questionnaire		
Height		3.46	39,796
Weight		3.35	39,796
Height or weight		3.49	39,796

[1] Both year and age missing

Table D.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living (L), dead (D), and total (T) children (weighted), Nigeria 2013

	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar year ratio[3]		
Calendar year	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
2013	5,551	488	6,039	100.0	100.0	100.0	104.4	134.9	106.6	na	na	na
2012	5,826	660	6,486	100.0	99.8	100.0	99.9	109.6	100.9	na	na	na
2011	5,375	734	6,109	100.0	100.0	100.0	102.5	105.1	102.8	90.7	101.3	91.9
2010	6,021	789	6,810	99.9	99.6	99.9	101.2	113.6	102.5	118.1	87.2	113.5
2009	4,820	1,076	5,896	99.2	96.2	98.6	99.3	117.6	102.4	84.2	121.1	89.2
2008	5,429	988	6,417	99.6	97.3	99.3	107.8	123.0	110.0	107.3	96.0	105.4
2007	5,297	982	6,279	99.0	96.3	98.6	104.2	105.7	104.4	102.9	103.3	103.0
2006	4,861	913	5,774	99.0	97.5	98.8	96.9	116.2	99.7	98.5	95.3	98.0
2005	4,574	935	5,509	99.3	97.1	98.9	103.7	118.3	106.0	99.8	98.6	99.6
2004	4,306	985	5,290	99.3	97.4	99.0	103.2	109.7	104.4	110.1	115.1	111.0
2009-2013	27,594	3,747	31,341	99.8	98.8	99.7	101.5	114.8	103.0	na	na	na
2004-2008	24,466	4,803	29,269	99.3	97.1	98.9	103.2	114.4	105.0	na	na	na
1999-2003	16,732	4,235	20,968	99.0	96.6	98.5	103.2	114.8	105.4	na	na	na
1994-1998	11,529	3,217	14,746	99.2	97.5	98.8	104.3	115.4	106.6	na	na	na
<1994	9,960	3,695	13,655	98.8	96.8	98.3	109.5	124.6	113.4	na	na	na
All	90,281	19,697	109,979	99.3	97.3	99.0	103.5	116.6	105.7	na	na	na

na = Not applicable
[1] Both year and month of birth given
[2] (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively
[3] [2Bx/(Bx-1+Bx+1)]x100, where Bx is the number of births in calendar year x

Table D.5 Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey (weighted), Nigeria 2013

Age at death (days)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1	270	276	237	148	930
1	293	271	236	173	973
2	129	130	96	85	440
3	107	104	95	73	380
4	33	56	58	23	170
5	63	53	35	24	175
6	30	40	39	29	138
7	42	64	57	38	201
8	39	39	37	16	131
9	21	48	20	26	115
10	24	38	26	19	107
11	4	4	5	4	17
12	12	17	5	14	48
13	6	10	6	4	26
14	29	56	39	35	158
15	12	17	10	17	56
16	8	6	3	5	22
17	8	5	3	1	17
18	3	5	3	2	12
19	3	2	10	3	18
20	4	12	15	17	48
21	20	22	19	16	77
22	1	5	4	1	11
23	4	6	1	0	11
24	1	3	1	5	10
25	1	6	2	2	11
26	2	2	1	2	7
27	1	2	2	1	6
28	5	2	6	6	19
29	2	2	2	2	8
30	5	4	5	4	18
31+	14	4	11	8	38
Missing	0	1	2	0	2
Total 0-30	1,182	1,305	1,078	795	4,361
Percentage early neonatal[1]	78.3	71.2	73.8	69.9	73.5

[1] ≤6 days / ≤30 days

Table D.6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, for five-year periods of birth preceding the survey, Nigeria 2013

Age at death (months)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1	1,182	1,306	1,079	795	4,363
1	120	125	114	87	446
2	103	178	129	117	527
3	85	133	113	85	416
4	63	103	85	66	317
5	63	77	70	54	265
6	70	102	121	58	350
7	80	111	87	69	347
8	86	97	91	69	343
9	59	136	109	81	385
10	58	109	87	52	306
11	51	55	73	60	238
12	128	244	232	143	747
13	55	114	117	93	378
14	44	98	104	70	317
15	47	63	56	48	215
16	35	68	49	37	189
17	26	66	29	27	147
18	38	68	65	59	229
19	34	41	39	33	147
20	27	33	39	37	136
21	16	30	33	19	98
22	21	30	31	18	100
23	15	34	42	25	116
24+	7	40	23	16	86
Missing	2	0	0	0	2
1 Year	16	30	35	38	119
Total 0-11	2,020	2,533	2,157	1,595	8,305
Percentage neonatal[1]	58.5	51.6	50.0	49.9	52.5

[a] Includes deaths under one month reported in days
[1] Under one month / under one year

Table D.7 Completeness of information for dead sisters

Percentage of sisters who died at ages 15-49 with information missing on whether or not the death was maternal (unweighted), Nigeria 2013

	Percent
Deaths that could not be classified as maternal or non-maternal	13.7
Total number of dead sisters who died at ages 15-49	1,554

Note: Restricted to sisters who died during the seven years preceding the survey

Table D.8 Sibship size and sex ratio of siblings

Mean sibship size and sex ratio of siblings at birth, Nigeria 2013

Age of respondents	Mean sibship size[1]	Sex ratio of siblings at birth[2]
15-19	6.3	107.7
20-24	6.4	106.0
25-29	6.4	105.4
30-34	6.3	106.1
35-39	6.4	105.3
40-44	6.2	107.0
45-49	5.9	103.3
Total	6.3	106.0

[1] Includes the respondent
[2] Excludes the respondent

PERSONS INVOLVED IN THE SURVEY *Appendix* E

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Ojogun Tellson Osifo	State Coordinator - Delta and Edo
Bintu A. Ibrahim	State Coordinator - Borno and Yobe
Adekunle Fasiku David	State Coordinator - Ekiti and Lagos
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Makinwa O. Martin	State Coordinator - Osun and Ondo
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Onuorah Innocent	State Coordinator - Benue and Enugu
Manuagwu John	State Coordinator - Bayelsa and Rivers
Ogu Gloria	State Coordinator - Abia and Imo
Ugwuanyi Charles Okafor	State Coordinator - Anambra and Ebonyi

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Telimoye Ona Albert	Data Entry Supervisor
Okoisor Jude Ashinze	Data Entry Supervisor
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Lamber Vera	Ani Chidera
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Ajewole Titilope Ruth	Ngerem Augusta Chinwendu
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Jolaoluwa Oluwafemi	Generator Operator
Okongwu Stella Chinyere	Cleaner

List of Field Enumerators for Household Listing and Mapping

NORTH CENTRAL ZONE

Benue	
Iwowo Michael	Lister
Bello Jibril	Lister
Audu Solomon	Lister
Ademu Sule	Lister
Apaa Gbaior Sebastine	Driver

FCT-Abuja	
Usman Musa	Lister
Usman Kudogi Ndako	Lister
Ukanwa Juliet	Lister
Adekunle Obanoyen	Lister
Dantsoho Alhassan	Driver

Kogi	
Zakari Ya'u Yaba	Lister
Toluhi R. Morounmubo	Lister
Shaibu Husseini	Lister
Ochi Patrick Ogbole	Lister
Joseph Johnson	Driver

Kwara	
Zulu Sule	Lister
Nuhu B. Agbabiaka	Lister
Bobadoye Martins D.	Lister
Baba Mohammed	Lister
Ajibade Atanda	Driver

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Usman S. Salamat	Lister
Mamman Yari	Lister
Kaura Kyauta Bala	Lister
Abubakar Dantsoho Saidu	Lister
Ali Ankruma	Driver

Niger	
Yunusa Musa	Lister
Shehu Muhd Isako	Lister
Nda Madaka Bako	Lister
Muhd S. Isah	Lister
Yakubu Ibrahim	Driver

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Musa Danladi C.	Lister
Ja'afar Ibrahim Maibanga	Lister
Bulus Yalwa Dugalla	Lister
Dabo Yakubu Yohanna	Driver

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Hamadina Parison	Lister
Abdulmalik Musa	Lister
Nright Jemuel	Driver

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Ahmed Galadima	Lister
Abubakar Baraza Issa	Lister
Abdullahi Yarima	Lister
Bala Mohammed	Driver

Borno	
Musa Yusuf Sabo	Lister
Mohd Musa	Lister
Moh`D A. Mustapha	Lister
Moh`D A. Milala	Lister
Ibrahim Kachalla	Driver

Gombe	
Sabuda A. Ahidjo	Lister
Musa Yunusa	Lister
Dahiru Bello Ribadu	Reserve
Chiebli C.Richard	Lister
Abubakar Umar Garba	Lister
Jibir Umaru	Driver

Taraba	
Murtala Mohammed Lau	Lister
Mohammed Tanko	Lister
Ilori O. Israel	Lister
Buba J. Ahmed	Lister
Gidado Mohammed	Driver

Yobe	
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Rahila Hamidu	Lister
Muktar Mohammed	Lister
Babangida Adamu	Lister
Alh Modu Mayami	Driver

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Ibrahim M. Madachi	Lister
Hussaini Ado	Lister
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Hamza Mohammed	Lister
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Baballe B. Usman	Lister
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Musa Sani Zakirai	Lister
Muhammad A Bello	Lister
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Ado Usman	Lister
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Umar Yakubu Sandamu	Lister
Lawal Ahamad Abubakar	Lister
Ibrahim Maje Tijjani	Lister
Abdullahi Lawal	Driver

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Mande Umar Bunza	Lister
Magaji Aliyu Kardi	Lister
Lawal Aliyu Kangiwa	Lister
Kabiru Sani	Lister
Sani Dandi	Driver

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Mainasara M. Rufai Ibrahim	Lister
Ladan D. Daji Sani	Lister
Gagi Marafa Malami	Lister
Umaru Mani	Driver

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Anyaegbu Ndidi Eugene	Lister
Aliyu Bashar	Lister
Abubakar M. Saidu	Lister
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Ifeanyi Oriaku	Lister
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Omife Ebube Sampson	Lister
Ezewulu Maduka Romanus	Lister
Aghaeze Emmanuel O.	Lister
Okeke Cyprian Udoye	Driver

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Njoku Alexandra C.	Lister
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Elibe C. E.	Lister
Agu F.C.	Lister
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Nwanguma Cyril	Lister
Ndu Nkechi	Lister
Anuforo Vitus	Lister
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Akpan Ayatmo S.	Lister
Akpakpan Unyime I.	Lister
Udoudo Love P	Driver

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Izulu Baratuaipre Obiene	Lister
Ineife J.Ayibaemi	Lister
Arumuna Ariwera	Lister
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Ofem Abam Uket	Lister
Aya Ebrigor Aya	Lister
Asuquo Ekpenyong	Lister
Okon Ndarake Effiong	Driver

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Nkenchor James C.	Lister
Isaac Forcados	Lister
Ataminyo Godwin	Lister
Ugba Micheal O.	Driver

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Igbinaduwa Jeffery	Lister
Evbadoloyi Godwin	Lister
Ekeoba Saturday I.	Lister
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Gbarabe Kenneth	Lister
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Adejumobi Elizabeth	Lister
Adebakin Jamiu Jaiyeola	Lister
Osibote Murisiku Olawale	Driver

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Ayeni Ajose L.	Lister
Arinde Samson O.	Lister
Adewunmi Olusola	Lister
Fasusi Sunday	Driver

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Ogunleye Ayodele Joseph	Lister
Kuye Razaq Adesina	Lister
Folami Muka Ayinla	Lister
Adeyanju Israel Adeniyi	Driver

Ondo	
Oyinkolade Damilola	Lister
Olabisi Temidayo	Lister
Ojomo Aaron Adekanye	Lister
Iwajomo Olusola Pius	Lister
Majeobaje Opeyemi Fatai	Driver

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Oori Ote Susan	Lister
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Abdulrauph Ayigoro Abdullahi	Editor
Temitayo Moses Obot	Interviewer
Rhoda Sali Kolo	Interviewer
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Mohammed Nma Usman	Interviewer
Aremu Khadijat	Interviewer
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Kucheli Hassan	Interviewer
Binta Muazu	Interviewer
Abubakar Saidu	Interviewer
Gambo Yusuf	Driver
Muhammed Inuwa	Driver

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Rahila T. Dickson	Editor
Shehu Abdullahi	Interviewer
Gloria Kunaba Isuwa	Interviewer
Deborah Usman	Interviewer
Akok Barnabas Kambai	Interviewer
Aisha Aliyu Muhammad	Interviewer
Hauwa Mohammed Musa	Interviewer
Haruna Samaila	Driver
Idris Abdullahi	Driver

Kano	
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Halima Ibrahim	Editor
Rabi Adamu Dikko	Interviewer
Khadija Bila	Interviewer
Jummai Garba Mijin-Yawa	Interviewer
Basheer M.Danbazau	Interviewer
Bara'atu Ismail Usman	Interviewer
Abubakar I. Umara	Interviewer
Gambo I. Sharfadi	Driver
Baba Labaran Baba	Driver

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Lawal M. Kurfi	Editor
Zainab Salisu	Interviewer
Sani Saidu	Interviewer
Bilkisu Salisu Usman	Interviewer
Asama U Jafar	Interviewer
Muhammed Aliyu	Interviewer
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Armayau M. Shehu	Driver

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Rukayya Muhammad	Editor
Tukur Arzika	Interviewer
Rabi Adamu	Interviewer
Kulu Baraya	Interviewer
Kabiru Ibrahim	Interviewer
Aisha Lawal	Interviewer
Sani Dandi	Driver
Hassan Umar	Driver

Sokoto	
Halima S. A. Yusuf	Supervisor
Sani Ladan	Editor
Hafsat Abubakar	Interviewer
Murtala Muhammad Gada	Interviewer
Zainab Yusuf Tono	Interviewer
Zainab Ayobami Bello	Interviewer
Salisu Bisallah Kangiwa	Interviewer
Mansurat Abdurazak	Interviewer
Umaru Mani	Driver
Usaini Dauda	Driver

Zamfara	
Musa Danjuma	Supervisor
Fatimah Ummitah Babaji	Editor
Habib Isah Abdullahi	Interviewer
Saratu Wakili	Interviewer
Rukayya Usman	Interviewer
Hafsat Tunau	Interviewer
Garba Salisu Musa	Interviewer
Adama Saidu	Interviewer
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SOUTH EAST ZONE

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Ogbujih Veronica O. C.	Editor
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Okoronkwo Elizabeth Ndidi	Interviewer
Okezie Obianuju Esther	Interviewer
Ogbu Gloria Ebere	Interviewer
Nwogu Chinedu.Goodluck	Interviewer
Ehiemere Iheanacho O.	Interviewer
Ajunwa Chijioke	Driver
Udochukwu Alozie	Driver

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Ugorji Ernest	Interviewer
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Igboke Amaka Immaculata	Interviewer
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Alu Godscare O.	Interviewer
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Nwobodo Ngozi Lovelyn	Editor
Ozor Festus Anibuzo	Interviewer
Okoye Joan Chinyere	Interviewer
Nnaji Nwanneka Doris	Interviewer
Ezue Daniel Chinonso	Interviewer
Etuka Rita Ngozi	Interviewer
Agbata Josephine Nebechi	Interviewer
Aneke Innocent Onyekachi	Driver
Odoh Paulinus	Driver

Imo	
Emeh Tochi	Supervisor
Innocent Agwu Chinyere	Editor
Onyenwe Ezinne M.	Interviewer
Onwuhaa Lilian O.	Interviewer
Ihenacho Uzochi M.	Interviewer
Enwere Odochi Peace	Interviewer
Emmanuel Chisom Ogbuaku	Interviewer
Ekwutosi Chinonso	Interviewer
Ibeh Peter Chinedu	Driver
Goodluck Eberechi	Driver

SOUTH SOUTH ZONE

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Stella Francis Ekpo	Interviewer
Iniobong James Ukpe	Interviewer
Christiana Timothy Udoh	Interviewer
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Attah Felicia Atiep	Interviewer
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Perebi Alaibe Nancy	Interviewer
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QUESTIONNAIRES

Appendix **F**

30 January 2013

C O N F I D E N T I A L

NIGERIA DEMOGRAPHIC AND HEALTH SURVEY 2013
HOUSEHOLD QUESTIONNAIRE

NATIONAL POPULATION COMMISSION

National Health Research Ethics Committee
Assigned Number NHREC/01/01/2007

IDENTIFICATION

STATE _____ .....

LOCAL GOVT. AREA _____ .....

LOCALITY _____ .....

ENUMERATION AREA _____ .....

URBAN/RURAL (URBAN=1, RURAL=2) .....

CLUSTER NUMBER .....

BUILDING/STRUCTURE NUMBER .....

HOUSEHOLD NUMBER .....

NAME OF HOUSEHOLD HEAD _____

HOUSEHOLD SELECTED FOR MAN'S QUESTIONNAIRE (YES=1, N0=2) .....

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
				YEAR 2013
INTERVIEWER'S NAME				INT. NUMBER
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES:
1 COMPLETED
2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____ (SPECIFY)

TOTAL PERSONS IN HOUSEHOLD

TOTAL ELIGIBLE WOMEN

TOTAL ELIGIBLE MEN

LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE

	HAUSA	YORUBA	IGBO	ENGLISH	OTHER
LANGUAGE OF INTERVIEW	1	2	3	4	6 _____ SPECIFY
NATIVE LANGUAGE OF RESPONDENT	1	2	3	4	6 _____ SPECIFY

TRANSLATOR USED? YES 1 NO 2

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME	NAME		
DATE	DATE		

ENGLISH

Introduction and Consent

Greetings. My name is _____ and I am working with National Population Commission. We are conducting a survey about health all over Nigeria. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 15 to 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of the research team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the persons listed below:

2013 NDHS Contact Person: Project Director; Email: amakaloveth4life@yahoo.com; Phone: 08033318224
NHREC Contact Person: Desk Officer, NHREC; Email: yaminads@yahoo.com; Phone: 08065479926

Do you have any questions?
May I begin the interview now?

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED 2 → END

HOUSEHOLD SCHEDULE

							IF AGE 15 OR OLDER				
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY			
	Please give me the names of the persons who usually live in your household and guests of the household who slept here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-32 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) sleep here last night?	How old is (NAME)? IF 95 OR MORE RECORD `95'	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF WOMAN SELECTED FOR DOMESTIC VIOLENCE QUESTIONS IN Q. 33.	CIRCLE LINE NUMBER OF ALL MEN AGE 15-49 IF HH SELECTED FOR MALE INTERVIEW	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(9A)	(10)	(11)
01			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		01	01	01	01
02			1 2	1 2	1 2			02	02	02	02
03			1 2	1 2	1 2			03	03	03	03
04			1 2	1 2	1 2			04	04	04	04
05			1 2	1 2	1 2			05	05	05	05
06			1 2	1 2	1 2			06	06	06	06
07			1 2	1 2	1 2			07	07	07	07
08			1 2	1 2	1 2			08	08	08	08
09			1 2	1 2	1 2			09	09	09	09
10			1 2	1 2	1 2			10	10	10	10

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = BROTHER-IN-LAW/SISTER-IN-LAW
10 = NIECE/NEPHEW BY BLOOD
11 = NIECE/NEPHEW BY MARRIAGE
12 = OTHER RELATIVE
13 = ADOPTED/FOSTER/ STEPCHILD
14 = NOT RELATED
98 = DON'T KNOW

	IF AGE 18-59 YEARS	IF AGE 0-17 YEARS								IF AGE 0-17 YEARS	
LINE NO.	SICK PERSON	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS								BROTHERS AND SISTERS	
	Has (NAME) been very sick for at least 3 months during the past 12 months, that is (NAME) was too sick to work or do normal activities?	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	**IF MOTHER NOT LISTED IN HOUSEHOLD** Has (NAME)'s mother been very sick for at least 3 months during the past 12 months, that is she was too sick to work or do normal activities?	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	**IF FATHER NOT LISTED IN HOUSEHOLD** Has (NAME)'s father been very sick for at least 3 months during the past 12 months, that is he was too sick to work or do normal activities?	**MOTHER AND/OR FATHER DEAD/ SICK** CIRCLE LINE NUMBER IF CHILD'S MOTHER AND/OR FATHER HAS DIED (Q.13 OR 16=NO) OR BEEN SICK (Q.15 OR 18=YES).	**BOTH PARENTS ALIVE** IF YES TO Q.13 AND Q.16 (BOTH ALIVE), CIRCLE '1'. FOR ALL OTHER CASES, CIRCLE '2'.	Does (NAME) have any brothers or sisters age 0 - 17 who have the same mother and the same father?	Do any of these brothers and sisters age 0 - 17 live elsewhere and not in this household?
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
	Y N DK	Y N DK		Y N DK	Y N DK		Y N DK			Y N DK	Y N
01	1 2 8	1 2 8 → GO TO 16		1 2 8	1 2 8 → GO TO 19		1 2 8	01	1 2 → GO TO 23	1 2 8 → GO TO 23	1 2
02	1 2 8	1 2 8 → GO TO 16		1 2 8	1 2 8 → GO TO 19		1 2 8	02	1 2 → GO TO 23	1 2 8 → GO TO 23	1 2
03	1 2 8	1 2 8 → GO TO 16		1 2 8	1 2 8 → GO TO 19		1 2 8	03	1 2 → GO TO 23	1 2 8 → GO TO 23	1 2
04	1 2 8	1 2 8 → GO TO 16		1 2 8	1 2 8 → GO TO 19		1 2 8	04	1 2 → GO TO 23	1 2 8 → GO TO 23	1 2
05	1 2 8	1 2 8 → GO TO 16		1 2 8	1 2 8 → GO TO 19		1 2 8	05	1 2 → GO TO 23	1 2 8 → GO TO 23	1 2
06	1 2 8	1 2 8 → GO TO 16		1 2 8	1 2 8 → GO TO 19		1 2 8	06	1 2 → GO TO 23	1 2 8 → GO TO 23	1 2
07	1 2 8	1 2 8 → GO TO 16		1 2 8	1 2 8 → GO TO 19		1 2 8	07	1 2 → GO TO 23	1 2 8 → GO TO 23	1 2
08	1 2 8	1 2 8 → GO TO 16		1 2 8	1 2 8 → GO TO 19		1 2 8	08	1 2 → GO TO 23	1 2 8 → GO TO 23	1 2
09	1 2 8	1 2 8 → GO TO 16		1 2 8	1 2 8 → GO TO 19		1 2 8	09	1 2 → GO TO 23	1 2 8 → GO TO 23	1 2
10	1 2 8	1 2 8 → GO TO 16		1 2 8	1 2 8 → GO TO 19		1 2 8	10	1 2 → GO TO 23	1 2 8 → GO TO 23	1 2

	IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS		IF AGE 5-17 YEARS			0-4 YEARS		
LINE NO.	EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		BASIC MATERIAL NEEDS			BIRTH REGISTRATION		
	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? SEE CODES BELOW. What is the highest class/year (NAME) completed at that level? SEE CODES BELOW.	Did (NAME) attend school at any time during the (2012 - 2013) school year?	During this/that school year, what level and class/year is/was (NAME) attending? SEE CODES BELOW.	Does (NAME) have a cover-cloth (blanket)?	Does (NAME) have a pair of shoes?	Does (NAME) have at least two sets of clothes?	Was (NAME'S) birth registered?	With which authority was (NAME'S) birth registered? 1 = NPOPC 2 = LGA 3 = PRIVATE CLINIC/ HOSPITAL 4 = OTHER	May I see (NAME'S) birth certificate? 1 = SEEN 2= NOT SEEN
	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
	Y N	LEVEL CLASS/ YEAR	Y N	LEVEL CLASS/ YEAR	Y N DK	Y N DK	Y N DK	Y N DK		
01	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
02	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
03	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
04	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
05	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
06	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
07	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
08	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
09	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
10	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		

CODES FOR Qs. 24 AND 26: EDUCATION

EDUCATION LEVEL:
0=PRE-PRIMARY/KINDERGARTEN
1 = PRIMARY
2 = SECONDARY
3 = HIGHER
8 = DON'T KNOW

EDUCATION YEAR:
01 - 03 = YEARS AT PRE-PRIMARY/KINDERGARDEN LEVEL
01 - 06 = YEARS 1 - 6 AT PRIMARY LEVEL
01 - 06 = YEARS 1 - 6 AT SECONDARY LEVEL
01 - TOTAL NUMBER OF YEARS AT HIGHER LEVEL*
00 = LESS THAN 1 YEAR COMPLETED
(USE '00' FOR Q. 24 ONLY.
THIS CODE IS NOT ALLOWED
FOR Q. 26)
98 = DON'T KNOW

***FOR "HIGHER", TOTAL THE NUMBER OF YEARS AT THE POST-SECONDARY LEVEL**

							IF AGE 15 OR OLDER				
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY			
	Please give me the names of the persons who usually live in your household and guests of the household who slept here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-32 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) sleep here last night?	How old is (NAME)? IF 95 OR MORE RECORD `95'	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF WOMAN SELECTED FOR DOMESTIC VIOLENCE QUESTIONS IN Q. 33.	CIRCLE LINE NUMBER OF ALL MEN AGE 15-49 IF HH SELECTED FOR MALE INTERVIEW	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(9A)	(10)	(11)
			M F	Y N	Y N	IN YEARS					
11			1 2	1 2	1 2			11	11	11	11
12			1 2	1 2	1 2			12	12	12	12
13			1 2	1 2	1 2			13	13	13	13
14			1 2	1 2	1 2			14	14	14	14
15			1 2	1 2	1 2			15	15	15	15
16			1 2	1 2	1 2			16	16	16	16
17			1 2	1 2	1 2			17	17	17	17
18			1 2	1 2	1 2			18	18	18	18
19			1 2	1 2	1 2			19	19	19	19
20			1 2	1 2	1 2			20	20	20	20

TICK HERE IF CONTINUATION SHEET USED ☐

2A) Just to make sure that I have a complete listing. Are there any other persons such as small children or infants that we have not listed? YES ☐ → ADD TO TABLE NO ☐

2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here? YES ☐ → ADD TO TABLE NO ☐

2C) Are there any guests or temporary visitors staying here, or anyone else who slept here last night, who have not been listed? YES ☐ → ADD TO TABLE NO ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = BROTHER-IN-LAW/SISTER-IN-LAW
10 = NIECE/NEPHEW BY BLOOD
11 = NIECE/NEPHEW BY MARRIAGE
12 = OTHER RELATIVE
13 = ADOPTED/FOSTER/ STEPCHILD
14 = NOT RELATED
98 = DON'T KNOW

	IF AGE 18-59 YEARS	IF AGE 0-17 YEARS									IF AGE 0-17 YEARS	
LINE NO.	SICK PERSON	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS									BROTHERS AND SISTERS	
	Has (NAME) been very sick for at least 3 months during the past 12 months, that is (NAME) was too sick to work or do normal activities?	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	**IF MOTHER NOT LISTED IN HOUSEHOLD** Has (NAME)'s mother been very sick for at least 3 months during the past 12 months, that is she was too sick to work or do normal activities?	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	**IF FATHER NOT LISTED IN HOUSEHOLD** Has (NAME)'s father been very sick for at least 3 months during the past 12 months, that is he was too sick to work or do normal activities?	**MOTHER AND/OR FATHER DEAD/ SICK** CIRCLE LINE NUMBER IF CHILD'S MOTHER AND/OR FATHER HAS DIED (Q.13 OR 16=NO) OR BEEN SICK (Q.15 OR 18=YES).	**BOTH PARENTS ALIVE** IF YES TO Q.13 AND Q.16 (BOTH ALIVE), CIRCLE '1'. FOR ALL OTHER CASES, CIRCLE '2'.	Does (NAME) have any brothers or sisters age 0 - 17 who have the same mother and the same father?	Do any of these brothers and sisters age 0 - 17 live elsewhere and not in this household?
	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	
	Y N DK	Y N DK		Y N DK	Y N DK		Y N DK			Y N DK	Y N	
11	1 2 8	1 2 8 GO TO 16		1 2 8	1 2 8 GO TO 19		1 2 8	11	1 2 GO TO 23	1 2 8 GO TO 23	1 2	
12	1 2 8	1 2 8 GO TO 16		1 2 8	1 2 8 GO TO 19		1 2 8	12	1 2 GO TO 23	1 2 8 GO TO 23	1 2	
13	1 2 8	1 2 8 GO TO 16		1 2 8	1 2 8 GO TO 19		1 2 8	13	1 2 GO TO 23	1 2 8 GO TO 23	1 2	
14	1 2 8	1 2 8 GO TO 16		1 2 8	1 2 8 GO TO 19		1 2 8	14	1 2 GO TO 23	1 2 8 GO TO 23	1 2	
15	1 2 8	1 2 8 GO TO 16		1 2 8	1 2 8 GO TO 19		1 2 8	15	1 2 GO TO 23	1 2 8 GO TO 23	1 2	
16	1 2 8	1 2 8 GO TO 16		1 2 8	1 2 8 GO TO 19		1 2 8	16	1 2 GO TO 23	1 2 8 GO TO 23	1 2	
17	1 2 8	1 2 8 GO TO 16		1 2 8	1 2 8 GO TO 19		1 2 8	17	1 2 GO TO 23	1 2 8 GO TO 23	1 2	
18	1 2 8	1 2 8 GO TO 16		1 2 8	1 2 8 GO TO 19		1 2 8	18	1 2 GO TO 23	1 2 8 GO TO 23	1 2	
19	1 2 8	1 2 8 GO TO 16		1 2 8	1 2 8 GO TO 19		1 2 8	19	1 2 GO TO 23	1 2 8 GO TO 23	1 2	
20	1 2 8	1 2 8 GO TO 16		1 2 8	1 2 8 GO TO 19		1 2 8	20	1 2 GO TO 23	1 2 8 GO TO 23	1 2	

	IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS		IF AGE 5-17 YEARS			0-4 YEARS		
LINE NO.	EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE		BASIC MATERIAL NEEDS			BIRTH REGISTRATION		
	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? SEE CODES BELOW. What is the highest class/year (NAME) completed at that level? SEE CODES BELOW.	Did (NAME) attend school at any time during the (2012 - 2013) school year?	During this/that school year, what level and class/year is/was (NAME) attending? SEE CODES BELOW.	Does (NAME) have a cover-cloth (blanket)?	Does (NAME) have a pair of shoes?	Does (NAME) have at least two sets of clothes?	Was (NAME'S) birth registered?	With which authority was (NAME'S) birth registered? 1 = NPOPC 2 = LGA 3 = PRIVATE CLINIC/ HOSPITAL 4 = OTHER	May I see (NAME'S) birth certificate? 1 = SEEN 2= NOT SEEN
	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)
	Y N	LEVEL CLASS/ YEAR	Y N	LEVEL CLASS/ YEAR	Y N DK	Y N DK	Y N DK	Y N DK		
11	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
12	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
13	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
14	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
15	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
16	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
17	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
18	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
19	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		
20	1 2 ↓ GO TO 27		1 2 ↓ GO TO 27		1 2 8	1 2 8	1 2 8	1 2 8 ↓ NEXT LINE		

CODES FOR Qs. 24 AND 26: EDUCATION

EDUCATION LEVEL:
0=PRE-PRIMARY/KINDERGARTEN
1 = PRIMARY
2 = SECONDARY
3 = HIGHER
8 = DON'T KNOW

EDUCATION YEAR:
01 - 03 = YEARS AT PRE-PRIMARY/KINDERGARDEN LEVEL
01 - 06 = YEARS 1 - 6 AT PRIMARY LEVEL
01 - 06 = YEARS 1 - 6 AT SECONDARY LEVEL
01 - TOTAL NUMBER OF YEARS AT HIGHER LEVEL*
00 = LESS THAN 1 YEAR COMPLETED
(USE '00' FOR Q. 24 ONLY.
THIS CODE IS NOT ALLOWED
FOR Q. 26)
98 = DON'T KNOW

***FOR "HIGHER", TOTAL THE NUMBER OF YEARS AT THE POST-SECONDARY LEVEL**

33. TABLE FOR SELECTION OF WOMEN FOR THE DOMESTIC VIOLENCE QUESTIONS

LOOK AT THE LAST DIGIT OF THE HOUSEHOLD NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE WOMEN (COLUMN 9) IN THE HOUSEHOLD SCHEDULE. THIS IS THE COLUMN NUMBER YOU SHOULD GO TO. FOLLOW THE SELECTED ROW AND COLUMN TO THE CELL WHERE THEY MEET AND CIRCLE THE NUMBER IN THE CELL. THIS IS THE NUMBER OF THE WOMAN SELECTED FOR THE DOMESTIC VIOLENCE QUESTIONS FROM THE LIST OF ELIGIBLE WOMEN IN COLUMN 9 OF THE HOUSEHOLD SCHEDULE. WRITE THE NAME AND LINE NUMBER OF THE SELECTED WOMAN IN THE SPACE BELOW THE TABLE.

EXAMPLE: THE HOUSEHOLD NUMBER IS '716' AND THE HOUSEHOLD SCHEDULE COLUMN 9 SHOWS THAT THERE ARE THREE ELIGIBLE WOMEN AGE 15-49 IN THE HOUSEHOLD (LINE NUMBERS 02, 04, AND 05). SINCE THE LAST DIGIT OF THE HOUSEHOLD NUMBER IS '6' GO TO ROW '6' AND SINCE THERE ARE THREE ELIGIBLE WOMEN IN THE HOUSEHOLD, GO TO COLUMN '3'. FOLLOW THE ROW AND COLUMN AND FIND THE NUMBER IN THE CELL WHERE THEY MEET ('2') AND CIRCLE THE NUMBER. NOW GO TO THE HOUSEHOLD SCHEDULE AND FIND THE SECOND WOMAN WHO IS ELIGIBLE FOR THE WOMAN'S INTERVIEW (LINE NUMBER '04' IN THIS EXAMPLE). WRITE HER NAME AND LINE NUMBER IN THE SPACE BELOW THE TABLE.

LAST DIGIT OF THE HOUSEHOLD NUMBER	TOTAL NUMBER OF ELIGIBLE WOMEN AGE 15-49 IN HOUSEHOLD SCHEDULE COLUMN 9							
	1	2	3	4	5	6	7	8
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

NAME OF SELECTED WOMAN _____

HH LINE NUMBER OF SELECTED WOMAN . . . . . | | |

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	How often does anyone smoke inside your house? Would you say daily, weekly, monthly, less than monthly, or never?	DAILY . . . . . 1 WEEKLY . . . . . 2 MONTHLY . . . . . 3 LESS THAN MONTHLY . . . . . 4 NEVER 5	
102	What is the main source of drinking water for members of your household?	**PIPED WATER** PIPED INTO DWELLING . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PUBLIC TAP/STANDPIPE . . . . . 13 TUBE WELL OR BOREHOLE . . . . . 21 **DUG WELL** PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 **WATER FROM SPRING** PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 CART WITH SMALL TANK . . . . . 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 BOTTLED WATER . . . . . 91 OTHER _____ 96 (SPECIFY)	→ 105 → 105
103	Where is that water source located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE 3	→ 105
104	How long does it take to go there, get water, and come back?	MINUTES . . . . . ☐☐☐ DON'T KNOW 998	
105	Do you do anything to the water to make it safer to drink?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 107
106	What do you usually do to make the water safer to drink? Anything else? CIRCLE ALL MENTIONED.	BOIL . . . . . A ADD BLEACH/CHLORINE . . . . . B STRAIN THROUGH A CLOTH . . . . . C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC.) . . . . . D SOLAR DISINFECTION . . . . . E LET IT STAND AND SETTLE . . . . . F ALUM . . . . . G OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
107	What kind of toilet facility do members of your household usually use?	**FLUSH OR POUR FLUSH TOILET** FLUSH TO PIPED SEWER SYSTEM . . . . . 11 FLUSH TO SEPTIC TANK . . . . . 12 FLUSH TO PIT LATRINE . . . . . 13 FLUSH TO SOMEWHERE ELSE . . . 14 FLUSH, DON'T KNOW WHERE . . . 15 **PIT LATRINE** VENTILATED IMPROVED PIT LATRINE . . . . . 21 PIT LATRINE WITH SLAB . . . . . 22 PIT LATRINE WITHOUT SLAB/ OPEN PIT . . . . . 23 COMPOSTING TOILET . . . . . 31 BUCKET TOILET . . . . . 41 HANGING TOILET/HANGING LATRINE . . . . . 51 NO FACILITY/BUSH/FIELD . . . . . 61 OTHER _____ 96 (SPECIFY)	→ 110
108	Do you share this toilet facility with other households?	YES . . . . . 1 NO 2	→ 110
109	How many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . [0][ ] 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW 98	
110	Does your household have:		

		YES	NO
Electricity?	ELECTRICITY	1	2
A radio?	RADIO	1	2
A television?	TELEVISION	1	2
A mobile telephone?	MOBILE TELEPHONE	1	2
A non-mobile telephone?	NON-MOBILE TELEPHONE .	1	2
A refrigerator?	REFRIGERATOR	1	2
A cable TV ?	CABLE TV	1	2
A generating set ?	GENERATING SET	1	2
Airconditioner ?	AIR CONDITIONER	1	2
A computer ?	COMPUTER	1	2
Electric iron ?	ELECTRIC IRON	1	2
A fan ?	FAN	1	2

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	What type of fuel does your household mainly use for cooking?	ELECTRICITY . . . . . 01 LPG . . . . . 02 NATURAL GAS . . . . . 03 BIOGAS . . . . . 04 KEROSENE . . . . . 05 COAL, LIGNITE . . . . . 06 CHARCOAL . . . . . 07 WOOD . . . . . 08 STRAW/SHRUBS/GRASS . . . . . 09 AGRICULTURAL CROP . . . . . 10 ANIMAL DUNG . . . . . 11 NO FOOD COOKED IN HOUSEHOLD . . . . . 95 OTHER _____ 96 (SPECIFY)	→ 114

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
112	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE . . . . . 1 IN A SEPARATE BUILDING . . . . . 2 OUTDOORS . . . . . 3 OTHER _____ 6 (SPECIFY)	→114
113	Do you have a separate room which is used as a kitchen?	YES . . . . . 1 NO 2	
114	MAIN MATERIAL OF THE FLOOR. RECORD OBSERVATION.	**NATURAL FLOOR** EARTH/SAND . . . . . 11 DUNG . . . . . 12 **RUDIMENTARY FLOOR** WOOD PLANKS . . . . . 21 PALM/BAMBOO . . . . . 22 **FINISHED FLOOR** PARQUET OR POLISHED WOOD . . . . . 31 VINYL OR ASPHALT STRIPS . . . . . 32 CERAMIC TILES . . . . . 33 CEMENT . . . . . 34 CARPET/RUG . . . . . 35 OTHER _____ 96 (SPECIFY)	
115	MAIN MATERIAL OF THE ROOF. RECORD OBSERVATION.	**NATURAL ROOFING** NO ROOF . . . . . 11 THATCH/PALM LEAF . . . . . 12 **RUDIMENTARY ROOFING** RUSTIC MAT . . . . . 21 PALM/BAMBOO . . . . . 22 WOOD PLANKS . . . . . 23 CARDBOARD . . . . . 24 **FINISHED ROOFING** METAL/ZINC . . . . . 31 WOOD . . . . . 32 CERAMIC TILES . . . . . 33 CEMENT . . . . . 34 ROOFING SHINGLES . . . . . 35 OTHER _____ 96 (SPECIFY)	
116	MAIN MATERIAL OF THE EXTERIOR WALLS. RECORD OBSERVATION.	**NATURAL WALLS** NO WALLS . . . . . 11 CANE/PALM/TRUNKS . . . . . 12 DIRT (MUD) . . . . . 13 **RUDIMENTARY WALLS** BAMBOO WITH MUD . . . . . 21 STONE WITH MUD . . . . . 22 PLYWOOD . . . . . 23 CARDBOARD . . . . . 24 REUSED WOOD . . . . . 25 **FINISHED WALLS** CEMENT . . . . . 31 STONE WITH LIME/CEMENT . . . . . 32 BRICKS . . . . . 33 CEMENT BLOCKS . . . . . 34 WOOD PLANKS/SHINGLES . . . . . 35 OTHER _____ 96 (SPECIFY)	
117A	How many rooms in total are in your household, including rooms for sleeping and all other rooms?	ROOMS (TOTAL)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
117B	How many rooms are used for sleeping in your household?	NUMBER OF ROOMS (SLEEPING) ☐☐	
118	Does any member of this household own:	YES NO	
	A watch?	WATCH 1 2	
	A bicycle?	BICYCLE 1 2	
	A motorcycle or motor scooter?	MOTORCYCLE/SCOOTER . 1 2	
	An animal-drawn cart?	ANIMAL-DRAWN CART . . . 1 2	
	A car or truck?	CAR/TRUCK 1 2	
	A boat with a motor?	BOAT WITH MOTOR 1 2	
	A canoe?	CANOE 1 2	
119	Does any member of this household own any agricultural land?	YES . . . . . 1 NO 2	→ 121
120	How many plot/acres/hectares of agricultural land do members of this household own?	PLOT . . . . . 1 ☐☐.☐ ACRES . . . . . 2 ☐☐.☐ HECTARES . . . . . 3 ☐☐.☐	
	IF 95 OR MORE, CIRCLE `9950'	95 OR MORE PLOTS/ACRES/ HECTARES . . . . . 9950 DON'T KNOW 9998	
121	Does this household own any livestock, herds, other farm animals, or poultry?	YES . . . . . 1 NO 2	→ 123
122	How many of the following animals does this household own? IF NONE, ENTER '00'. IF MORE THAN 95, ENTER '95'. IF UNKNOWN, ENTER '98'.		
	Milk cows or bulls?	COWS/BULLS . . . . . ☐☐	
	Horses, donkeys, or mules?	HORSES/DONKEYS/MULES . ☐☐	
	Goats?	GOATS . . . . . ☐☐	
	Sheep?	SHEEP . . . . . ☐☐	
	Chickens/Ducks?	CHICKENS/DUCKS . . . . . ☐☐	
	Pigs?	PIGS . . . . . ☐☐	
	Other _____ (SPECIFY)	OTHER . . . . . ☐☐	
	Other _____ (SPECIFY)	OTHER . . . . . ☐☐	
123	Does any member of this household have a bank account?	YES . . . . . 1 NO 2	
124	At any time in the past 12 months, has anyone come into your dwelling to spray the interior walls against mosquitoes?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 126

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
125	Who sprayed the dwelling?	GOVERNMENT WORKER/PROGRAM . . . A PRIVATE COMPANY . . . . . B NONGOVERNMENTAL ORGANIZATION (NGO) . . . . . C OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
126	Does your household have any mosquito nets that can be used while sleeping?	YES . . . . . 1 NO 2	→ 135
127	How many mosquito nets does your household have? IF 7 OR MORE NETS, RECORD '7'.	NUMBER OF NETS . . . . . ☐	

		NET #1	NET #2	NET #3
128	ASK THE RESPONDENT TO SHOW YOU THE NETS IN THE HOUSEHOLD. IF MORE THAN 3 NETS, USE ADDITIONAL QUESTIONNAIRE(S).	OBSERVED, HANGED 1 OBSERVED NOT HANGED . . . 2 NOT OBSERVED . 3	OBSERVED, HANGED 1 OBSERVED NOT HANGED . . . 2 NOT OBSERVED . 3	OBSERVED, HANGED 11 OBSERVED NOT HANGED . . . 2 NOT OBSERVED . 3
129	How many months ago did your household obtain the mosquito net? IF LESS THAN ONE MONTH AGO, RECORD '00'.	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . 95 NOT SURE 98	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . 95 NOT SURE 98	MONTHS AGO . . . . . [ ][ ] MORE THAN 36 MONTHS AGO . . . 95 NOT SURE 98
130	OBSERVE OR ASK THE BRAND/ TYPE OF MOSQUITO NET. IF BRAND IS UNKNOWN AND YOU CANNOT OBSERVE THE NET, SHOW PICTURES OF TYPICAL NET TYPES/BRANDS TO RESPONDENT.	LONG-LASTING INSECTICIDAL NET (LLIN) PERMANET . . . . . 11 OLYSET . . . . . 12 ICONLIFE . . . . . 13 DURANET . . . . . 14 NETPROTECT 15 BASF INTERCEPTC 17 OTHER/ DK BRAND . . . 16 (SKIP TO 132) PRETREATED NET .. 21 (SKIP TO 132) UNTREATED NET .. 31 (SKIP TO 132) OTHER ______ 96 (SPECIFY) DK BRAND 98	LONG-LASTING INSECTICIDAL NET (LLIN) PERMANET . . . . . 11 OLYSET . . . . . 12 ICONLIFE . . . . . 13 DURANET . . . . . 14 NETPROTECT 15 BASF INTERCEPTC 17 OTHER/ DK BRAND . . . 16 (SKIP TO 132) PRETREATED NET .. 21 (SKIP TO 132) UNTREATED NET .. 31 (SKIP TO 132) OTHER ______ 96 (SPECIFY) DK BRAND 98	LONG-LASTING INSECTICIDAL NET (LLIN) PERMANET . . . . . 11 OLYSET . . . . . 12 ICONLIFE . . . . . 13 DURANET . . . . . 14 NETPROTECT 15 BASF INTERCEPTC 17 OTHER/ DK BRAND . . . 16 (SKIP TO 132) PRETREATED NET .. 21 (SKIP TO 132) UNTREATED NET .. 31 (SKIP TO 132) OTHER ______ 96 (SPECIFY) DK BRAND 98
131	When you got the net, was it already treated with an insecticide to kill or repel mosquitos?	YES . . . . 1 NO . . . . 2 NOT SURE 8	YES . . . . 1 NO . . . . 2 NOT SURE 8	YES . . . . 1 NO . . . . 2 NOT SURE 8
132	Did anyone sleep under this mosquito net last night? IF `YES' CHECK 128 FOR CODE `2' CIRCLED THEN PROBE.	YES . . . . 1 NO . . . . 2 (SKIP TO 134) NOT SURE 8	YES . . . . 1 NO . . . . 2 (SKIP TO 134) NOT SURE 8	YES . . . . 1 NO . . . . 2 (SKIP TO 134) NOT SURE 8

		NET #1	NET #2	NET #3
133	Who slept under this mosquito net last night? RECORD THE PERSON'S LINE NUMBER FROM THE HOUSEHOLD SCHEDULE.	NAME_____________ LINE NO. . . . . . [ ][ ] NAME_____________ LINE NO. . . . . . [ ][ ] NAME_____________ LINE NO. . . . . . [ ][ ] NAME_____________ LINE NO. . . . . . [ ][ ]	NAME_____________ LINE NO. . . . . . [ ][ ] NAME_____________ LINE NO. . . . . . [ ][ ] NAME_____________ LINE NO. . . . . . [ ][ ] NAME_____________ LINE NO. . . . . . [ ][ ]	NAME_____________ LINE NO. . . . . . [ ][ ] NAME_____________ LINE NO. . . . . . [ ][ ] NAME_____________ LINE NO. . . . . . [ ][ ] NAME_____________ LINE NO. . . . . . [ ][ ]
134		GO BACK TO 128 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 135.	GO BACK TO 128 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 135.	GO TO 128 IN FIRST COLUMN OF A NEW QUESTIONNAIRE; OR, IF NO MORE NETS, GO TO 135.

135	Please show me where members of your household most often wash their hands.	OBSERVED . . . . 1 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT . . . . 2 NOT OBSERVED, NO PERMISSION TO SEE . . . . 3 NOT OBSERVED, OTHER REASON . . . . 4 (SKIP TO 201) ← (2, 3, 4)
136	OBSERVATION ONLY: OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING.	WATER IS AVAILABLE . . . . 1 WATER IS NOT AVAILABLE 2
137	OBSERVATION ONLY: OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) . . . . A ASH, MUD, SAND . . . . B NONE C

SUPPORT FOR SICK PEOPLE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		
201	CHECK QUESTIONS 7 AND 12 IN THE HOUSEHOLD SCHEDULE: AT LEAST ONE ☐ ↓ NUMBER OF SICK PEOPLE AGE 18-59 ☐☐ NONE ☐ → 301			
202	ENTER IN QUESTION 203 THE LINE NUMBER AND NAME OF EACH SICK PERSON AGE 18-59, BEGINNING WITH THE FIRST SICK PERSON LISTED IN QUESTION 12 IN THE HOUSEHOLD SCHEDULE. IF THERE ARE MORE THAN 3 SICK PEOPLE, USE ADDITIONAL QUESTIONNAIRE(S). READ THE INTRODUCTION THAT FOLLOWS. THEN ASK QUESTIONS 204-215 AS APPROPRIATE FOR EACH OF THE PERSONS AGE 18-59 REPORTED AS HAVING BEEN VERY SICK. You told me that in your household one (some) of the members of your household has(ve) been very sick for at least three of the past 12 months. We are interested in learning about the care and support that may have been received for [that/each of those persons]. First I would like to ask you about any formal, organized help or support that your household may have been given for [that/each of those] person(s) for which you did not have to pay. By formal, organized support I mean help provided by someone working for a program. This program could be government, private, religious, charity, or community based.			
203	NAME AND LINE NUMBER FROM COLUMNS 1 AND 2 OF THE HOUSEHOLD SCHEDULE	1ST SICK PERSON NAME _____ LINE NO. ... ☐☐	2ND SICK PERSON NAME _____ LINE NO. ... ☐☐	3RD SICK PERSON NAME _____ LINE NO. ... ☐☐
204	Now I would like to ask you about any support you received for (NAME). In the last 12 months, has your household received any medical support for (NAME), such as medical care, supplies or medicine, for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 206) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 206) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 206) ← DK 8
205	Did your household receive any of these medical support at least once a month while (NAME) was sick?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
206	In the last 12 months, has your household received any emotional or psychological support for (NAME), such as companionship, counseling from a trained counselor, or spiritual support, for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 208) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 208) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 208) ← DK 8
207	Did your household receive any of these emotional or psychological support in the past 30 days?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
208	In the last 12 months, has your household received any material support for (NAME), such as clothing, food, or financial support, for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 210) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 210) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 210) ← DK 8
209	Did your household receive any of these material support in the past 30 days?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
210	In the last 12 months, has your household received any social support for (NAME), such as help in household work, training for a caregiver, or legal services, for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 212) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 212) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 212) ← DK 8
211	Did your household receive any of these social support in the past 30 days?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		
		1ST SICK PERSON NAME _____	2ND SICK PERSON NAME _____	3RD SICK PERSON NAME _____
212	Now I would like to ask about health problems (NAME) may have recently had. In the last 30 days, has (NAME) had severe pain, mild pain, or no pain at all?	SEVERE . . . . . 1 MILD . . . . . 2 NOT AT ALL . 3 (SKIP TO 214) ←	SEVERE . . . . . 1 MILD . . . . . 2 NOT AT ALL . 3 (SKIP TO 214) ←	SEVERE . . . . . 1 MILD . . . . . 2 NOT AT ALL . . . 3 (SKIP TO 214) ←
213	When (NAME) was in pain, was he/she able to reduce or stop the pain by any means most of the time, some of the time, or not at all?	MOST TIME . . . 1 SOME TIME . . . 2 NOT AT ALL . 3	MOST TIME . . . 1 SOME TIME . . . 2 NOT AT ALL . 3	MOST TIME . . . . . 1 SOME TIME . . . . . 2 NOT AT ALL . . . 3
214	In the last 30 days, did (NAME) suffer from nausea, coughing, diarrhea, or constipation? IF YES: Was this problem (were any of these problems) ever severe?	YES, SEVERE .. 1 YES, NEVER SEVERE . . . 2 NO . . . . . 3 (SKIP TO 216) ←	YES, SEVERE .. 1 YES, NEVER SEVERE . . . 2 NO . . . . . 3 (SKIP TO 216) ←	YES, SEVERE . . . 1 YES, NEVER SEVERE . . . . . 2 NO . . . . . 3 (SKIP TO 216) ←
215	Was (NAME) able to reduce or stop this (these) problem(s) by any means most of the time, some of the time, or not at all?	MOST TIME . . . 1 SOME TIME . . . 2 NOT AT ALL . 3	MOST TIME . . . 1 SOME TIME . . . 2 NOT AT ALL . 3	MOST TIME . . . . . 1 SOME TIME . . . . . 2 NOT AT ALL . . . 3
216		GO BACK TO 204 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF ADDITIONAL QUESTIONNAIRE(S); IF THERE ARE NO MORE SICK PEOPLE, GO TO 301.		

SUPPORT FOR PERSONS WHO HAVE DIED

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
301	Now I would like to ask you a few more questions about your household. Think back over the past 12 months. Has any usual member of your household died in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 401
302	How many household members died in the last 12 months?	NUMBER OF DEATHS	
303	ASK 304-322 AS APPROPRIATE FOR EACH PERSON WHO DIED. IF THERE WERE MORE THAN 3 DEATHS, USE ADDITIONAL QUESTIONNAIRE(S).		

		NAME 1ST DEATH	NAME 2ND DEATH	NAME 3RD DEATH
304	What was the name of the person who died (most recently/before him/her)?	_____	_____	_____
305	Was (NAME) male or female?	MALE . . . . . 1 FEMALE 2	MALE . . . . . 1 FEMALE 2	MALE . . . . . 1 FEMALE 2
306	How old was (NAME) when (he/she) died?	AGE	AGE	AGE . . .
306A	Was the death of (NAME) registered with NPopC?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
307	CHECK 306: AGE OF PERSON AT DEATH	<18 or 60+ → (SKIP TO 318) 18-59	<18 or 60+ → (SKIP TO 318) 18-59	<18 or 60+ → (SKIP TO 318) 18-59
308	Was (NAME) very sick for at least three of the 12 months before (he/she) died, that is (NAME) was too sick to work or do normal activities?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 318) DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 318) DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 318) DK 8
309	I would like to ask you about any formal, organized help or support that your household may have received for [NAME] before (he/she) died, for which you did not have to pay. By formal, organized support I mean help provided by someone working for a program. This program could be government, private, religious, charity, or community based.			
310	In the last 12 months, did your household receive any medical supplies for (NAME), such as medical care, supplies or medicine, for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 312) DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 312) DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 312) DK 8
311	Did your household receive any of these medical support at least once a month while (NAME) was sick?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
312	In the last 12 months, did your household receive any emotional or psychological support for (NAME), such as companionship, counseling from a trained counselor, or spiritual support for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 314) DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 314) DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 314) DK 8
313	Did your household receive any of these emotional or psychological support in the last 30 days before (NAME)'s death?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
314	In the last 12 months, did your household receive any material support for (NAME), such as clothing, food, or financial support, for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 316) DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 316) DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 316) DK 8
315	Did your household receive any of these material support in the last 30 days before (NAME)'s death?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
316	In the last 12 months, did your household receive any social support for (NAME), such as help in household work, training for a caregiver, or legal services, for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 318) DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 318) DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 318) DK 8

		NAME 1ST DEATH	NAME 2ND DEATH	NAME 3RD DEATH
317	Did your household receive any of this social support in the last 30 days before (NAME)'s death?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
318	Now I would like to ask about the health problems (NAME) may have had. In the 30 days before (NAME) died, did he/she have severe pain, mild pain, or no pain at all?	SEVERE . . . . . 1 MILD . . . . . 2 NOT AT ALL . 3 (SKIP TO 320)	SEVERE . . . . . 1 MILD . . . . . 2 NOT AT ALL . 3 (SKIP TO 320)	SEVERE . . . . . 1 MILD . . . . . 2 NOT AT ALL . 3 (SKIP TO 320)
319	When (NAME) was in pain, was he/she able to reduce or stop the pain most of the time, some of the time, or not at all?	MOST TIME . . . 1 SOME TIME . . . 2 NOT AT ALL . . . 3	MOST TIME . . . . 1 SOME TIME . . . . 2 NOT AT ALL . 3	MOST TIME . . . . 1 SOME TIME . . . . 2 NOT AT ALL . 3
320	In the 30 days before (NAME) died, did he/she suffer from nausea, coughing, diarrhea, or constipation? IF YES: Was this problem (were any of these problems) severe?	YES, SEVERE . 1 YES, NEVER SEVERE . . . 2 NO . . . . . 3 (SKIP TO 322)	YES, SEVERE . 1 YES, NEVER SEVERE . . . . 2 NO . . . . . 3 (SKIP TO 322)	YES, SEVERE . 1 YES, NEVER SEVERE . . . . 2 NO . . . . . 3 (SKIP TO 322)
321	Was (NAME) able to reduce or stop the problems he/she had most of the time, some of the time or not at all?	MOST TIME . . . 1 SOME TIME . . . 2 NOT AT ALL . . . 3	MOST TIME . . . . 1 SOME TIME . . . . 2 NOT AT ALL . 3	MOST TIME . . . . 1 SOME TIME . . . . 2 NOT AT ALL . 3
322		GO BACK TO 304 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF ADDITIONAL QUESTIONNAIRE(S); IF NO MORE DEATHS, GO TO 401.		

SUPPORT FOR ORPHANS AND VULNERABLE CHILDREN

NO.	QUESTIONS AND FILTERS	SKIP
401	CHECK COLUMN 7 IN THE HOUSEHOLD SCHEDULE: **ANY CHILD AGE 0-17?** AT LEAST ONE CHILD AGE 0-17 ☐ ↓ NO CHILD AGE 0-17 ☐ → 501	
402	CHECK COLUMN 12 IN THE HOUSEHOLD SCHEDULE: **ANY SICK ADULT AGE 18-59 WHO IS VERY SICK?** NO SICK ADULT AGE 18-59 ☐ ↓ AT LEAST ONE SICK ADULT AGE 18-59 ☐ → GO TO 406. CHECK QUESTION 7 IN THE HOUSEHOLD SCHEDULE AND LIST THE NAME(S), LINE NUMBER(S) AND AGE(S) OF ALL PERSONS AGE 0-17 YEARS.	
403	CHECK 306 IN THE PREVIOUS SECTION: **ANY ADULT AGE 18-59 WHO DIED IN PAST 12 MONTHS?** NO ADULT DEATH AGE 18-59 IN 306 ☐ ↓ AT LEAST ONE ADULT DEATH AGE 18-59 IN 306 ☐ → GO TO 406. CHECK QUESTION 7 IN THE HOUSEHOLD SCHEDULE AND LIST THE NAME(S), LINE NUMBER(S) AND AGE(S) OF ALL PERSONS AGE 0-17 YEARS.	
404	CHECK COLUMN 19 IN THE HOUSEHOLD SCHEDULE: **ANY CHILD WHOSE MOTHER AND/OR FATHER HAS DIED OR WHOSE MOTHER AND/OR FATHER IS NOT LISTED IN THE HOUSEHOLD SCHEDULE AND IS VERY SICK?** AT LEAST ONE CHILD WHOSE MOTHER AND/OR FATHER HAS DIED/IS NOT LISTED IN THE HOUSEHOLD SCHEDULE AND HAS BEEN VERY SICK ☐ ↓ NO CHILD WHOSE MOTHER AND/OR FATHER HAS DIED OR IS NOT LISTED IN HOUSEHOLD SCHEDULE AND HAS BEEN VERY SICK ☐ → 501	
405	RECORD NAMES, LINE NUMBERS AND AGES OF CHILDREN AGE 0-17 FOR ALL CHILDREN WHO ARE IDENTIFIED IN COLUMN 19 AS HAVING A MOTHER AND/OR FATHER WHO HAS DIED OR HAS BEEN VERY SICK.	

		1ST CHILD	2ND CHILD	3RD CHILD	4TH CHILD
406	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____	NAME _____
	LINE NUMBER FROM COLUMN 1	LINE NO.	LINE NO.	LINE NO.	LINE NO.
	AGE FROM COLUMN 7	AGE	AGE	AGE	AGE
407	I would like to ask you about any formal, organized help or support for children that your household may have received for which you did not have to pay. By formal, organized support I mean help provided by someone working for a program. This program could be government, private, religious, charity, or community based.				
408	Now I would like to ask you about the support your household received for (NAME). In the last 12 months, has your household received any medical support for (NAME), such as medical care, supplies or medicine, for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
409	In the last 12 months, has your household received any emotional or psychological support for (NAME), such as companionship, counseling from a trained counselor, or spiritual support, which you received at home and for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 411) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 411) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 411) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 411) ← DK 8
410	Did your household receive any of these emotional or psychological support in the past 3 months?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
411	In the last 12 months, has your household received any material support for (NAME), such as clothing, food, or financial support, for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 413) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 413) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 413) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 413) ← DK 8
412	Did your household receive any of these material support in the past 3 months?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
413	In the last 12 months, has your household received any social support for (NAME) such as help in household work, training for a caregiver, or legal services for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 415) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 415) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 415) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 415) ← DK 8
414	Did your household receive any of this social support in the past 3 months?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
415	CHECK 406: AGE OF CHILD	AGE 0-4 (SKIP TO 417) ← AGE 5-17 ↓	AGE 0-4 (SKIP TO 417) ← AGE 5-17 ↓	AGE 0-4 (SKIP TO 417) ← AGE 5-17 ↓	AGE 0-4 (SKIP TO 417) ← AGE 5-17 ↓
416	In the last 12 months, has your household received any support for (NAME'S) schooling, such as allowance, free admission, books or supplies, for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
417	GO BACK TO 408 FOR NEXT CHILD; OR, IF NO MORE CHILDREN, GO TO 501.				

		5TH CHILD	6TH CHILD	7TH CHILD	8TH CHILD
406	NAME FROM COLUMN 2 LINE NUMBER FROM COLUMN 1 AGE FROM COLUMN 7	NAME _____ LINE NO. . . . ☐☐ AGE . ☐☐	NAME _____ LINE NO. . . . ☐☐ AGE . ☐☐	NAME _____ LINE NO. . . . ☐☐ AGE . ☐☐	NAME _____ LINE NO. . . . ☐☐ AGE . ☐☐
408	Now I would like to ask you about the support your household received for (NAME). In the last 12 months, has your household received any medical support for (NAME), such as medical care, supplies or medicine, for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
409	In the last 12 months, has your household received any emotional or psychological support for (NAME), such as companionship, counseling from a trained counselor, or spiritual support, which you received at home and for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 411) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 411) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 411) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 411) ← DK 8
410	Did your household receive any of these emotional or psychological support in the past 3 months?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
411	In the last 12 months, has your household received any material support for (NAME), such as clothing, food, or financial support, for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 413) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 413) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 413) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 413) ← DK 8
412	Did your household receive any of these material support in the past 3 months?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
413	In the last 12 months, has your household received any social support for (NAME) such as help in household work, training for a caregiver, or legal services for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 415) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 415) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 415) ← DK 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 415) ← DK 8
414	Did your household receive any social support in the past 3 months?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
415	CHECK 406: AGE OF CHILD	AGE 0-4 ☐ (SKIP TO 417) ← AGE 5-17 ☐ ↓	AGE 0-4 ☐ (SKIP TO 417) ← AGE 5-17 ☐ ↓	AGE 0-4 ☐ (SKIP TO 417) ← AGE 5-17 ☐ ↓	AGE 0-4 ☐ (SKIP TO 417) ← AGE 5-17 ☐ ↓
416	In the last 12 months, has your household received any support for (NAME'S) schooling, such as allowance, free admission, books or supplies, for which you did not have to pay?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
417		GO BACK TO 408 FOR NEXT CHILD; OR, IF NO MORE CHILDREN, GO TO 501.			

WEIGHT AND HEIGHT MEASUREMENT FOR CHILDREN AGE 0-5 YEARS

501	CHECK COLUMN 11 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 502. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
502	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
503	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR OF BIRTH FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME)'s birth date?	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐
504	CHECK 503: CHILD BORN IN JANUARY 2008 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 510)	YES . . . . . 1 NO . . . . . 2 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 510)	YES . . . . . 1 NO . . . . . 2 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 510)
505	WEIGHT IN KILOGRAMS	KG. ☐☐.☐☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. ☐☐.☐☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. ☐☐.☐☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
506	HEIGHT IN CENTIMETERS	CM. ☐☐☐.☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. ☐☐☐.☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. ☐☐☐.☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
507	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3
508	GO BACK TO 503 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 510.			

WEIGHT AND HEIGHT MEASUREMENT FOR CHILDREN AGE 0-5 YEARS

501	CHECK COLUMN 11 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 502. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 4	CHILD 5	CHILD 6
502	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
503	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR OF BIRTH FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME)'s birth date?	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR ☐☐☐☐
504	CHECK 503: CHILD BORN IN JANUARY 2008 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 510)	YES . . . . . 1 NO . . . . . 2 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 510)	YES . . . . . 1 NO . . . . . 2 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 510)
505	WEIGHT IN KILOGRAMS	KG. ☐☐.☐☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. ☐☐.☐☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. ☐☐.☐☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
506	HEIGHT IN CENTIMETERS	CM. ☐☐☐.☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. ☐☐☐.☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. ☐☐☐.☐ NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
507	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3
508	GO BACK TO 503 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 510.			

WEIGHT AND HEIGHT MEASUREMENT FOR WOMEN AGE 15-49 YEARS

510	CHECK COLUMN 9 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE WOMEN IN 511. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 1	WOMAN 2	WOMAN 3
511	LINE NUMBER FROM COLUMN 9 NAME FROM COLUMN 2	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
512	WEIGHT IN KILOGRAMS	KG. . . . ☐☐☐.☐☐ NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. . . . ☐☐☐.☐☐ NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. . . . ☐☐☐.☐☐ NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996
513	HEIGHT IN CENTIMETERS	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
514	PREGNANCY STATUS: CHECK 226 IN WOMAN'S QUESTIONNAIRE OR ASK: Are you pregnant?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
515	GO BACK TO 511 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, END INTERVIEW.			

30 January 2013

C O N F I D E N T I A L

NIGERIA DEMOGRAPHIC AND HEALTH SURVEY 2013
WOMAN'S QUESTIONNAIRE

NATIONAL POPULATION COMMISSION

National Health Research Ethics Committee
Assigned Number NHREC/01/01/2007

IDENTIFICATION

STATE _____ . . . . . | | | |

LOCAL GOVT. AREA _____ . . . . . | | | |

LOCALITY _____ . . . . . | | | | |

ENUMERATION AREA _____ . . . . . | | | | |

URBAN/RURAL (URBAN=1, RURAL=2) . . . . . |

CLUSTER NUMBER . . . . . | | |

BUILDING/STRUCTURE NUMBER . . . . . | | |

HOUSEHOLD NUMBER . . . . . | | |

NAME OF HOUSEHOLD HEAD _____

NAME AND LINE NUMBER OF WOMAN _____ | |

IS WOMAN SELECTED FOR QUESTIONS ON DOMESTIC VIOLENCE (SECTION 13)? . . . . . |
(YES=1, NO=2)

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
				YEAR 2 0 1 3
INTERVIEWER'S NAME				INT. NUMBER
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES:

1	COMPLETED	4	REFUSED		
2	NOT AT HOME	5	PARTLY COMPLETED	7	OTHER _____ (SPECIFY)
3	POSTPONED	6	INCAPACITATED		

	HAUSA	YORUBA	IGBO	ENGLISH	OTHER	TRANSLATOR USED?	YES	NO
LANGUAGE OF INTERVIEW	1	2	3	4	6 _____ SPECIFY		1	2
NATIVE LANGUAGE OF RESPONDENT	1	2	3	4	6 _____ SPECIFY			

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

ENGLISH

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Greetings. My name is _____ and I am working with National Population Commission. We are conducting a survey about health all over Nigeria. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of the research team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the following persons:

2013 NDHS Contact Person: Project Director; Email: amakaloveth4life@yahoo.com; Phone: 08033318224
NHREC Contact Person: Desk Officer, NHREC; Email: yaminads@yahoo.com; Phone: 08065479926

Do you have any questions? May I begin the interview now?
May I begin the interview now?

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . → END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . ☐☐ MINUTES . . . . . ☐☐	
102	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
103	How old were you at your last birthday? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS ☐☐	
104	Have you ever attended school?	YES . . . . . 1 NO 2	→108
105	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY . . . . . 1 SECONDARY . . . . . 2 HIGHER 3	
106	What is the highest (class/year) you completed at that level?	CLASS/YEAR . . . . . ☐☐	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
107	CHECK 105: PRIMARY ☐ SECONDARY OR HIGHER ☐ → 110		
108	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PARTS OF SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE. . 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
109	CHECK 108: CODE '2', '3' OR '4' CIRCLED ☐ CODE '1' OR '5' CIRCLED ☐ → 111		
110	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
111	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
112	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
113	What is your religion?	CATHOLIC . . . . . 1 OTHER CHRISTIAN . . . . . 2 ISLAM . . . . . 3 TRADITIONALIST . . . . . 4 OTHER _____ 6 (SPECIFY)	
114	What is your ethnic group?	_____ ☐☐☐	
115	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES . . . . . ☐☐ NONE . . . . . 00 → 201	
116	In the last 12 months, have you been away from home for more than one month at a time?	YES . . . . . 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES . . . . . 1 NO 2	→ 206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME . . . . . ☐☐ DAUGHTERS AT HOME . . . . . ☐☐	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE . . . . . ☐☐ DAUGHTERS ELSEWHERE . ☐☐	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES . . . . . 1 NO 2	→ 208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . ☐☐ GIRLS DEAD . . . . . ☐☐	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL . . . . . ☐☐	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES ☐ ↓ NO ☐ → PROBE AND CORRECT 201-208 AS NECESSARY.		
210	CHECK 208: ONE OR MORE BIRTHS ☐ ↓ NO BIRTHS ☐ →		→ 226

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.
RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.
(IF THERE ARE MORE THAN 12 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE SECOND ROW).

212 What name was given to your (first/next) baby? RECORD NAME BIRTH HISTORY NUMBER	213 Is (NAME) a boy or a girl?	214 Were any of these births twins?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COM-PLETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	220 IF DEAD: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	220A In what month and year did (NAME) die?	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
01	BOY 1 GIRL 2	SING 1 MULT 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . . 1 NO . . . 2 → 220	AGE IN YEARS ☐☐	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (NEXT BIRTH)	DAYS . . . 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	
02	BOY 1 GIRL 2	SING 1 MULT 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . . 1 NO . . . 2 → 220	AGE IN YEARS ☐☐	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (GO TO 221)	DAYS . . . 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
03	BOY 1 GIRL 2	SING 1 MULT 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . . 1 NO . . . 2 → 220	AGE IN YEARS ☐☐	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (GO TO 221)	DAYS . . . 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
04	BOY 1 GIRL 2	SING 1 MULT 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . . 1 NO . . . 2 → 220	AGE IN YEARS ☐☐	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (GO TO 221)	DAYS . . . 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
05	BOY 1 GIRL 2	SING 1 MULT 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . . 1 NO . . . 2 → 220	AGE IN YEARS ☐☐	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (GO TO 221)	DAYS . . . 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
06	BOY 1 GIRL 2	SING 1 MULT 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . . 1 NO . . . 2 → 220	AGE IN YEARS ☐☐	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (GO TO 221)	DAYS . . . 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
07	BOY 1 GIRL 2	SING 1 MULT 2	MONTH ☐☐ YEAR ☐☐☐☐	YES . . 1 NO . . . 2 → 220	AGE IN YEARS ☐☐	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (GO TO 221)	DAYS . . . 1 ☐☐ MONTHS 2 ☐☐ YEARS . . 3 ☐☐	MONTH ☐☐ YEAR ☐☐☐☐	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH

212 What name was given to your next baby? RECORD NAME BIRTH HISTORY NUMBER	213 Is (NAME) a boy or a girl?	214 Were any of these births twins?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COM-PLETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	220 IF DEAD: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	220A In what month and year did (NAME) die?	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
08	BOY 1 GIRL 2	SING 1 MULT 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	MONTH YEAR	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
09	BOY 1 GIRL 2	SING 1 MULT 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	MONTH YEAR	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
10	BOY 1 GIRL 2	SING 1 MULT 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	MONTH YEAR	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
11	BOY 1 GIRL 2	SING 1 MULT 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	MONTH YEAR	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
12	BOY 1 GIRL 2	SING 1 MULT 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	HOUSEHOLD LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	MONTH YEAR	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH

222	Have you had any live births since the birth of (NAME OF LAST BIRTH)? IF YES, RECORD BIRTH(S) IN TABLE.	YES . . . . . 1 NO 2

223	COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK: NUMBERS ARE SAME ↓ NUMBERS ARE DIFFERENT → (PROBE AND RECONCILE)
223A	CHECK 220A: ANY DEATHS IN JANUARY 2009 OR LATER? YES ↓ NO → SKIP TO 224
223B	CHECK 220: ENTER THE NUMBER OF DEATHS THAT HAPPENED IN DAYS, MONTHS AND 2-4 YEARS. IF NONE, RECORD `0'.

224	CHECK 215: ENTER THE NUMBER OF BIRTHS IN 2008 OR LATER.	NUMBER OF BIRTHS . . . . . NONE 0	→ 226

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	**C** FOR EACH BIRTH SINCE JANUARY 2008, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.)		
226	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 230
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. **C** ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS	
228	When you got pregnant, did you want to get pregnant at that time?	YES . . . . . 1 NO 2	→ 230
229	Did you want to have a baby later on or did you not want any (more) children?	LATER . . . . . 1 NO MORE 2	
230	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES . . . . . 1 NO 2	→ 238
231	When did the last such pregnancy end?	MONTH . . . . . YEAR	
232	CHECK 231: LAST PREGNANCY ENDED IN JAN. 2008 OR LATER ↓ LAST PREGNANCY ENDED BEFORE JAN. 2008 → 238		
233	How many months pregnant were you when the last such pregnancy ended? **C** RECORD NUMBER OF COMPLETED MONTHS. ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.	MONTHS	
234	Since January 2008, have you had any other pregnancies that did not result in a live birth?	YES . . . . . 1 NO 2	→ 236
235	ASK THE DATE AND THE DURATION OF PREGNANCY FOR EACH EARLIER NON-LIVE BIRTH PREGNANCY BACK TO JANUARY 2008. **C** ENTER 'T' IN THE CALENDAR IN THE MONTH THAT EACH PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.		
236	Did you have any miscarriages, abortions or stillbirths that ended before 2008?	YES . . . . . 1 NO 2	→ 238
237	When did the last such pregnancy that terminated before 2008 end?	MONTH . . . . . YEAR	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
238	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO . . . . . 1 | | | WEEKS AGO . . . . . 2 | | | MONTHS AGO . . . . . 3 | | | YEARS AGO . . . . . 4 | | | IN MENOPAUSE/ HAS HAD HYSTERECTOMY . . . 994 BEFORE LAST BIRTH . . . . . 995 NEVER MENSTRUATED 996	
239	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 301
240	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?		
01	**Female Sterilization**. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
02	**Male Sterilization**. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
03	**IUD**. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse.	YES . . . . . 1 NO 2	
04	**Injectables**. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2	
05	**Implants**. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	
06	**Pill**. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2	
07	**Condom**. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2	
08	**Female Condom**. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2	
09	**Diaphragm:** Women can place a thin flexible disk in their vagina before intercourse.	YES . . . . . 1 NO 2	
10	**Foam or Jelly:** Women can place a suppository, jelly, or cream in their vagina before intercourse.	YES . . . . . 1 NO 2	
11	**Standard Days Method.** PROBE: A woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, they uses a condom or does not have sexual intercourse.	YES . . . . . 1 NO 2	
12	**Lactational Amenorrhea Method (LAM)**.	YES . . . . . 1 NO 2	
13	**Rhythm Method**. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2	
14	**Withdrawal**. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	
15	**Emergency Contraception**. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2	
16	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) _____ (SPECIFY) NO 2	
302	CHECK 226: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐ → 311		
303	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 311

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Which method are you using? CIRCLE ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H DIAPHRAGM . . . . . I FOAM/JELLY . . . . . J STANDARD DAYS METHOD . . . . . K LACTATIONAL AMEN. METHOD . . . . . L RHYTHM METHOD . . . . . M WITHDRAWAL . . . . . N OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . Y	→ 307 → 308A → 308A → 305 → 306 → 306 → 308A
304A	What name/type of injectables are you using?	NORISTERAT (2 MONTHS) . . . . . 1 NORIGYNON (2 MONTHS) . . . . . 2 DEPO PROVERA (3 MONTHS) . . . 3 OTHER _____ 6 (SPECIFY)	→308A
305	What is the brand name of the pills you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	DUOFEMCONFIDENCE . . . . . 01 MICROGYNON . . . . . 02 LOFEMENAL . . . . . 03 NEOGYNON . . . . . 04 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 308A
306	What is the brand name of the condoms you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	**MALE CONDOMS** GOLD CIRCLE . . . . . 01 DUREX . . . . . 02 ROUGH RIDER . . . . . 03 TWIN LOTUS . . . . . 04 PLAIN CONDOMS . . . . . 05 **FEMALE CONDOMS** FEMALE PLAIN CONDOMS . . . . . 06 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 308A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
307	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVT. HOSPITAL . . . . . 11 GOVT. HEALTH CENTER . . . . . 12 FAMILY PLANNING CLINIC . . . . . 13 MOBILE CLINIC . . . . . 14 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 21 PRIVATE DOCTOR'S OFFICE . . . . . 24 MOBILE CLINIC . . . . . 25 NON-GOV. ORGANIZATION . . . 27 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
308	In what month and year was the sterilization performed?		
308A	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
309	CHECK 308/308A, 215 AND 231: ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 308/308A GO BACK TO 308/308A, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).	YES ☐ NO ☐	
310	CHECK 308/308A: YEAR IS 2008 OR LATER **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. YEAR IS 2007 OR EARLIER **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2008. THEN SKIP TO → 322		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
311	I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2008. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. **C** **IN COLUMN 1**, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH. ILLUSTRATIVE QUESTIONS: * When was the last time you used a method? Which method was that? * When did you start using that method? How long after the birth of (NAME)? * How long did you use the method then? **IN COLUMN 2**, ENTER CODES FOR DISCONTINUATION NEXT TO THE LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 2 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1. ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT. ILLUSTRATIVE QUESTIONS: * Why did you stop using the (METHOD)? Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason? * IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER ‘0’ IN EACH SUCH MONTH IN COLUMN 1.		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
312	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ → ANY METHOD USED ☐ → 314		
313	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 324
314	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED . . . . . 00 FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 STANDARD DAYS METHOD . . . . . 11 LACTATIONAL AMEN. METHOD . . . . . 12 RHYTHM METHOD . . . . . 13 WITHDRAWAL . . . . . 14 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 324 → 317A → 326 → 315A → 326
315	You first started using (CURRENT METHOD) in (DATE FROM 308/308A). Where did you get it at that time?	PUBLIC SECTOR GOVT. HOSPITAL . . . . . 11 GOVT. HEALTH CENTER . . . . . 12 FAMILY PLANNING CLINIC . . . . . 13 MOBILE CLINIC . . . . . 14 FIELDWORKER . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY)	
315A	Where did you learn how to use the rhythm/lactational amenorrhea method? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 21 PHARMACY . . . . . 22 CHEMIST/PMS STORE . . . . . 23 PRIVATE DOCTOR . . . . . 24 MOBILE CLINIC . . . . . 25 FIELDWORKER . . . . . 27 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER SOURCE SHOP . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 NGO . . . . . 34 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
316	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 STANDARD DAYS METHOD . . . . . 11 LACTATIONAL AMEN. METHOD . . . . . 12 RHYTHM METHOD 13	→ 323 → 320 → 326 → 326 → 326
317 317A	At that time, were you told about side effects or problems you might have with the method? When you got sterilized, were you told about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ 319
318	Were you ever told by a health or family planning worker about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	 → 320
319	Were you told what to do if you experienced side effects or problems?	YES . . . . . 1 NO 2	
320	CHECK 317: CODE '1' CIRCLED → At that time, were you told about other methods of family planning that you could use? CODE '1' NOT CIRCLED → When you obtained (CURRENT METHOD FROM 314) from (SOURCE OF METHOD FROM 307 OR 315), were you told about other methods of family planning that you could use?	YES . . . . . 1 NO 2	→ 322
321	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES . . . . . 1 NO 2	
322	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 STANDARD DAYS METHOD . . . . . 11 LACTATIONAL AMEN. METHOD . . . . . 12 RHYTHM METHOD . . . . . 13 WITHDRAWAL . . . . . 14 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD . . . 96	→ 326 → 326

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
323	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVT. HOSPITAL . . . . . 11 GOVT. HEALTH CENTER . . . . . 12 FAMILY PLANNING CLINIC . . . . . 13 MOBILE CLINIC . . . . . 14 FIELDWORKER . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 21 PHARMACY . . . . . 22 CHEMIST/PMS STORE . . . . . 23 PRIVATE DOCTOR . . . . . 24 MOBILE CLINIC . . . . . 25 FIELDWORKER . . . . . 27 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER SOURCE SHOP . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 NGO . . . . . 34 OTHER _____ 96 (SPECIFY)	→ 326
324	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	→ 326
325	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL . . . . . A GOVT. HEALTH CENTER . . . . . B FAMILY PLANNING CLINIC . . . . . C MOBILE CLINIC . . . . . D FIELDWORKER . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . G PHARMACY . . . . . H CHEMIST/PMS STORE . . . . . I PRIVATE DOCTOR . . . . . J MOBILE CLINIC . . . . . K FIELDWORKER . . . . . L OTHER PRIVATE MEDICAL SECTOR _____ M (SPECIFY) OTHER SOURCE SHOP . . . . . N CHURCH . . . . . O FRIEND/RELATIVE . . . . . P NGO . . . . . Q OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
326	In the last 12 months, were you visited by a fieldworker who talked to you about family planning?	YES . . . . . 1 NO 2	
327	In the last 12 months, have you visited a health facility for care for yourself (or your children)?	YES . . . . . 1 NO 2	→ 401
328	Did any staff member at the health facility speak to you about family planning methods?	YES . . . . . 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 224: ONE OR MORE BIRTHS IN 2008 OR LATER ☐ ↓ NO BIRTHS IN 2008 OR LATER ☐ → 556			
402	CHECK 215: ENTER IN THE TABLE THE BIRTH HISTORY NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2008 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)			
403	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY	LAST BIRTH BIRTH HISTORY NUMBER ☐☐	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER ☐☐	SECOND-FROM-LAST BIRTH BIRTH HISTORY NUMBER ☐☐
404	FROM 212 AND 216	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES . . . . . 1 (SKIP TO 408) NO 2	YES . . . . . 1 (SKIP TO 430) NO 2	YES . . . . . 1 (SKIP TO 430) NO 2
406	Did you want to have a baby later on, or did you not want any (more) children?	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 408)	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 430)	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 430)
407	How much longer did you want to wait?	MONTHS . . 1 ☐☐ YEARS . . 2 ☐☐ DON'T KNOW 998	MONTHS . . 1 ☐☐ YEARS . . 2 ☐☐ DON'T KNOW 998	MONTHS . . 1 ☐☐ YEARS . . 2 ☐☐ DON'T KNOW . . . 998
408	Did you see anyone for antenatal care for this pregnancy?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 415)		
409	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE . . . . B AUXILIARY MIDWIFE . . . . . C COMMUNITY EXTENSION HLT. WORKER . D OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . . . E COMMUNITY/ VILLAGE HEALTH WORKER . . . . . F OTHER _____ X (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
410	Where did you receive antenatal care for this pregnancy? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	HOME YOUR HOME . . . . A OTHER HOME . . . . B PUBLIC SECTOR GOVT. HOSPITAL . C GOVT. HEALTH CENTER . . . . . D GOVT. HEALTH POST/ DISPENSARY . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . G OTHER PRIVATE MED. SECTOR _____ H (SPECIFY) OTHER _____ X (SPECIFY)		
411	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS . . . . [ ][ ] DON'T KNOW 98		
412	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES [ ][ ] DON'T KNOW 98		
413	As part of your antenatal care during this pregnancy, were any of the following done at least once: Was your blood pressure measured? Did you give a urine sample? Did you give a blood sample?	YES NO BP . . . . . 1 2 URINE . . . . . 1 2 BLOOD 1 2		
414	During (any of) your antenatal care visit(s), were you told about things to look out for that might suggest problems with the pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
415	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 418) ← DON'T KNOW 8		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
416	During this pregnancy, how many times did you get a tetanus injection?	TIMES . . . . . ☐ DON'T KNOW 8		
417	CHECK 416:	2 OR MORE TIMES ☐ → (SKIP TO 421) OTHER ☐ →		
418	At any time before this pregnancy, did you receive any tetanus injections?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 421) ← DON'T KNOW 8		
419	Before this pregnancy, how many times did you receive a tetanus injection? IF 7 OR MORE TIMES, RECORD '7'.	TIMES . . . . . ☐☐ DON'T KNOW 8		
420	How many years ago did you receive the last tetanus injection before this pregnancy?	YEARS AGO . . . . . ☐☐		
421	During this pregnancy, were you given or did you buy any iron tablets or iron syrup? SHOW TABLETS/SYRUP.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 423) ← DON'T KNOW 8		
422	During the whole pregnancy, for how many days did you take the tablets or syrup? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS ☐☐☐ DON'T KNOW 998		
423	During this pregnancy, did you take any drug for intestinal worms?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
424	During this pregnancy, did you take any drugs to keep you from getting malaria?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 430) ← DON'T KNOW 8		
425	What drugs did you take? RECORD ALL MENTIONED. IF TYPE OF DRUG IS NOT DETERMINED, SHOW TYPICAL ANTIMALARIAL DRUGS TO RESPONDENT.	SP/FANSIDAR/ AMALAR/ MALOXINE . . . . . A CHLOROQUINE . . . . B OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
426	CHECK 425: SP/FANSIDAR/AMALAR/ MALOXINE TAKEN FOR MALARIA PREVENTION.	CODE 'A' CIRCLED ☐ CODE 'A' NOT CIRCLED ☐ (SKIP TO 430)		
427	How many times did you take (SP/Fansidar) during this pregnancy?	TIMES . . . . ☐☐		
427A	How many months pregnant were you when you took your **first** dose of (SP/Fansidar/ Amalar/Maxoline)?	MONTH . . . . ☐☐ DON'T KNOW 98		
427B	CHECK 427:	2 OR MORE TIMES ☐ 1 TIME ☐ (SKIP TO 428)		
427C	How many months pregnant were you when you took your **second** dose of (SP/Fansidar/ Amalar/Maxoline)?	MONTH . . . . ☐☐ DON'T KNOW 98		
428	CHECK 409: ANTENATAL CARE FROM HEALTH PERSONNEL DURING THIS PREGNANCY	CODE 'A', 'B' OR 'C' CIRCLED ☐ OTHER ☐ (SKIP TO 430)		
429	Did you get the (SP/Fansidar) during any antenatal care visit, during another visit to a health facility or from another source?	ANTENATAL VISIT . . . . 1 ANOTHER FACILITY VISIT . . . . 2 OTHER ________ 6 (SPECIFY)		
430	When (NAME) was born, was he/she very large, larger than average, average, smaller than average, or very small?	VERY LARGE . . . . 1 LARGER THAN AVERAGE . . . . 2 AVERAGE . . . . 3 SMALLER THAN AVERAGE . . . . 4 VERY SMALL . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . . 1 LARGER THAN AVERAGE . . . . . . 2 AVERAGE . . . . 3 SMALLER THAN AVERAGE . . . . . . 4 VERY SMALL . . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8
431	Was (NAME) weighed at birth?	YES . . . . 1 NO . . . . 2 (SKIP TO 433) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 433) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 433) DON'T KNOW 8
432	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 ☐ . ☐☐☐ KG FROM RECALL 2 ☐ . ☐☐☐ DON'T KNOW 99998	KG FROM CARD 1 ☐ . ☐☐☐ KG FROM RECALL 2 ☐ . ☐☐☐ DON'T KNOW 99998	KG FROM CARD 1 ☐ . ☐☐☐ KG FROM RECALL 2 ☐ . ☐☐☐ DON'T KNOW 99998

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
433	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE . . . . B AUXILIARY MIDWIFE . . . . . C COMMUNITY EXTENSION HLT. WORKER . D OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . . . E RELATIVE/FRIEND . . F OTHER _____ X (SPECIFY) NO ONE ASSISTED Y	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE B AUXILIARY MIDWIFE . . . . . C COMMUNITY EXTENSION HLT. WORKER . D OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . E RELATIVE/FRIEND . F OTHER _____ X (SPECIFY) NO ONE ASSISTED Y	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE B AUXILIARY MIDWIFE . . . . . C COMMUNITY EXTENSION HLT. WORKER D OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . E RELATIVE/FRIEND . F OTHER _____ X (SPECIFY) NO ONE ASSISTED Y
434	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME YOUR HOME . . . . 11 (SKIP TO 437A) ← OTHER HOME . . . . 12 PUBLIC SECTOR GOVT. HOSPITAL . 21 GOVT. HEALTH CENTER . . . . . 22 GOVT. HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED. SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 437A) ←	HOME YOUR HOME . . . . 11 (SKIP TO 448) ← OTHER HOME . . . . 12 PUBLIC SECTOR GOVT. HOSPITAL . 21 GOVT. HEALTH CENTER . . . . . 22 GOVT. HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED. SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 448) ←	HOME YOUR HOME . . . 11 (SKIP TO 448) ← OTHER HOME . . . 12 PUBLIC SECTOR GOVT. HOSPITAL . 21 GOVT. HEALTH CENTER . . . . . 22 GOVT. HEALTH POST . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED. SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 448) ←
434A	How long after (NAME) was delivered did you stay there? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 ☐☐ DAYS 2 ☐☐ WEEKS 3 ☐☐ DON'T KNOW 998		
435	Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
436	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility?	YES . . . . . 1 (SKIP TO 439) ← NO 2		
437	Did anyone check on your health after you left the facility?	YES . . . . . 1 (SKIP TO 439) ← NO . . . . . 2 (SKIP TO 442) ←		
437A	Why didn't you deliver in a health facility? PROBE: Any other reason? RECORD ALL MENTIONED.	COST TOO MUCH . . . . A FACILITY NOT OPEN . B TOO FAR/ NO TRANS- PORTATION . . . . . C DON'T TRUST FACILITY/POOR QUALITY SERVICE . D NO FEMALE PROVID- ER AT FACILITY . . . . E HUSBAND/FAMILY DID NOT ALLOW . . . . F NOT NECESSARY . . . . G NOT CUSTOMARY . . . . H NO TIME BECAUSE BABY CAME SUDDENLY . . . . . I OTHER _____ (SPECIFY) X		
437B	Was a special clean delivery kit used? SHOW CLEAN DELIVERY KIT	YES . . . . . 1 (SKIP TO 437D) ← NO . . . . . 2 DON'T KNOW 8		
437C	When (NAME) was born, what instrument was used to cut the umblical cord?	NEW/BOILED BLADE . . . . . 1 USED BLADE . . . . . 2 KNIFE . . . . . 3 SICKLE . . . . . 4 SCISSORS . . . . . 5 OTHER _____ 6 (SPECIFY) DON'T KNOW 8		
437D	Was anything applied on the stump after the umblical cord was cut?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 437F) ← DON'T KNOW 8		
437E	What was applied on the stump?	OIL . . . . . A ASH . . . . . B OINTMENT/POWDER . C ANIMAL DUNG . . . . . D TURMERIC . . . . . E DETOL . . . . . F METHYLATED SPIRIT . . . . . G OTHER _____ X (SPECIFY) DON'T KNOW . . . . Z		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
437F	Was (NAME) dried before the placenta was delivered?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
437G	Was (NAME) placed on your belly/breast before delivery of the placenta?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
437H	Was (NAME) wrapped in cloth before the placenta was delivered?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
437I	How long after delivery was (NAME) bathed for the first time? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 ☐☐ DAYS 2 ☐☐ WEEKS 3 ☐☐ DON'T KNOW 998		
438	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you gave birth to (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 442)←		
439	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR . . . . . 11 NURSE/MIDWIFE . . . . 12 AUXILIARY MIDWIFE . . . . . 13 COMMUNITY EXTENSION HLT. WORKER . # OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . . . 21 COMMUNITY/ VILLAGE HEALTH WORKER . . . . 22 OTHER _____ 96 (SPECIFY)		
440	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 ☐☐ DAYS 2 ☐☐ WEEKS 3 ☐☐ DON'T KNOW 998		
442	In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on his/her health (eg. check cord, baby's temperature, baby feeding well)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 446)← DON'T KNOW 8		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
443	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HRS AFTER BIRTH . . 1 ☐☐ DAYS AFTER BIRTH . . 2 ☐☐ WKS AFTER BIRTH . . 3 ☐☐ DON'T KNOW 998		
444	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR . . . . . 11 NURSE/MIDWIFE 12 AUXILIARY MIDWIFE . . . . . 13 COMMUNITY EXTENSION HLT. WORKER . # OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . . . 21 COMMUNITY/ VILLAGE HEALTH WORKER . . . . 22 OTHER _____ 96 (SPECIFY)		
444A	During that check, was any of the following done for (NAME)?	YES NO		
	Was cord checked?	CORD 1 2		
	Observe/counsel on how well (NAME) was breastfeeding?	BF 1 2		
	Assess (NAME's) temperature?	TEMP 1 2		
	Counsel on how to recognize if (NAME) might be sick?	IF SICK 1 2		
445	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME YOUR HOME . . . . . 11 OTHER HOME . . . . . 12 PUBLIC SECTOR GOVT. HOSPITAL . 21 GOVT. HEALTH CENTER . . . . . 22 GOVT. HEALTH POST . . . . . 23 OTHER PUBLIC _____ 26 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED. _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
446	In the first two months after delivery, did you receive a vitamin A dose like (this/any of these)? SHOW COMMON TYPES OF CAPSULES.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
447	Has your menstrual period returned since the birth of (NAME)?	YES . . . . . 1 (SKIP TO 449) NO . . . . . 2 (SKIP TO 450)		
448	Did your period return between the birth of (NAME) and your next pregnancy?		YES . . . . . 1 NO . . . . . 2 (SKIP TO 452)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 452)
449	For how many months after the birth of (NAME) did you not have a period?	MONTHS . . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98
450	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREG-NANT ☐ PREGNANT OR UNSURE ☐ (SKIP TO 452)		
451	Have you had sexual intercourse since the birth of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 453)		
452	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTHS . . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98	MONTHS . . . ☐☐ DON'T KNOW 98
453	Did you ever breastfeed (NAME)?	YES . . . . . 1 (SKIP TO 455) NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
454	CHECK 404: IS CHILD LIVING?	LIVING ☐ (SKIP TO 460) DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN; OR IF NO MORE BIRTHS, GO TO 501)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
455	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.	IMMEDIATELY .... 000 HOURS 1 ☐☐ DAYS 2 ☐☐		
456	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES ..... 1 NO ..... 2 (SKIP TO 458)		
457	What was (NAME) given to drink? Anything else? RECORD ALL LIQUIDS MENTIONED.	MILK (OTHER THAN BREAST MILK) .... A PLAIN WATER .... B SUGAR OR GLUCOSE WATER .... C GRIPE WATER .... D SUGAR-SALT-WATER SOLUTION ..... E FRUIT JUICE ..... F INFANT FORMULA .... G TEA/INFUSIONS .... H COFFEE ..... I HONEY ..... J OTHER _____ X (SPECIFY)		
458	CHECK 404: IS CHILD LIVING?	LIVING ☐ DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)	LIVING ☐ DEAD ☐ (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)	LIVING ☐ DEAD ☐ (GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501)
459	Are you still breastfeeding (NAME)?	YES ..... 1 NO 2		
460	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES ..... 1 NO ..... 2 DON'T KNOW 8	YES ..... 1 NO ..... 2 DON'T KNOW 8	YES ..... 1 NO ..... 2 DON'T KNOW 8
461		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501.

SECTION 5. CHILD IMMUNIZATION, HEALTH AND NUTRITION

501 ENTER IN THE TABLE THE BIRTH HISTORY NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2008 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH.
(IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
502	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY	BIRTH HISTORY NUMBER . . . . . ☐☐	BIRTH HISTORY NUMBER . . . . . ☐☐	BIRTH HISTORY NUMBER . . . . . ☐☐
503	FROM 212 AND 216	NAME _____ LIVING ☐ DEAD ☐ → (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 553)	NAME _____ LIVING ☐ DEAD ☐ → (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 553)	NAME _____ LIVING ☐ DEAD ☐ → (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE, OR IF NO MORE BIRTHS, GO TO 553)
504	Do you have a card where (NAME)'s vaccinations are written down? IF YES: May I see it please?	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 509) NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 509) NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 509) NO CARD 3
505	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 (SKIP TO 509) NO 2	YES . . . . . 1 (SKIP TO 509) NO 2	YES . . . . . 1 (SKIP TO 509) NO 2

506 (1) COPY DATES FROM THE CARD.
(2) WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.

	LAST BIRTH DAY	MONTH	YEAR		NEXT-TO-LAST BIRTH DAY	MONTH	YEAR		SECOND-FROM-LAST BIRTH DAY	MONTH	YEAR	
BCG	☐☐	☐☐	☐☐☐☐	BCG	☐☐	☐☐	☐☐☐☐	BCG	☐☐	☐☐	☐☐☐☐	
POLIO 0 (POLIO GIVEN AT BIRTH)	☐☐	☐☐	☐☐☐☐	P0	☐☐	☐☐	☐☐☐☐	P0	☐☐	☐☐	☐☐☐☐	
POLIO 1	☐☐	☐☐	☐☐☐☐	P1	☐☐	☐☐	☐☐☐☐	P1	☐☐	☐☐	☐☐☐☐	
POLIO 2	☐☐	☐☐	☐☐☐☐	P2	☐☐	☐☐	☐☐☐☐	P2	☐☐	☐☐	☐☐☐☐	
POLIO 3	☐☐	☐☐	☐☐☐☐	P3	☐☐	☐☐	☐☐☐☐	P3	☐☐	☐☐	☐☐☐☐	
DPT 1	☐☐	☐☐	☐☐☐☐	D1	☐☐	☐☐	☐☐☐☐	D1	☐☐	☐☐	☐☐☐☐	
DPT 2	☐☐	☐☐	☐☐☐☐	D2	☐☐	☐☐	☐☐☐☐	D2	☐☐	☐☐	☐☐☐☐	
DPT 3	☐☐	☐☐	☐☐☐☐	D3	☐☐	☐☐	☐☐☐☐	D3	☐☐	☐☐	☐☐☐☐	
HEP B 1	☐☐	☐☐	☐☐☐☐	H1	☐☐	☐☐	☐☐☐☐	H1	☐☐	☐☐	☐☐☐☐	
HEP B 2	☐☐	☐☐	☐☐☐☐	H2	☐☐	☐☐	☐☐☐☐	H2	☐☐	☐☐	☐☐☐☐	
HEP B 3	☐☐	☐☐	☐☐☐☐	H3	☐☐	☐☐	☐☐☐☐	H3	☐☐	☐☐	☐☐☐☐	
MEASLES	☐☐	☐☐	☐☐☐☐	MEA	☐☐	☐☐	☐☐☐☐	MEA	☐☐	☐☐	☐☐☐☐	
YELLOW FEVER	☐☐	☐☐	☐☐☐☐	YE F	☐☐	☐☐	☐☐☐☐	YE F	☐☐	☐☐	☐☐☐☐	
VITAMIN A (MOST RECENT)	☐☐	☐☐	☐☐☐☐	VIT A	☐☐	☐☐	☐☐☐☐	VIT A	☐☐	☐☐	☐☐☐☐	

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
507	CHECK 506:	BCG TO MEASLES ALL RECORDED ☐ → (GO TO 511) OTHER ☐	BCG TO MEASLES ALL RECORDED ☐ → (GO TO 511) OTHER ☐	BCG TO MEASLES ALL RECORDED ☐ → (GO TO 511) OTHER ☐

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
508	Has (NAME) had any vaccinations that are not recorded on this card, including vaccinations given in a national immunization day campaign? RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 506 THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	YES . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO . . . . 2 (SKIP TO 511) DON'T KNOW 8
509	Did (NAME) ever have any vaccinations to prevent him/her from getting diseases, including vaccinations received in a national immunization day campaign?	YES . . . . 1 NO . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 511) DON'T KNOW 8
510	Please tell me if (NAME) had any of the following vaccinations:			
510A	A BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
510B	Polio vaccine, that is, drops in the mouth?	YES . . . . 1 NO . . . . 2 (SKIP TO 510E) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 510E) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 510E) DON'T KNOW 8
510C	Was the first polio vaccine given in the first two weeks after birth or later?	FIRST 2 WEEKS . . . 1 LATER 2	FIRST 2 WEEKS . . . 1 LATER 2	FIRST 2 WEEKS . . . 1 LATER 2
510D	How many times was the polio vaccine given?	NUMBER OF TIMES . . . . . ☐	NUMBER OF TIMES . . . . . ☐	NUMBER OF TIMES . . . . . ☐
510E	A DPT vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as polio drops?	YES . . . . 1 NO . . . . 2 (SKIP TO 510G) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 510G) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 510G) DON'T KNOW 8
510F	How many times was the DPT vaccination given?	NUMBER OF TIMES . . . . . ☐	NUMBER OF TIMES . . . . . ☐	NUMBER OF TIMES . . . . . ☐
510G	A HEP B vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as DPT?	YES . . . . 1 NO . . . . 2 (SKIP TO 510I) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 510I) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 510I) DON'T KNOW 8
510H	How many times was the HEP B vaccination given?	NUMBER OF TIMES . . . . . ☐	NUMBER OF TIMES . . . . . ☐	NUMBER OF TIMES . . . . . ☐

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
510I	A measles injection or an MMR injection - that is, a shot in the arm at the age of 9 months or older - to prevent him/her from getting measles?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
510J	A yellow fever injection - that is, a shot in the arm at the age of 9 months or older - to prevent him/her from getting yellow fever?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
511	Within the last six months, was (NAME) given a vitamin A dose like (this/any of these)? SHOW COMMON TYPES OF CAPSULES.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
512	In the last seven days, was (NAME) given sprinkles with iron or any micronutrient powder like (this/any of these)? SHOW COMMON TYPES OF SPRINKLES SACHETS	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
512a	In the last seven days, was (NAME) given any ready to use therapeutic feeds like plumpy'nuts like (this/any of these)? SHOW THE PACKET	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
513	Was (NAME) given any drug for intestinal worms in the last six months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
514	Has (NAME) had diarrhea in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ← DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ← DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ← DON'T KNOW 8
515	Was there any blood in the stools?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
516	Now I would like to know how much (NAME) was given to drink during the diarrhea (including breastmilk). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
517	When (NAME) had diarrhea, was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8
518	Did you seek advice or treatment for the diarrhea from any source?	YES . . . . 1 NO . . . . 2 (SKIP TO 522)←	YES . . . . 1 NO . . . . 2 (SKIP TO 522)←	YES . . . . 1 NO . . . . 2 (SKIP TO 522)←
519	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. ________ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT HOSPITAL . . A GOVT HEALTH CENTER . . . . . B GOVT HEALTH POST . . . . C MOBILE CLINIC . D FIELDWORKER . E OTHER PUBLIC SECTOR ________ F (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC . . . . G PHARMACY . . . H CHEMIST/PMS . . . I PVT DOCTOR . . . J MOBILE CLINIC . K FIELDWORKER . L OTHER PRIVATE MED. SECTOR ________ M (SPECIFY) OTHER SOURCE SHOP . . . . N TRADITIONAL PRACTITIONER . O MARKET . . . . . P OTHER ________ X (SPECIFY)	PUBLIC SECTOR GOVT HOSPITAL . A GOVT HEALTH CENTER . . . . . B GOVT HEALTH POST . . . . C MOBILE CLINIC . D FIELDWORKER . E OTHER PUBLIC SECTOR ________ F (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC . . . . G PHARMACY . . . H CHEMIST/PMS . . . I PVT DOCTOR . . . J MOBILE CLINIC . K FIELDWORKER . L OTHER PRIVATE MED. SECTOR ________ M (SPECIFY) OTHER SOURCE SHOP . . . . N TRADITIONAL PRACTITIONER . O MARKET . . . . . P OTHER ________ X (SPECIFY)	PUBLIC SECTOR GOVT HOSPITAL . A GOVT HEALTH CENTER . . . . . B GOVT HEALTH POST . . . . C MOBILE CLINIC . D FIELDWORKER . E OTHER PUBLIC SECTOR ________ F (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC . . . . G PHARMACY . . . H CHEMIST/PMS . . . I PVT DOCTOR . . . J MOBILE CLINIC . K FIELDWORKER . L OTHER PRIVATE MED. SECTOR ________ M (SPECIFY) OTHER SOURCE SHOP . . . . N TRADITIONAL PRACTITIONER . O MARKET . . . . . P OTHER ________ X (SPECIFY)
519A	CHECK 519: CODES `H' AND/OR `I' CIRCLED	PHARMACY/ CHEMIST/ PMS CIRCLED ☐ ↓ PHARMACY/ CHEMIST/ PMS NOT CIRCLED ☐ (SKIP TO 520)←	PHARMACY/ CHEMIST/ PMS CIRCLED ☐ ↓ PHARMACY/ CHEMIST/ PMS NOT CIRCLED ☐ (SKIP TO 520)←	PHARMACY/ CHEMIST/ PMS CIRCLED ☐ ↓ PHARMACY/ CHEMIST/ PMS NOT CIRCLED ☐ (SKIP TO 520)←

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
519B	At the Pharmacy/Chemist/Patent Medicine Stores (PMS): a. Was (NAME) examined? b. Did you get advice on type of medication to buy? c. Did you know exactly what medication to buy and only went there to buy it?	YES NO DK 1 2 8 1 2 8 1 2 8	YES NO DK 1 2 8 1 2 8 1 2 8	YES NO DK 1 2 8 1 2 8 1 2 8
520	CHECK 519:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 522)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 522)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 522)
521	Where did you first seek advice or treatment? USE LETTER CODE FROM 519.	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐
521A	How many days after the diarrhea began did you first seek advice or treatment for (NAME)? IF THE SAME DAY, RECORD '00'.	DAYS . . . . . ☐☐	DAYS . . . . . ☐☐	DAYS . . . . . ☐☐
522	Was he/she given any of the following to drink at any time since he/she started having the diarrhea: a) A fluid made from a special packet called ORS? b) A government-recommended homemade fluid?	YES NO DK FLUID FROM ORS PKT 1 2 8 HOMEMADE FLUID . . . 1 2 8	YES NO DK FLUID FROM ORS PKT 1 2 8 HOMEMADE FLUID . . . 1 2 8	YES NO DK FLUID FROM ORS PKT 1 2 8 HOMEMADE FLUID . . . 1 2 8
523	Was anything (else) given to treat the diarrhea?	YES . . . . 1 NO . . . . 2 (SKIP TO 525) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 525) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (SKIP TO 525) DON'T KNOW 8
524	What (else) was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS GIVEN.	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY . . . B ZINC . . . . C OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY, OR ZINC) . . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC . G UNKNOWN INJECTION . . . H (IV) INTRAVENOUS I HOME REMEDY/ HERBAL MEDICINE J OTHER ______ X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY . . . B ZINC . . . . C OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY, OR ZINC) . . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC . G UNKNOWN INJECTION . . . H (IV) INTRAVENOUS I HOME REMEDY/ HERBAL MEDICINE J OTHER ______ X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY . . . B ZINC . . . . C OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY, OR ZINC) . . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC . G UNKNOWN INJECTION . . . H (IV) INTRAVENOUS I HOME REMEDY/ HERBAL MEDICINE J OTHER ______ X (SPECIFY)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
525	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 527) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 527) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 527) DON'T KNOW 8
526	At any time during the illness, did (NAME) have blood taken from his/her finger or heel for testing?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
527	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) DON'T KNOW 8
528	When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficulty breathing?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 531) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 531) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 531) DON'T KNOW 8
529	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER ________ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 531)	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER ________ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 531)	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER ________ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 531)
530	CHECK 525: HAD FEVER?	YES ☐ NO OR DK ☐ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	YES ☐ NO OR DK ☐ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	YES ☐ NO OR DK ☐ (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553)
531	Now I would like to know how much (NAME) was given to drink (including breastmilk) during the illness with a (fever/cough). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8
532	When (NAME) had a (fever/cough), was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE . . . . . 4 STOPPED FOOD . . . 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE . . . . . 4 STOPPED FOOD . . . 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . 2 ABOUT THE SAME . 3 MORE . . . . . 4 STOPPED FOOD . . . 5 NEVER GAVE FOOD 6 DON'T KNOW 8
533	Did you seek advice or treatment for the illness from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 537)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 537)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 537)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
534	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. ________ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTER . . . . . B GOVT HEALTH POST . . . . C MOBILE CLINIC . D FIELDWORKER . E OTHER PUBLIC SECTOR ________ F (SPECIFY) PRIVATE MEDICAL SECTOR PVT HOSPITAL/ CLINIC . . . . G PHARMACY . . . H CHEMIST/PMS . . . I PVT DOCTOR . . . J MOBILE CLINIC . K FIELDWORKER . L OTHER PRIVATE MED. SECTOR ________ M (SPECIFY) OTHER SOURCE SHOP . . . . N TRADITIONAL PRACTITIONER O MARKET . . . . . P OTHER ________ X (SPECIFY)	PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTER . . . . . B GOVT HEALTH POST . . . . C MOBILE CLINIC . D FIELDWORKER . E OTHER PUBLIC SECTOR ________ F (SPECIFY) PRIVATE MEDICAL SECTOR PVT HOSPITAL/ CLINIC . . . . G PHARMACY . . . H CHEMIST/PMS . . . I PVT DOCTOR . . . J MOBILE CLINIC . K FIELDWORKER . L OTHER PRIVATE MED. SECTOR ________ M (SPECIFY) OTHER SOURCE SHOP . . . . N TRADITIONAL PRACTITIONER O MARKET . . . . . P OTHER ________ X (SPECIFY)	PUBLIC SECTOR GOVT HOSPITAL A GOVT HEALTH CENTER . . . . . B GOVT HEALTH POST . . . . C MOBILE CLINIC . D FIELDWORKER . E OTHER PUBLIC SECTOR ________ F (SPECIFY) PRIVATE MEDICAL SECTOR PVT HOSPITAL/ CLINIC . . . . G PHARMACY . . . H CHEMIST/PMS . . . I PVT DOCTOR . . . J MOBILE CLINIC . K FIELDWORKER . L OTHER PRIVATE MED. SECTOR ________ M (SPECIFY) OTHER SOURCE SHOP . . . . N TRADITIONAL PRACTITIONER O MARKET . . . . . P OTHER ________ X (SPECIFY)
534A	CHECK 534: CODES `H' AND/OR `I' CIRCLED	PHARMACY/ CHEMIST/ PMS CIRCLED ☐ ↓ PHARMACY/ CHEMIST/ PMS NOT CIRCLED ☐ (SKIP TO 535)	PHARMACY/ CHEMIST/ PMS CIRCLED ☐ ↓ PHARMACY/ CHEMIST/ PMS NOT CIRCLED ☐ (SKIP TO 535)	PHARMACY/ CHEMIST/ PMS CIRCLED ☐ ↓ PHARMACY/ CHEMIST/ PMS NOT CIRCLED ☐ (SKIP TO 535)
534B	At the Pharmacy/Chemist/Patent Medicine Stores (PMS):	YES NO DK	YES NO DK	YES NO DK
	a. Was (NAME) examined?	1 2 8	1 2 8	1 2 8
	b. Did you get advice on type of medication to buy?	1 2 8	1 2 8	1 2 8
	c. Did you know exactly what medication to buy and only went there to buy it?	1 2 8	1 2 8	1 2 8
535	CHECK 534:	TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐ (SKIP TO 537)	TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐ (SKIP TO 537)	TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐ (SKIP TO 537)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
536	Where did you first seek advice or treatment? USE LETTER CODE FROM 534.	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐
537	At any time during the illness, did (NAME) take any drugs for the illness?	YES . . . . 1 NO . . . . 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553) DON'T KNOW 8	YES . . . . 1 NO . . . . 2 (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553) DON'T KNOW 8
538	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	ANTIMALARIAL DRUGS SP/FANSIDAR AMALAR/ MALOXINE . . . A CHLOROQUINE . B AMODIAQUINE . C QUININE . . . . D ARTEMISININ COMBINATION THERAPY . . . E OTHER ANTI-MALARIAL ________ . . . F (SPECIFY) ANTIBIOTIC DRUGS PILL/SYRUP . . . G INJECTION . . . H OTHER DRUGS ASPIRIN . . . . I PARA-CETAMOL . . . J IBUPROFEN . . . K OTHER ________ X (SPECIFY) DON'T KNOW . . . . . Z	ANTIMALARIAL DRUGS SP/FANSIDAR AMALAR/ MALOXINE . . . A CHLOROQUINE . B AMODIAQUINE . C QUININE . . . . D ARTEMISININ COMBINATION THERAPY . . . E OTHER ANTI-MALARIAL ________ . . . F (SPECIFY) ANTIBIOTIC DRUGS PILL/SYRUP . . . G INJECTION . . . H OTHER DRUGS ASPIRIN . . . . I PARA-CETAMOL . . . J IBUPROFEN . . . K OTHER ________ X (SPECIFY) DON'T KNOW . . . . . Z	ANTIMALARIAL DRUGS SP/FANSIDAR AMALAR/ MALOXINE . . . A CHLOROQUINE . B AMODIAQUINE . C QUININE . . . . D ARTEMISININ COMBINATION THERAPY . . . E OTHER ANTI-MALARIAL ________ . . . F (SPECIFY) ANTIBIOTIC DRUGS PILL/SYRUP . . . G INJECTION . . . H OTHER DRUGS ASPIRIN . . . . I PARA-CETAMOL . . . J IBUPROFEN . . . K OTHER ________ X (SPECIFY) DON'T KNOW . . . . . Z
539	CHECK 538: ANY CODE A-F CIRCLED?	YES ☐ NO ☐ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	YES ☐ NO ☐ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	YES ☐ NO ☐ (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
540	CHECK 538: SP/FANSIDAR/AMALAR/ MALOXINE ('A') GIVEN	CODE 'A' CIRCLED ☐ CODE 'A' NOT CIRCLED ☐ (SKIP TO 542)	CODE 'A' CIRCLED ☐ CODE 'A' NOT CIRCLED ☐ (SKIP TO 542)	CODE 'A' CIRCLED ☐ CODE 'A' NOT CIRCLED ☐ (SKIP TO 542)
541	How long after the fever started did (NAME) first take SP/Fansidar/Amalar/Maloxine?	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8
541A	For how many days did (NAME) take the SP/Fansidar/Amalar/ Maloxine? IF 7 DAYS OR MORE, RECORD 7.	DAYS . . . . ☐ DON'T KNOW . . . 8	DAYS . . . . ☐ DON'T KNOW . . . 8	DAYS . . . . ☐ DON'T KNOW . . . 8
542	CHECK 538: CHLOROQUINE ('B') GIVEN	CODE 'B' CIRCLED ☐ CODE 'B' NOT CIRCLED ☐ (SKIP TO 544)	CODE 'B' CIRCLED ☐ CODE 'B' NOT CIRCLED ☐ (SKIP TO 544)	CODE 'B' CIRCLED ☐ CODE 'B' NOT CIRCLED ☐ (SKIP TO 544)
543	How long after the fever started did (NAME) first take chloroquine?	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8
543A	For how many days did (NAME) take the chloroquine? IF 7 DAYS OR MORE, RECORD 7.	DAYS . . . . ☐ DON'T KNOW . . . 8	DAYS . . . . ☐ DON'T KNOW . . . 8	DAYS . . . . ☐ DON'T KNOW . . . 8
544	CHECK 538: AMODIAQUINE ('C') GIVEN	CODE 'C' CIRCLED ☐ CODE 'C' NOT CIRCLED ☐ (SKIP TO 546)	CODE 'C' CIRCLED ☐ CODE 'C' NOT CIRCLED ☐ (SKIP TO 546)	CODE 'C' CIRCLED ☐ CODE 'C' NOT CIRCLED ☐ (SKIP TO 546)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ________	NEXT-TO-LAST BIRTH NAME ________	SECOND-FROM-LAST BIRTH NAME ________
545	How long after the fever started did (NAME) first take amodiaquine?	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8
545A	For how many days did (NAME) take the Amodiaquine? IF 7 DAYS OR MORE, RECORD 7.	DAYS . . . . [ ] DON'T KNOW . . . 8	DAYS . . . . [ ] DON'T KNOW . . . 8	DAYS . . . . [ ] DON'T KNOW . . . 8
546	CHECK 538: QUININE ('D') GIVEN	CODE 'D' CIRCLED [ ] ↓ CODE 'D' NOT CIRCLED [ ] (SKIP TO 548)	CODE 'D' CIRCLED [ ] ↓ CODE 'D' NOT CIRCLED [ ] (SKIP TO 548)	CODE 'D' CIRCLED [ ] ↓ CODE 'D' NOT CIRCLED [ ] (SKIP TO 548)
547	How long after the fever started did (NAME) first take quinine?	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8
547A	For how many days did (NAME) take the quinine? IF 7 DAYS OR MORE, RECORD 7.	DAYS . . . . [ ] DON'T KNOW . . . 8	DAYS . . . . [ ] DON'T KNOW . . . 8	DAYS . . . . [ ] DON'T KNOW . . . 8
548	CHECK 538: COMBINATION WITH ARTEMISININ ('E') GIVEN	CODE 'E' CIRCLED [ ] ↓ CODE 'E' NOT CIRCLED [ ] (SKIP TO 550)	CODE 'E' CIRCLED [ ] ↓ CODE 'E' NOT CIRCLED [ ] (SKIP TO 550)	CODE 'E' CIRCLED [ ] ↓ CODE 'E' NOT CIRCLED [ ] (SKIP TO 550)
549	How long after the fever started did (NAME) first take (COMBINATION WITH ARTEMISININ)?	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8
549A	For how many days did (NAME) take the (ARTEMISININ COMBINATION THERAPY (ACT))? IF 7 DAYS OR MORE, RECORD	DAYS . . . . [ ] DON'T KNOW . . . 8	DAYS . . . . [ ] DON'T KNOW . . . 8	DAYS . . . . [ ] DON'T KNOW . . . 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME ______	NEXT-TO-LAST BIRTH NAME ______	SECOND-FROM-LAST BIRTH NAME ______
550	CHECK 538: OTHER ANTIMALARIAL ('F') GIVEN	CODE 'F' CIRCLED ☐ CODE 'F' NOT CIRCLED ☐ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	CODE 'F' CIRCLED ☐ CODE 'F' NOT CIRCLED ☐ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	CODE 'F' CIRCLED ☐ CODE 'F' NOT CIRCLED ☐ (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553)
551	How long after the fever started did (NAME) first take (OTHER ANTIMALARIAL)?	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8	SAME DAY . . . . 0 NEXT DAY . . . . 1 TWO DAYS AFTER FEVER . . . . 2 THREE OR MORE DAYS AFTER FEVER . . . . 3 DON'T KNOW . . . 8
551A	For how many days did (NAME) take the (OTHER ANTIMALARIAL)? IF 7 DAYS OR MORE, RECORD	DAYS . . . . ☐ DON'T KNOW . . . 8	DAYS . . . . ☐ DON'T KNOW . . . 8	DAYS . . . . ☐ DON'T KNOW . . . 8
552		GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553.	GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553.	GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
553	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2008 OR LATER LIVING WITH THE RESPONDENT ONE OR MORE ☐ NONE ☐ → 556 RECORD NAME OF YOUNGEST CHILD LIVING WITH HER AND CONTINUE WITH 554 _____ (NAME)		
554	The last time (NAME FROM 553) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE . . . 01 PUT/RINSED INTO TOILET OR LATRINE . . . . . 02 PUT/RINSED INTO DRAIN OR DITCH . . . . . 03 THROWN INTO GARBAGE . . . . . 04 BURIED . . . . . 05 LEFT IN THE OPEN . . . . . 06 RIVER/RIVER BANKS . . . . . 07 OTHER _____ 96 (SPECIFY)	
555	CHECK 522(a), ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET ☐ ANY CHILD RECEIVED FLUID FROM ORS PACKET ☐ → 557		
556	Have you ever heard of a special product called [LOCAL NAME FOR ORS PACKET] you can get for the treatment of diarrhea?	YES . . . . . 1 NO 2	
557	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2011 OR LATER LIVING WITH THE RESPONDENT ONE OR MORE ☐ NONE ☐ → 601 RECORD NAME OF YOUNGEST CHILD LIVING WITH HER AND CONTINUE WITH 558 _____ (NAME)		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
558	Now I would like to ask you about liquids or foods that (NAME FROM 557) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods. Did (NAME FROM 557) (drink/eat):	YES NO DK	
	a) Plain water?	**a)** 1 2 8	
	b) Juice or juice drinks?	**b)** 1 2 8	
	c) Clear broth (liquid derived from cooking meat, fish, and vegtables)?	**c)** 1 2 8	
	d) Milk such as tinned, powdered, or fresh animal milk?	**d)** 1 2 8	
	IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DRANK MILK ☐	
	e) Infant formula (Nan, SMA Gold, My Boy, Friso, Lactogen, Peak Milk 123, Cow and Gate, etc.)?	**e)** 1 2 8	
	IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DRANK FORMULA ☐	
	f) Any other liquids?	**f)** 1 2 8	
	g) Yogurt?	**g)** 1 2 8	
	IF YES: How many times did (NAME) take yogurt? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES ATE YOGURT ☐	
	h) Any [Commercially fortified baby food like Cerelac, Nutren, Frisolac H, Weatabix, etc.]?	**h)** 1 2 8	
	i) Bread, rice, noodles, porridge, or other foods made from grains [e.g. millet, sorghum, maize, wheat etc.]?	**i)** 1 2 8	
	j) Pumpkin, carrots, squash or sweet potatoes that are yellow or orange inside?	**j)** 1 2 8	
	k) Irish/white potatoes, white yams, cassava, cocoyam, or any other foods made from roots?	**k)** 1 2 8	
	l) Any dark green, leafy vegetables like spinach, pumpkin leaf etc.?	**l)** 1 2 8	
	m) Ripe mangoes, pawpaw, or palm-nuts etc.?	**m)** 1 2 8	
	n) Any other fruits or vegetables [e.g. bananas, plantains, watermelon, apples/sauce, green beans, avocados, tomatoes]?	**n)** 1 2 8	
	o) Liver, kidney, heart or other organ meats?	**o)** 1 2 8	
	p) Any meat, such as beef, pork, lamb, goat, chicken, or duck?	**p)** 1 2 8	
	q) Eggs?	**q)** 1 2 8	
	r) Fresh or dried fish or shellfish?	**r)** 1 2 8	
	s) Any foods made from beans, peas, lentils, or nuts like moimoi, akara?	**s)** 1 2 8	
	t) Cheese or other food made from milk?	**t)** 1 2 8	
	u) Any other solid, semi-solid, or soft food?	**u)** 1 2 8	
559	CHECK 558 (CATEGORIES "g" THROUGH "u"): NOT A SINGLE "YES" ☐ ↓ AT LEAST ONE "YES" ☐ →		561

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
560	Did (NAME) eat any solid, semi-solid, or soft foods yesterday during the day or at night? IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?	YES . . . . . 1 (GO BACK TO 558 TO RECORD FOOD EATEN YESTERDAY) NO . . . . . 2 → 601	
561	How many times did (NAME FROM 557) eat solid, semi-solid, or soft foods yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES . . . . . ☐ DON'T KNOW 8	

SECTION 6. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A MAN . . . . . 2 NO, NOT IN UNION 3	→ 604
602	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A MAN . . . . . 2 NO 3	→ 612
603	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 609
604	Is your (husband/partner) living with you now or is he staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	
605	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO.	
606	Does your (husband/partner) have other wives or does he live with other women as if married?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 609
607	Including yourself, in total, how many wives or live-in partners does he have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS . . . . . DON'T KNOW 98	
608	Are you the first, second, … wife?	RANK	
609	Have you been married or lived with a man only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	→ 609B
609A	CHECK 603: IS RESPONDENT CURRENTLY WIDOWED? CURRENTLY WIDOWED → 609D NOT ASKED OR CURRENTLY DIVORCED/ SEPARATED → 610		
609B	CHECK 603: IS RESPONDENT CURRENTLY WIDOWED? CURRENTLY WIDOWED → 609D NOT ASKED CURRENTLY DIVORCED/ SEPARATED → 610		
609C	How did your previous marriage or union end?	DEATH . . . . . 1 DIVORCE . . . . . 2 SEPARATION 3	→ 610

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
609D	To whom did most of your late husband's property go?	RESPONDENT . . . . . 1 OTHER WIFE . . . . . 2 SPOUSE'S CHILDREN . . . . . 3 SPOUSE'S FAMILY . . . . . 4 NO PROPERTY . . . . . 5 OTHER _____ 6 (SPECIFY)	→ 610
609E	Did you receive any of your late husband's assets or valuables?	YES . . . . . 1 NO 2	
610	CHECK 609: MARRIED/ LIVED WITH A MAN ONLY ONCE → In what month and year did you start living with your (husband/partner)? MARRIED/ LIVED WITH A MAN MORE THAN ONCE → Now I would like to ask about your first (husband/partner). In what month and year did you start living with him?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	→ 612
611	How old were you when you first started living with him?	AGE . . . . . ☐☐	
612	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
613	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS . . . . . ☐☐ FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/PARTNER 95	→ 628
614	Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.		
615	When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 ☐☐ WEEKS AGO . . . . . 2 ☐☐ MONTHS AGO . . . . . 3 ☐☐ YEARS AGO . . . . . 4 ☐☐	→ 627

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
616	When was the last time you had sexual intercourse with this person?		DAYS AGO . . . 1 WEEKS AGO . . . 2 MONTHS AGO . . . 3	DAYS AGO . . . 1 WEEKS AGO . . . 2 MONTHS AGO . . . 3
617	The last time you had sexual intercourse (with this second/third person), was a condom used?	YES . . . . 1 NO . . . . 2 (SKIP TO 619)	YES . . . . 1 NO . . . . 2 (SKIP TO 619)	YES . . . . 1 NO . . . . 2 (SKIP TO 619)
618	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2
619	What was your relationship to this person with whom you had sexual intercourse? IF BOYFRIEND: Were you living together as if married? IF YES, CIRCLE '2'. IF NO, CIRCLE '3'.	HUSBAND . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER ______ 6 (SPECIFY) (SKIP TO 622)	HUSBAND . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER ______ 6 (SPECIFY) (SKIP TO 622)	HUSBAND . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER ______ 6 (SPECIFY) (SKIP TO 622)
620	CHECK 609:	MARRIED ONLY ONCE ☐ MARRIED MORE THAN ONCE ☐ (SKIP TO 622)	MARRIED ONLY ONCE ☐ MARRIED MORE THAN ONCE ☐ (SKIP TO 622)	MARRIED ONLY ONCE ☐ MARRIED MORE THAN ONCE ☐ (SKIP TO 622)
621	CHECK 613:	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND ☐ (SKIP TO 623) OTHER ☐	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND ☐ (SKIP TO 623) OTHER ☐	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND ☐ (SKIP TO 623) OTHER ☐
622	How long ago did you first have sexual intercourse with this (second/third) person?	DAYS AGO . . . 1 WEEKS AGO . . . 2 MONTHS AGO . . . 3 YEARS AGO . . . 4	DAYS AGO . . . 1 WEEKS AGO . . . 2 MONTHS AGO . . . 3 YEARS AGO . . . 4	DAYS AGO . . . 1 WEEKS AGO . . . 2 MONTHS AGO . . . 3 YEARS AGO . . . 4
623	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, WRITE '95'.	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
624	How old is this person?	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98
625	Apart from (this person/these two people), have you had sexual intercourse with any other person in the last 12 months?	YES . . . . 1 (GO BACK TO 616 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 627)	YES . . . . 1 (GO BACK TO 616 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 627)	
626	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . . DON'T KNOW . . . 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
627	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . [ ][ ] DON'T KNOW 98	
628	PRESENCE OF OTHERS DURING THIS SECTION	YES NO CHILDREN <10 . . . . . 1 2 MALE ADULTS . . . . . 1 2 FEMALE ADULTS 1 2	
629	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	→ 632
630	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . A GOVT. HEALTH CENTER . . . . . B FAMILY PLANNING CLINIC . . . . . C MOBILE CLINIC . . . . . D FIELDWORKER . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . G PHARMACY . . . . . H CHEMIST/PMS . . . . . I PRIVATE DOCTOR . . . . . J MOBILE CLINIC . . . . . K FIELDWORKER . . . . . L OTHER PRIVATE MEDICAL SECTOR _____ M (SPECIFY) OTHER SOURCE SHOP . . . . . N CHURCH . . . . . O FRIENDS/RELATIVES . . . . . P NGO . . . . . Q OTHER _____ X (SPECIFY)	
631	If you wanted to, could you yourself get a condom?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	
632	Do you know of a place where a person can get female condoms?	YES . . . . . 1 NO 2	→ 701

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
633	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . A GOVT. HEALTH CENTER . . . . . B FAMILY PLANNING CLINIC . . . . . C MOBILE CLINIC . . . . . D FIELDWORKER . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . G PHARMACY . . . . . H CHEMIST/PMS . . . . . I PRIVATE DOCTOR . . . . . J MOBILE CLINIC . . . . . K FIELDWORKER . . . . . L OTHER PRIVATE MEDICAL SECTOR _____ M (SPECIFY) OTHER SOURCE SHOP . . . . . N CHURCH . . . . . O FRIENDS/RELATIVES . . . . . P NGO . . . . . Q OTHER _____ X (SPECIFY)	
634	If you wanted to, could you yourself get a female condom?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	

SECTION 7. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 304: NEITHER STERILIZED HE OR SHE STERILIZED		→ 712
702	CHECK 226: PREGNANT NOT PREGNANT OR UNSURE		→ 704
703	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 705 → 711
704	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS SHE CAN'T GET PREGNANT 3 UNDECIDED/DON'T KNOW 8	→ 707 → 712 → 710
705	CHECK 226: NOT PREGNANT OR UNSURE: How long would you like to wait from now before the birth of (a/another) child? PREGNANT: After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS SHE CAN'T GET PREGNANT 994 AFTER MARRIAGE . . . . . 995 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 710 → 712 → 710
706	CHECK 226: NOT PREGNANT OR UNSURE PREGNANT		→ 711
707	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT CURRENTLY USING CURRENTLY USING		→ 712
708	CHECK 705: NOT ASKED 24 OR MORE MONTHS OR 02 OR MORE YEARS 00-23 MONTHS OR 00-01 YEAR		→ 711

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
709	CHECK 704: WANTS TO HAVE A/ANOTHER CHILD ☐↓ — You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? WANTS NO MORE/ NONE ☐↓ — You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? RECORD ALL REASONS MENTIONED.	NOT MARRIED . . . . . A FERTILITY-RELATED REASONS NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY D CAN'T GET PREGNANT . . . . . E NOT MENSTRUATED SINCE LAST BIRTH . . . . . F BREASTFEEDING . . . . . G UP TO GOD/FATALISTIC . . . . . H OPPOSITION TO USE RESPONDENT OPPOSED . . . . . I HUSBAND/PARTNER OPPOSED . . . J OTHERS OPPOSED . . . . . K RELIGIOUS PROHIBITION . . . . . L LACK OF KNOWLEDGE KNOWS NO METHOD . . . . . M KNOWS NO SOURCE . . . . . N METHOD-RELATED REASONS SIDE EFFECTS/HEALTH CONCERNS . . . . . O LACK OF ACCESS/TOO FAR . . . . . P COSTS TOO MUCH . . . . . Q PREFERRED METHOD NOT AVAILABLE . . . . . R NO METHOD AVAILABLE . . . . . S INCONVENIENT TO USE . . . . . T INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . U OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
710	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ASKED ☐↓ — NO, NOT CURRENTLY USING ☐↓ — YES, CURRENTLY USING ☐ → 712		
711	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
712	CHECK 216: HAS LIVING CHILDREN ☐↓ — If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐↓ — If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 → 714 NUMBER . . . . . ☐☐ OTHER _____ 96 → 714 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
713	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	
714	In the last few months have you: Heard about family planning on the radio? Seen anything about family planning on the television? Read about family planning in a newspaper or magazine? Read about family planning in a poster? Read about family planning in leaflets and brochures? Heard about family planning from town crier? Heard about family planning from mobile public announcement?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 2 POSTER . . . . . 1 2 LEAFLETS OR BROCHURES . . . 1 2 TOWN CRIER . . . . . 1 2 MOBILE PUBLIC ANNOUNCEMENT 1 2	
715	CHECK 714: AT LEAST ONE "YES" (HAS HEARD OR READ MESSAGE) ☐ NOT A SINGLE "YES" (HAS **NOT** HEARD OR READ MESSAGE) ☐ → 716		
715A	Please tell me which family planning messages you have heard or seen in the past few months? PROBE: Any others? PROBE UNTIL YOU HAVE EXHAUSTED ALL ANSWERS.	AS FOR ME AND MY PARTNER WE "DEY KAMPE" WITH FEMALE CONDOM. . . . . A UNSPACED CHILDREN MAKES THE GOING TOUGH. FOR THE LOVE OF YOUR FAMILY, GO FOR CHILD SPACING TODAY. . . . . B WELL-SPACED CHILDREN ARE EVERY PARENT'S JOY. . . . . C IT'S NOT TOO LATE TO PREVENT UNWANTED PREGNANCY. . . . . D WHY IS YOUR WIFE LOOKING SO GOOD? . . . . . E OTHER _____ . X (SPECIFY)	
716	CHECK 601: YES, CURRENTLY MARRIED ☐ YES, LIVING WITH A MAN ☐ NO, NOT IN UNION ☐ → 801		
717	CHECK 303: USING A CONTRACEPTIVE METHOD? CURRENTLY USING ☐ NOT CURRENTLY USING OR NOT ASKED ☐ → 720		
718	Would you say that using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ 6 (SPECIFY)	
719	CHECK 304: NEITHER STERILIZED ☐ HE OR SHE STERILIZED ☐ → 801		
720	Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER . . . . . 1 MORE CHILDREN . . . . . 2 FEWER CHILDREN . . . . . 3 DON'T KNOW 8	

SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 601 AND 602: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ FORMERLY MARRIED/ LIVED WITH A MAN ☐ → 803 NEVER MARRIED AND NEVER LIVED WITH A MAN ☐ → 807		
802	How old was your (husband/partner) on his last birthday?	AGE IN COMPLETED YEARS ☐☐	
803	Did your (last) (husband/partner) ever attend school?	YES . . . . . 1 NO 2	→ 806
804	What was the highest level of school he attended: primary, secondary, or higher?	PRIMARY . . . . . 1 SECONDARY . . . . . 2 HIGHER . . . . . 3 DON'T KNOW 8	→ 806
805	What was the highest (class/year) he completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	CLASS/YEAR . . . . . ☐☐ DON'T KNOW 98	
806	CHECK 801: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ What is your (husband's/ partner's) occupation? That is, what kind of work does he mainly do? FORMERLY MARRIED/ LIVED WITH A MAN ☐ ↓ What was your (last) (husband's/ partner's) occupation? That is, what kind of work did he mainly do?	_____ ☐☐☐ _____ _____	
807	Aside from your own housework, have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 811
808	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES . . . . . 1 NO 2	→ 811
809	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES . . . . . 1 NO 2	→ 811
810	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 815
811	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐☐ _____ _____	
812	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 FOR SOMEONE ELSE . . . . . 2 SELF-EMPLOYED 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
813	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . 2 ONCE IN A WHILE 3	
814	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
815	CHECK 601: CURRENTLY MARRIED/LIVING WITH A MAN ☐ NOT IN UNION ☐		→ 823
816	CHECK 814: CODE 1 OR 2 CIRCLED ☐ OTHER ☐		→ 819
817	Who usually decides how the money you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 OTHER _____ 6 (SPECIFY)	
818	Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same?	MORE THAN HIM . . . . . 1 LESS THAN HIM . . . . . 2 ABOUT THE SAME . . . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 DON'T KNOW 8	→ 820
819	Who usually decides how your (husband's/partner's) earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 OTHER _____ 6 (SPECIFY)	
820	Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
821	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
822	Who usually makes decisions about visits to your family or relatives?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
823	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
824	Do you own any land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
825	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ LISTEN. / PRES./ NOT LISTEN. / NOT PRES. CHILDREN < 10 . . . . . 1 2 3 HUSBAND . . . . . 1 2 3 OTHER MALES . . . . . 1 2 3 OTHER FEMALES . . . 1 2 3	
826	In your opinion, is a husband justified in hitting or beating his wife in the following situations: If she goes out without telling him? If she neglects the children? If she argues with him? If she refuses to have sex with him? If she burns the food?	YES / NO / DK GOES OUT . . . . . 1 2 8 NEGL. CHILDREN . . . 1 2 8 ARGUES . . . . . 1 2 8 REFUSES SEX . . . . . 1 2 8 BURNS FOOD 1 2 8	

SECTION 9. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES . . . . . 1 NO 2	→ 937
902	Can people reduce their chance of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
903	Can people get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
904	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
905	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
906	Can people get the AIDS virus because of witchcraft or other supernatural means?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
907	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
908	Can the virus that causes AIDS be transmitted from a mother to her baby: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREG. . . . . 1 2 8 DURING DELIVERY . . . 1 2 8 BREASTFEEDING . . . 1 2 8	
909	CHECK 908: AT LEAST ONE 'YES' ☐ OTHER ☐	→ 911	
910	Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
911	CHECK 208 AND 215: NO BIRTHS ☐ LAST BIRTH SINCE JANUARY 2008 ☐ LAST BIRTH BEFORE JANUARY 2008 ☐	→ 926 → 926	
912	CHECK 408 FOR LAST BIRTH: HAD ANTENATAL CARE ☐ NO ANTENATAL CARE ☐	→ 920	
913	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
914	During any of the antenatal visits for your last birth were you given any information about: Babies getting the AIDS virus from their mother? Things that you can do to prevent getting the AIDS virus? Getting tested for the AIDS virus?	YES NO DK AIDS FROM MOTHER 1 2 8 THINGS TO DO 1 2 8 TESTED FOR AIDS 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
915	Were you offered a test for the AIDS virus as part of your antenatal care?	YES . . . . . 1 NO 2	
916	I don't want to know the results, but were you tested for the AIDS virus as part of your antenatal care?	YES . . . . . 1 NO 2	→ 920
917	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . 11 GOVT. HEALTH CENTER . . . . . 12 STAND-ALONE VCT CENTER . . . 13 FAMILY PLANNING CLINIC . . . . . 14 MOBILE CLINIC . . . . . 15 FIELDWORKER . . . . . 16 SCHOOL BASED CLINIC . . . . . 17 OTHER PUBLIC SECTOR _____ 18 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . 21 STAND-ALONE VCT CENTER . . . . . 22 PHARMACY . . . . . 23 MOBILE CLINIC . . . . . 24 FIELDWORKER . . . . . 25 SCHOOL BASED CLINIC . . . . . 26 OTHER PRIVATE MEDICAL SECTOR _____ 27 (SPECIFY) OTHER SOURCE HOME . . . . . 31 CORRECTIONAL FACILITY . . . . . 32 OTHER _____ 96 (SPECIFY)	
918	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	→ 924
919	All women are supposed to receive counseling after being tested. After you were tested, did you receive counseling?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 924
920	CHECK 434 FOR LAST BIRTH: ANY CODE 21-36 CIRCLED OTHER		→ 926
921	Between the time you went for delivery but before the baby was born, were you offered a test for the AIDS virus?	YES . . . . . 1 NO 2	
922	I don't want to know the results, but were you tested for the AIDS virus at that time?	YES . . . . . 1 NO 2	→ 926
923	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	
924	Have you been tested for the AIDS virus since that time you were tested during your pregnancy?	YES . . . . . 1 NO 2	→ 927
925	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	→ 932

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
926	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES . . . . . 1 NO 2	→ 930
927	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . [ ][ ] TWO OR MORE YEARS 95	
928	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	
929	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . 11 GOVT. HEALTH CENTER . . . . . 12 STAND-ALONE VCT CENTER . . . . . 13 FAMILY PLANNING CLINIC . . . . . 14 MOBILE CLINIC . . . . . 15 FIELDWORKER . . . . . 16 SCHOOL BASED CLINIC . . . . . 17 OTHER PUBLIC SECTOR _____ 18 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . 21 STAND-ALONE VCT CENTER . . . . . 22 PHARMACY . . . . . 23 MOBILE CLINIC . . . . . 24 FIELDWORKER . . . . . 25 SCHOOL BASED CLINIC . . . . . 26 OTHER PRIVATE MEDICAL SECTOR _____ 27 (SPECIFY) OTHER SOURCE HOME . . . . . 31 CORRECTIONAL FACILITY . . . . . 32 OTHER _____ 96 (SPECIFY)	→ 932
930	Do you know of a place where people can go to get tested for the AIDS virus?	YES . . . . . 1 NO 2	→ 932

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
931	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . A GOVT. HEALTH CENTER . . . . . B STAND-ALONE VCT CENTER . . . . . C FAMILY PLANNING CLINIC . . . . . D MOBILE CLINIC . . . . . E FIELDWORKER . . . . . F OTHER PUBLIC SECTOR _____ G (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . H STAND-ALONE VCT CENTER . . . . . I PHARMACY . . . . . J MOBILE CLINIC . . . . . K FIELDWORKER . . . . . L OTHER PRIVATE MEDICAL SECTOR _____ M (SPECIFY) OTHER _____ X (SPECIFY)	
932	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
933	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
934	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
935	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED . . . . . 1 SHOULD NOT BE ALLOWED . . . . . 2 DK/NOT SURE/DEPENDS 8	
935A	Do you personally know someone who has been denied health services in the last 12 months because he or she has or is suspected to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DK ANYONE WITH AIDS 3	→ 935F
935B	Do you personally know someone who has been denied involvement in social events, religious services, or community events in the last 12 months because he or she has or is suspected to have the AIDS virus?	YES . . . . . 1 NO 2	
935C	Do you personally know someone who has been verbally abused or teased in the last 12 months because he or she has or is suspected to have the AIDS virus?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
935D	CHECK 935A, 935B, AND 935C: NOT A SINGLE 'YES' ↓ ☐ AT LEAST ONE 'YES' ☐ → 935F		
935E	Do you personally know someone who has or is suspected to have the AIDS virus?	YES . . . . . 1 NO 2	
935F	Do you agree or disagree with the following statement: People with the AIDS virus should be ashamed of themselves.	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/NO OPINION 8	
935G	Do you agree or disagree with the following statement: People with the AIDS virus should be blamed for bringing the disease into the community.	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/NO OPINION 8	
936	Should children age 12-14 be taught about using a condom to avoid getting AIDS?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
937	CHECK 901: HEARD ABOUT AIDS ↓ ☐ Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT AIDS ↓ ☐ Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
938	CHECK 613: HAS HAD SEXUAL INTERCOURSE ↓ ☐ NEVER HAD SEXUAL INTERCOURSE ☐ → 946		
939	CHECK 937: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ↓ ☐ NO ☐ → 941		
940	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
941	Sometimes women experience a bad-smelling abnormal genital discharge. During the last 12 months, have you had a bad-smelling abnormal genital discharge?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
942	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
943	CHECK 940, 941, AND 942: HAS HAD AN INFECTION (ANY 'YES') ↓ ☐ HAS NOT HAD AN INFECTION OR DOES NOT KNOW ☐ → 946		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
944	The last time you had (PROBLEM FROM 940/941/942), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 946
945	Where did you go? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . A GOVT. HEALTH CENTER . . . . . B STAND-ALONE VCT CENTER . . . C FAMILY PLANNING CLINIC . . . . . D MOBILE CLINIC . . . . . E FIELDWORKER . . . . . F OTHER PUBLIC SECTOR _____ G (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . H STAND-ALONE VCT CENTER . . . I PHARMACY . . . . . J CHEMIST/PMS STORE . . . . . K MOBILE CLINIC . . . . . L FIELDWORKER . . . . . M OTHER PRIVATE MEDICAL SECTOR _____ N (SPECIFY) OTHER SOURCE SHOP . . . . . O OTHER _____ X (SPECIFY)	
946	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
947	Is a wife justified in refusing to have sex with her husband when she knows he has sex with women other than his wives?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
948	CHECK 601: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ NOT IN UNION ☐ → 1001		
949	Can you say no to your (husband/partner) if you do not want to have sexual intercourse?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	
950	Could you ask your (husband/partner) to use a condom if you wanted him to?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	

SECTION 10. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . ☐☐ NONE 00	→ 1004
1002	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . ☐☐ NONE 00	→ 1004
1003	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1004	Do you currently smoke cigarettes?	YES . . . . . 1 NO 2	→ 1006
1005	In the last 24 hours, how many cigarettes did you smoke?	NUMBER OF CIGARETTES . . . . . ☐☐	
1006	Do you currently smoke or use any (other) type of tobacco?	YES . . . . . 1 NO 2	→ 1008
1007	What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPE . . . . . A CHEWING TOBACCO . . . . . B SNUFF . . . . . C OTHER _____ X (SPECIFY)	
1008	Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not?	BIG PROB-LEM / NOT A BIG PROB-LEM	
	Getting permission to go to the doctor?	PERMISSION TO GO . . . 1 / 2	
	Getting money needed for advice or treatment?	GETTING MONEY . . . . . 1 / 2	
	The distance to the health facility?	DISTANCE . . . . . 1 / 2	
	Not wanting to go alone?	GO ALONE . . . . . 1 / 2	
	Attitude of the healthworkers ?	ATTITUTE . . . . . 1 / 2	
1009	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→ 1101

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1010	What type of health insurance are you covered by? RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B SOCIAL SECURITY . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE D OTHER _____ X (SPECIFY)	

FEMALE GENITAL CUTTING

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1101	Have you ever heard of female circumcision, that is, a practice in which a girl may have part of her genitals cut, for example, excision of the clitoris and the labia minora, scraping of tissue surrounding the vaginal orifice (angurya cuts) or cutting of the vagina (gishiri cuts) and even use of corrosive substances or herbs into vagina to tighten or norrow it or to cause bleeding. Have you ever heard about any of these practices?	YES . . . . . 1 NO 2	→ 1201
1102	Have you yourself ever had any of these procedures performed on you?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 3	→ 1108
1103	Now I would like to ask you what was done to you at that time. Was any flesh removed from the genital area?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1105
1104	Was the genital area just nicked without removing any flesh?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1105	Was your genital area sewn closed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1105A	Which type of procedure was performed on you? a) Removal of clitoris along with partial or total excision of the labia minora? b) Infibulation: removal of clitoris, labia minora and adjacent medial part of labia majora and stitching it? c) scraping of tissue surrounding the vaginal orifice (eg. angurya cuts etc.)? d) Cutting of the vagina (eg. gishiri cuts etc)?	YES NO DK REMOVAL OF CLITORIS 1 2 8 INFIBULATION . . . . . 1 2 8 ANGURYA . . . . . 1 2 8 GISHIRI 1 2 8	
1105B	Have you ever used corrosive substances or herbs into the vagina with the aim of tightening or narrowing it or to cause bleeding ?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1106	How old were you when this procedure (1105A/1105B) was performed for the first time? IF THE RESPONDENT DOES NOT KNOW THE EXACT AGE, PROBE TO GET AN ESTIMATE.	AGE IN COMPLETED YEARS ☐☐ AS A BABY/DURING INFANCY . . . . . 95 DON'T KNOW 98	
1107	Who performed this procedure?	TRADITIONAL TRAD. CIRCUMCISER . . . . . 11 TRAD. BIRTH ATTENDANT . . . . . 12 OTHER TRAD. _____ (SPECIFY) 16 HEALTH PROFESSIONAL DOCTOR . . . . . 21 NURSE/MIDWIFE . . . . . 22 OTHER HEALTH PROFESSIONAL _____ (SPECIFY) 26 DON'T KNOW 98	
1108	CHECK 213, 215 AND 216: HAS ONE OR MORE LIVING DAUGHTERS BORN IN 1998 OR LATER ☐ ↓ HAS NO LIVING DAUGHTERS BORN IN 1998 OR LATER ☐ →		→ 1115

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	CHECK 213, 215 AND 216: ENTER IN THE TABLE THE BIRTH HISTORY NUMBER AND NAME OF EACH LIVING DAUGHTER BORN IN 1998 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE DAUGHTERS. BEGIN WITH THE YOUNGEST DAUGHTER. (IF THERE ARE MORE THAN 3 DAUGHTERS, USE ADDITIONAL QUESTIONNAIRES). Now I would like to ask you some questions about your (daughter/daughters).		

1109	BIRTH HISTORY NUMBER AND NAME OF EACH LIVING DAUGHTER BORN IN 1998 OR LATER	YOUNGEST LIVING DAUGHTER BIRTH HISTORY NUMBER ☐☐ NAME _____	NEXT-TO-YOUNGEST LIVING DAUGHTER BIRTH HISTORY NUMBER ☐☐ NAME _____	SECOND-TO-YOUNGEST LIVING DAUGHTER BIRTH HISTORY NUMBER ☐☐ NAME _____
1110	Is (NAME OF DAUGHTER) circumcised?	YES . . . . . 1 NO . . . . . 2 (GO TO 1110 IN NEXT COLUMN; OR IF NO MORE DAUGHTERS, GO TO 1115)	YES . . . . . 1 NO . . . . . 2 (GO TO 1110 IN NEXT COLUMN; OR IF NO MORE DAUGHTERS, GO TO 1115)	YES . . . . . 1 NO . . . . . 2 (GO TO 1110 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR IF NO MORE DAUGHTERS, GO TO 1115)
1111	How old was (NAME OF DAUGHTER) when she was circumcised? IF THE RESPONDENT DOES NOT KNOW THE AGE, PROBE TO GET AN ESTIMATE.	AGE IN COMPLETED YEARS . . . ☐☐ DON'T KNOW 98	AGE IN COMPLETED YEARS . . . ☐☐ DON'T KNOW 98	AGE IN COMPLETED YEARS . . . ☐☐ DON'T KNOW 98
1112	Was her genital area sewn closed?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
1113	Who performed the circumcision?	TRADITIONAL TRADITIONAL CIRCUMCISER . 11 TRAD. BIRTH ATTENDANT . 12 OTHER TRAD. _____ 16 (SPECIFY) HEALTH PROFESSIONAL DOCTOR . . . . . 21 NURSE/MIDWIFE . 22 OTHER HEALTH PROFESSIONAL _____ 26 (SPECIFY) DON'T KNOW 98	TRADITIONAL TRADITIONAL CIRCUMCISER . 11 TRAD. BIRTH ATTENDANT . 12 OTHER TRAD. _____ 16 (SPECIFY) HEALTH PROFESSIONAL DOCTOR . . . . . 21 NURSE/MIDWIFE . 22 OTHER HEALTH PROFESSIONAL _____ 26 (SPECIFY) DON'T KNOW 98	TRADITIONAL TRADITIONAL CIRCUMCISER . . 11 TRAD. BIRTH ATTENDANT . . 12 OTHER TRAD. _____ 16 (SPECIFY) HEALTH PROFESSIONAL DOCTOR . . . . . 21 NURSE/MIDWIFE . . 22 OTHER HEALTH PROFESSIONAL _____ 26 (SPECIFY) DON'T KNOW 98
1114		GO BACK TO 1110 IN NEXT COLUMN; OR, IF NO MORE DAUGHTERS, GO TO 1115.	GO BACK TO 1110 IN NEXT COLUMN; OR, IF NO MORE DAUGHTERS, GO TO 1115.	GO TO 1110 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR IF NO MORE DAUGHTERS, GO TO 1115.

1115	Do you believe that female circumcision is required by your religion?	YES . . . . . 1 NO . . . . . 2 NO RELIGION . . . . . 3 DON'T KNOW 8	
1116	Do you think that female circumcision should be continued, or should it be stopped?	CONTINUED . . . . . 1 STOPPED . . . . . 2 DEPENDS . . . . . 3 DON'T KNOW 8	

SECTION 12. MATERNAL AND ADULT MORTALITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1201	Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your natural mother, including those who are living with you, those living elsewhere and those who have died. How many children did your mother give birth to, including you?	NUMBER OF BIRTHS TO NATURAL MOTHER	
1202	CHECK 1201: TWO OR MORE BIRTHS ☐ ↓ ONLY ONE BIRTH (RESPONDENT ONLY) ☐ →		1300
1203	How many of these births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS	

1204	What was the name given to your oldest (next oldest) brother or sister?	(1) _____	(2) _____	(3) _____	(4) _____	(5) _____	(6) _____
1205	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2
1206	Is (NAME) still alive?	YES . . . 1 NO . . . 2 (GO TO 1208) DK . . . 8 (GO TO (2))	YES . . . 1 NO . . . 2 (GO TO 1208) DK . . . 8 (GO TO (3))	YES . . . 1 NO . . . 2 (GO TO 1208) DK . . . 8 (GO TO (4))	YES . . . 1 NO . . . 2 (GO TO 1208) DK . . . 8 (GO TO (5))	YES . . . 1 NO . . . 2 (GO TO 1208) DK . . . 8 (GO TO (6))	YES . . . 1 NO . . . 2 (GO TO 1208) DK . . . 8 (GO TO (7))
1207	How old is (NAME)?	☐☐ GO TO (2)	☐☐ GO TO (3)	☐☐ GO TO (4)	☐☐ GO TO (5)	☐☐ GO TO (6)	☐☐ GO TO (7)
1208	How many years ago did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1209	How old was (NAME) when he/she died?	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (2)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (3)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (4)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (5)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (6)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (7)
1210	Was (NAME) pregnant when she died?	YES . . . 1 (GO TO 1213) NO . . . 2 DK . . . 8	YES . . . 1 (GO TO 1213) NO . . . 2 DK . . . 8	YES . . . 1 (GO TO 1213) NO . . . 2 DK . . . 8	YES . . . 1 (GO TO 1213) NO . . . 2 DK . . . 8	YES . . . 1 (GO TO 1213) NO . . . 2 DK . . . 8	YES . . . 1 (GO TO 1213) NO . . . 2 DK . . . 8
1211	Did (NAME) die during childbirth?	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2
1212	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2
1213	How many live born children did (NAME) give birth to during her lifetime?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐

IF NO MORE BROTHERS OR SISTERS, GO TO 1301

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES						SKIP
1204	What was the name given to your oldest (next oldest) brother or sister?	(7) _____	(8) _____	(9) _____	(10) _____	(11) _____	(12) _____	
1205	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	
1206	Is (NAME) still alive?	YES . . . 1 NO . . . 2 (GO TO 1208) DK . . . 8 (GO TO (8))	YES . . . 1 NO . . . 2 (GO TO 1208) DK . . . 8 (GO TO (9))	YES . . . 1 NO . . . 2 (GO TO 1208) DK . . . 8 (GO TO (10))	YES . . . 1 NO . . . 2 (GO TO 1208) DK . . . 8 (GO TO (11))	YES . . . 1 NO . . . 2 (GO TO 1208) DK . . . 8 (GO TO (12))	YES . . . 1 NO . . . 2 (GO TO 1208) DK . . . 8 (GO TO (13))	
1207	How old is (NAME)?	☐☐ GO TO (8)	☐☐ GO TO (9)	☐☐ GO TO (10)	☐☐ GO TO (11)	☐☐ GO TO (12)	☐☐ GO TO (13)	
1208	How many years ago did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐	
1209	How old was (NAME) when he/she died?	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [8]	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (9)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (10)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (11)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (12)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (13)	
1210	Was (NAME) pregnant when she died?	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	
1211	Did (NAME) die during childbirth?	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	YES . . . 1 (GO TO 1213) NO . . . 2	
1212	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	
1213	How many live born children did (NAME) give birth to during her lifetime?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐	

IF NO MORE BROTHERS OR SISTERS, GO TO 1301

TICK HERE IF CONTINUATION SHEET USED ☐

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1300	CHECK HOUSEHOLD QUESTIONNAIRE, Q.9A AND FRONT COVER: WOMAN SELECTED FOR THIS SECTION? WOMAN SELECTED FOR THIS SECTION ☐ ↓ WOMAN NOT SELECTED ☐ → 1332A		
1301	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED. PRIVACY OBTAINED . . . . . 1 ↓ PRIVACY NOT POSSIBLE . . . . . 2 → 1332		
	READ TO THE RESPONDENT Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in Nigeria. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions.		
1302	CHECK 601 AND 602: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ FORMERLY MARRIED/ LIVED WITH A MAN (READ IN PAST TENSE AND USE 'LAST' WITH HUSBAND/PARTNER') ☐ ↓ NEVER MARRIED/ NEVER LIVED WITH A MAN ☐ → 1316		
1303	First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) (husband/partner)?		
	a) He (is/was) jealous or angry if you (talk/talked) to other men?	JEALOUS . . . . . YES 1 NO 2 DK 8	
	b) He frequently (accuses/accused) you of being unfaithful?	ACCUSES . . . . . YES 1 NO 2 DK 8	
	c) He (does/did) not permit you to meet your female friends?	NOT MEET FRIENDS . . . YES 1 NO 2 DK 8	
	d) He (tries/tried) to limit your contact with your family?	NO FAMILY . . . . . YES 1 NO 2 DK 8	
	e) He (insists/insisted) on knowing where you (are/were) at all times?	WHERE YOU ARE . . . . . YES 1 NO 2 DK 8	
1304	Now I need to ask some more questions about your relationship with your (last) (husband/partner).		
	A Did your (last) (husband/partner) ever:	B How often did this happen during the last 12 months: often, only sometimes, or not at all?	

	EVER		OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a) say or do something to humiliate you in front of others?	YES	1 →	1	2	3
	NO	2 ↓			
b) threaten to hurt or harm you or someone you care about?	YES	1 →	1	2	3
	NO	2 ↓			
c) insult you or make you feel bad about yourself?	YES	1 →	1	2	3
	NO	2 ↓			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1305	A Did your (last) (husband/partner) ever do any of the following things to you:	B How often did this happen during the last 12 months: often, only sometimes, or not at all?	

	EVER		OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a) push you, shake you, or throw something at you?	YES	1 →	1	2	3
	NO	2 ↓			
b) slap you?	YES	1 →	1	2	3
	NO	2 ↓			
c) twist your arm or pull your hair?	YES	1 →	1	2	3
	NO	2 ↓			
d) punch you with his fist or with something that could hurt you?	YES	1 →	1	2	3
	NO	2 ↓			
e) kick you, drag you, or beat you up?	YES	1 →	1	2	3
	NO	2 ↓			
f) try to choke you or burn you on purpose?	YES	1 →	1	2	3
	NO	2 ↓			
g) threaten or attack you with a knife, gun, or other weapon?	YES	1 →	1	2	3
	NO	2 ↓			
h) physically force you to have sexual intercourse with him when you did not want to?	YES	1 →	1	2	3
	NO	2 ↓			
i) physically force you to perform any other sexual acts you did not want to?	YES	1 →	1	2	3
	NO	2 ↓			
j) force you with threats or in any other way to perform sexual acts you did not want to?	YES	1 →	1	2	3
	NO	2 ↓			

1306	CHECK 1305A (a-j): AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →		1309
1307	How long after you first (got married/started living together) with your (last) (husband/partner) did (this/any of these things) first happen? IF LESS THAN ONE YEAR, RECORD '00'.	NUMBER OF YEARS . . . . . ☐☐ BEFORE MARRIAGE/BEFORE LIVING TOGETHER 95	
1308	Did the following ever happen as a result of what your (last) (husband/partner) did to you:		
	a) You had cuts, bruises, or aches?	YES . . . . . 1 NO 2	
	b) You had eye injuries, sprains, dislocations, or burns?	YES . . . . . 1 NO 2	
	c) You had deep wounds, broken bones, broken teeth, or any other serious injury?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1308A	CHECK 1308 (a-c): AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ → 1309		
1308B	Did you seek any medical attention?	YES . . . . . 1 NO 2	
1309	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) (husband/partner) at times when he was not already beating or physically hurting you?	YES . . . . . 1 NO 2	→ 1311
1310	In the last 12 months, how often have you done this to your (last) (husband/partner): often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1311	Does (did) your (last) (husband/partner) drink alcohol?	YES . . . . . 1 NO 2	→ 1313
1312	How often does (did) he get drunk: often, only sometimes, or never?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NEVER 3	
1313	Are (Were) you afraid of your (last) (husband/partner): most of the time, sometimes, or never?	MOST OF THE TIME AFRAID . . . . . 1 SOMETIMES AFRAID . . . . . 2 NEVER AFRAID 3	
1314	CHECK 609: MARRIED MORE THAN ONCE ☐ ↓ MARRIED ONLY ONCE ☐ → 1316		
1315	A So far we have been talking about the behavior of your (current/last) (husband/partner). Now I want to ask you about the behavior of any previous (husband/partner).	B How long ago did this last happen?	

	EVER		0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER
a) Did any previous (husband/partner) ever hit, slap, kick, or do anything else to hurt you physically?	YES	1 →	1	2	3
	NO	2 ↓			
b) Did any previous (husband/partner) physically force you to have intercourse or perform any other sexual acts against your will?	YES	1 →	1	2	3
	NO	2			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1316	CHECK 601 AND 602: EVER MARRIED/EVER LIVED WITH A MAN ☐ → From the time you were 15 years old has anyone other than (your/any) (husband/partner) hit you, slapped you, kicked you, or done anything else to hurt you physically? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ → From the time you were 15 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1319
1317	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/STEP-MOTHER . . . . . A FATHER/STEP-FATHER . . . . . B SISTER/BROTHER . . . . . C DAUGHTER/SON . . . . . D UNCLE/AUNT . . . . . E OTHER RELATIVE . . . . . F CURRENT BOYFRIEND . . . . . G FORMER BOYFRIEND . . . . . H MOTHER-IN-LAW . . . . . I FATHER-IN-LAW . . . . . J OTHER IN-LAW . . . . . K TEACHER . . . . . L EMPLOYER/SOMEONE AT WORK . . . . . M POLICE/SOLDIER . . . . . N DOMESTIC HELP . . . . . O OTHER _____ X (SPECIFY)	
1318	In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1319	CHECK 201, 226, AND 230: EVER BEEN PREGNANT (YES ON 201 OR 226 OR 230) ☐ NEVER BEEN PREGNANT ☐ →		→ 1322
1320	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES . . . . . 1 NO 2	→ 1322
1321	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/PARTNER . . . . . A MOTHER/STEP-MOTHER . . . . . B FATHER/STEP-FATHER . . . . . C SISTER/BROTHER . . . . . D DAUGHTER/SON . . . . . E UNCLE/AUNT . . . . . F OTHER RELATIVE . . . . . G FORMER HUSBAND/PARTNER . . . . . H CURRENT BOYFRIEND . . . . . I FORMER BOYFRIEND . . . . . J MOTHER-IN-LAW . . . . . K FATHER-IN-LAW . . . . . L OTHER IN-LAW . . . . . M TEACHER . . . . . N EMPLOYER/SOMEONE AT WORK . . . . . O POLICE/SOLDIER . . . . . P DOMESTIC HELP . . . . . Q OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1322	CHECK 601 AND 602: EVER MARRIED/EVER LIVED WITH A MAN ↓ NEVER MARRIED/NEVER LIVED WITH A MAN → 1322B		
1322A	Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/partner). At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1323 → 1324A
1322B	At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1326
1323	Who was the person who forced you the first time?	CURRENT HUSBAND/PARTNER . . . . . 01 FORMER HUSBAND/PARTNER . . . . . 02 CURRENT/FORMER BOYFRIEND . . . . . 03 FATHER/STEP-FATHER . . . . . 04 BROTHER/STEP-BROTHER . . . . . 05 UNCLE/AUNT . . . . . 06 OTHER RELATIVE . . . . . 07 IN-LAW . . . . . 08 OWN FRIEND/ACQUAINTANCE . . . . . 09 FAMILY FRIEND . . . . . 10 TEACHER . . . . . 11 EMPLOYER/SOMEONE AT WORK . . . . . 12 POLICE/SOLDIER . . . . . 13 PRIEST/RELIGIOUS LEADER . . . . . 14 DOMESTIC HELP . . . . . 15 STRANGER . . . . . 16 OTHER _____ 96 (SPECIFY)	
1324	CHECK 601 AND 602: EVER MARRIED/EVER LIVED WITH A MAN ↓ In the last 12 months, has anyone other than (your/any) (husband/partner) physically forced you to have sexual intercourse when you did not want to? NEVER MARRIED/NEVER LIVED WITH A MAN ↓ In the last 12 months has anyone physically forced you to have sexual intercourse when you did not want to?	YES . . . . . 1 NO 2	→ 1325
1324A	CHECK 1305A (h-j) and 1315A(b) AT LEAST ONE 'YES' ↓ NOT A SINGLE 'YES' → 1326		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1325	CHECK 601 AND 602: EVER MARRIED/EVER LIVED WITH A MAN ☐ → How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts by anyone, including (your/any) husband/partner? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ → How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts?	AGE IN COMPLETED YEARS ☐☐ DON'T KNOW 98	
1326	CHECK 1305A (a-j), 1315A (a,b), 1316, 1320, 1322A, AND 1322B: AT LEAST ONE 'YES' ☐ → NOT A SINGLE 'YES' ☐		→ 1330
1327	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES . . . . . 1 NO 2	→ 1329
1328	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY . . . . . A HUSBAND'S/PARTNER'S FAMILY . . . . . B CURRENT/FORMER HUSBAND/PARTNER . . . . . C CURRENT/FORMER BOYFRIEND . . . . . D FRIEND . . . . . E NEIGHBOR . . . . . F RELIGIOUS LEADER . . . . . G TRADITIONAL LEADERS . . . . . H DOCTOR/MEDICAL PERSONNEL . . . . . I POLICE . . . . . J LAWYER . . . . . K SOCIAL SERVICE ORGANIZATION . . . . . L OTHER _____ X (SPECIFY)	→ 1330
1329	Have you ever told any one about this?	YES . . . . . 1 NO 2	
1330	As far as you know, did your father ever beat your mother?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1330A	CHECK 603: WIDOW ☐ → OTHERS ☐		→ 1331
1330B	Have you ever faced the following as a result of the death of your husband? a. Did your late husband's relatives blame you for his death? b. Did your late husband's relatives physically or verbally abuse you? c. Did your late husband's relatives maltreat you? d. Did your late husband's relatives maltreat your children? e. Did your late husband's relatives demand that you carry out any cultural practice to prove your innocence of his death or otherwise?	YES NO BLAME FOR DEATH . . . . . 1 2 PHYSICAL/VERBAL ABUSE . 1 2 MALTREAT YOU . . . . . 1 2 MALTREAT CHILDREN . . . . . 1 2 CULTURAL PRACTICE 1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE MODULE ONLY.		
1331	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	YES ONCE / YES, MORE THAN ONCE / NO HUSBAND . . . . . 1 2 3 OTHER MALE ADULT . . . 1 2 3 FEMALE ADULT 1 2 3	
1332	INTERVIEWER'S COMMENTS / EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE _____ _____		
1332A	CHECK 223A: ONE OR MORE DEATHS ☐ ↓ NO DEATHS ☐ →		1333
1332B	**READ TO THE RESPONDENT:** I would like to inform you that detailed information on the circumstances surrounding the deaths of children under the age of 5 years will be collected in the near future so that the federal government of Nigeria can provide health services to help reduce these deaths. If you don't mind, another team will be coming at a later date to interview members of the household about the death (s) you have told me about. Is this okay?	YES . . . . . 1 NO 2	
1333	RECORD THE TIME.	HOUR . . . . . ☐☐ MINUTES . . . . . ☐☐	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR: _____ DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR: _____ DATE: _____

INSTRUCTIONS:
ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

INFORMATION TO BE CODED FOR EACH COLUMN

COLUMN 1: <u>BIRTHS, PREGNANCIES, CONTRACEPTIVE USE</u>

- B BIRTHS
- P PREGNANCIES
- T TERMINATIONS

- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 IUD
- 4 INJECTABLES
- 5 IMPLANTS
- 6 PILL
- 7 CONDOM
- 8 FEMALE CONDOM
- 9 DIAPHRAGM
- J FOAM OR JELLY
- K STANDARD DAYS METHOD
- L LACTATIONAL AMENORRHEA METHOD
- M RHYTHM METHOD
- N WITHDRAWAL
- X OTHER MODERN METHOD
- Y OTHER TRADITIONAL METHOD

COLUMN 2: <u>DISCONTINUATION OF CONTRACEPTIVE USE</u>

- 0 INFREQUENT SEX/HUSBAND AWAY
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND/PARTNER DISAPPROVED
- 4 WANTED MORE EFFECTIVE METHOD
- 5 SIDE EFFECTS/HEALTH CONCERNS
- 6 LACK OF ACCESS/TOO FAR
- 7 COSTS TOO MUCH
- 8 INCONVENIENT TO USE
- F UP TO GOD/FATALISTIC
- A DIFFICULT TO GET PREGNANT/MENOPAUSAL
- D MARITAL DISSOLUT(SPECIFY)
- X OTHER

- Z DON'T KNOW

				1	2	
	12	DEC	01			
	11	NOV	02			
	10	OCT	03			
	09	SEP	04			
2	08	AUG	05			2
0	07	JUL	06			0
1	06	JUN	07			1
3	05	MAY	08			3
	04	APR	09			
	03	MAR	10			
	02	FEB	11			
	01	JAN	12			
	12	DEC	13			
	11	NOV	14			
	10	OCT	15			
	09	SEP	16			
2	08	AUG	17			2
0	07	JUL	18			0
1	06	JUN	19			1
2	05	MAY	20			2
	04	APR	21			
	03	MAR	22			
	02	FEB	23			
	01	JAN	24			
	12	DEC	25			
	11	NOV	26			
	10	OCT	27			
	09	SEP	28			
2	08	AUG	29			2
0	07	JUL	30			0
1	06	JUN	31			1
1	05	MAY	32			1
	04	APR	33			
	03	MAR	34			
	02	FEB	35			
	01	JAN	36			
	12	DEC	37			
	11	NOV	38			
	10	OCT	39			
	09	SEP	40			
2	08	AUG	41			2
0	07	JUL	42			0
1	06	JUN	43			1
0	05	MAY	44			0
	04	APR	45			
	03	MAR	46			
	02	FEB	47			
	01	JAN	48			
	12	DEC	49			
	11	NOV	50			
	10	OCT	51			
	09	SEP	52			
2	08	AUG	53			2
0	07	JUL	54			0
0	06	JUN	55			0
9	05	MAY	56			9
	04	APR	57			
	03	MAR	58			
	02	FEB	59			
	01	JAN	60			
	12	DEC	61			
	11	NOV	62			
	10	OCT	63			
	09	SEP	64			
2	08	AUG	65			2
0	07	JUL	66			0
0	06	JUN	67			0
8	05	MAY	68			8
	04	APR	69			
	03	MAR	70			
	02	FEB	71			
	01	JAN	72			

30 January 2013

C O N F I D E N T I A L

NIGERIA DEMOGRAPHIC AND HEALTH SURVEY 2013
MAN'S QUESTIONNAIRE

NATIONAL POPULATION COMMISSION

National Health Research Ethics Committee
Assigned Number NHREC/01/01/2007

IDENTIFICATION

STATE ______________________ . . . .

LOCAL GOVT. AREA ______________________ . . . .

LOCALITY ______________________ . . . .

ENUMERATION AREA ______________________ . . . .

URBAN/RURAL (URBAN=1, RURAL=2) . . . .

CLUSTER NUMBER . . . .

BUILDING/STRUCTURE NUMBER . . . .

HOUSEHOLD NUMBER . . . .

NAME OF HOUSEHOLD HEAD ______________________

NAME AND LINE NUMBER OF MAN ______________________

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	________	________	________	DAY MONTH YEAR 2 0 1 3
INTERVIEWER'S NAME	________	________	________	INT. NUMBER
RESULT*	________	________	________	RESULT
NEXT VISIT: DATE	________	________		TOTAL NUMBER OF VISITS
TIME	________	________		

*RESULT CODES:

1	COMPLETED	4	REFUSED		
2	NOT AT HOME	5	PARTLY COMPLETED	7	OTHER ________ (SPECIFY)
3	POSTPONED	6	INCAPACITATED		

	HAUSA	YORUBA	IGBO	ENGLISH	OTHER	TRANSLATOR USED?	YES	NO
LANGUAGE OF INTERVIEW	1	2	3	4	6 ________ SPECIFY		1	2
NATIVE LANGUAGE OF RESPONDENT	1	2	3	4	6 ________ SPECIFY			

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME ________	NAME ________		
DATE ________	DATE ________		

ENGLISH

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Greetings. My name is _____ and I am working with National Population Commission. We are conducting a survey about health all over Nigeria. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of the research team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the following persons:

2013 NDHS Contact Person: Project Director; Email: amakaloveth4life@yahoo.com; Phone: 08033318224
NHREC Contact Person: Desk Officer, NHREC; Email: yaminads@yahoo.com; Phone: 08065479926

Do you have any questions? May I begin the interview now?
May I begin the interview now?

Signature of interviewer: _____ Date: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . . 2 → END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	
102	In what month and year were you born?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	
103	How old were you at your last birthday? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS [ ][ ]	
104	Have you ever attended school?	YES . . . . . 1 NO 2	→ 108
105	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY . . . . . 1 SECONDARY . . . . . 2 HIGHER 3	
106	What is the highest (class/form/year) you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	CLASS . . . . . [ ][ ]	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
107	CHECK 105: PRIMARY ☐ SECONDARY OR HIGHER ☐ → 110		
108	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PARTS OF SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE. . 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
109	CHECK 108: CODE '2', '3' OR '4' CIRCLED ☐ CODE '1' OR '5' CIRCLED ☐ → 111		
110	Do you read a newspaper or magazine, at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
111	Do you listen to the radio, at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
112	Do you watch television, at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
113	What is your religion?	CATHOLIC . . . . . 1 OTHER CHRISTIAN . . . . . 2 ISLAM . . . . . 3 TRADITIONALIST . . . . . 4 OTHER _____ 6 (SPECIFY)	
114	What is your ethnic group?	_____ ☐☐☐	
115	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES . . . . . ☐☐ NONE . . . . . 00 → 201	
116	In the last 12 months, have you been away from home for more than one month at a time?	YES . . . . . 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 206
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME . . . . . [ ][ ] DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE . . . . . [ ][ ] DAUGHTERS ELSEWHERE . . . . [ ][ ]	
206	Have you ever fathered a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . [ ][ ] GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL CHILDREN . . . . . [ ][ ]	
209	CHECK 208: HAS HAD MORE THAN ONE CHILD ↓ HAS HAD ONLY ONE CHILD → 212 HAS NOT HAD ANY CHILDREN → 301		
210	Did all of the children you have fathered have the same biological mother?	YES . . . . . 1 NO 2	→ 212
211	In all, how many women have you fathered children with?	NUMBER OF WOMEN . . . . . [ ][ ]	
212	How old were you when your (first) child was born? (AGE IN COMPLETEDD YEARS)	AGE IN COMPLETED YEARS [ ][ ]	
213	CHECK 203 AND 205: AT LEAST ONE LIVING CHILD ↓ NO LIVING CHILDREN → 301		
214	How old is your (youngest) child? (AGE IN COMPLETED YEARS)	AGE IN COMPLETED YEARS [ ][ ]	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
215	CHECK 214: (YOUNGEST) CHILD IS AGE 0-2 YEARS ☐ ↓ OTHER ☐		→ 301
216	What is the name of your (youngest) child? WRITE NAME OF (YOUNGEST) CHILD _____ (NAME OF (YOUNGEST) CHILD)		
217	When (NAME)'s mother was pregnant with (NAME), did she have any antenatal check-ups?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 3	→ 219
218	Were you ever present during any of those antenatal check-ups?	PRESENT . . . . . 1 NOT PRESENT 2	
219	Was (NAME) born in a hospital or health facility?	HOSPITAL/HEALTH FACILITY . . . . . 1 OTHER 2	→ 221
220	What was the main reason why (NAME)'s mother did not deliver in a hospital or health facility?	COST TOO MUCH . . . . . 01 FACILITY CLOSED . . . . . 02 TOO FAR/NO TRANSPORTATION . 03 DON'T TRUST FACILITY/POOR QUALITY SERVICE . . . . . 04 NO FEMALE PROVIDER . . . . . 05 NOT THE FIRST CHILD . . . . . 06 CHILD'S MOTHER DID NOT THINK IT WAS NECESSARY . . . . . 07 HE DID NOT THINK IT WAS NECESSARY . . . . . 08 FAMILY DID NOT THINK IT WAS NECESSARY . . . . . 09 OTHER _____ 96 (SPECIFY) DON"T KNOW 98	
221	When a child has diarrhea, how much should he or she be given to drink: more than usual, about the same as usual, less than usual, or nothing to drink at all?	MORE THAN USUAL . . . . . 1 ABOUT THE SAME . . . . . 2 LESS THAN USUAL . . . . . 3 NOTHING TO DRINK . . . . . 4 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?		
01	**Female Sterilization**. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
02	**Male Sterilization**. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
03	**IUD**. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse.	YES . . . . . 1 NO 2	
04	**Injectables**. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2	
05	**Implants**. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	
06	**Pill**. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2	
07	**Condom**. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2	
08	**Female Condom**. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2	
09	**Diaphragm:** Women can place a thin flexible disk in their vagina before intercourse.	YES . . . . . 1 NO 2	
10	**Foam or Jelly:** Women can place a suppository, jelly, or cream in their vagina before intercourse.	YES . . . . . 1 NO 2	
11	**Standard Days Method.** PROBE: A Woman uses a string of colored beads to know the days she can get pregnant. On the days she can get pregnant, they uses a condom or does not have sexual intercourse.	YES . . . . . 1 NO 2	
12	**Lactational Amenorrhea Method (LAM)**.	YES . . . . . 1 NO 2	
13	**Rhythm Method**. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2	
14	**Withdrawal**. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	
15	**Emergency Contraception**. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2	
16	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) _____ (SPECIFY) NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	In the last few months have you: Heard about family planning on the radio? Seen anything about family planning on the television? Read about family planning in a newspaper or magazine? Read about family planning in a poster? Read about family planning in leaflets and brochures? Heard about family planning from town crier? Heard about family planning from mobile public announcement?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 2 POSTER . . . . . 1 2 LEAFLETS OR BROCHURES . . . 1 2 TOWN CRIER . . . . . 1 2 MOBILE PUBLIC ANNOUNCEMEN 1 2	
302A	CHECK 302: AT LEAST ONE "YES" (HAS HEARD OR READ MESSAGE) ☐ NOT A SINGLE "YES" (HAS **NOT** HEARD OR READ MESSAGE) ☐		→ 303
302B	Please tell me which family planning messages you have heard or seen in the past few months? PROBE: Any others? PROBE UNTIL YOU HAVE EXHAUSTED ALL ANSWERS.	AS FOR ME AND MY PARTNER WE "DEY KAMPE" WITH FEMALE CONDOM. . . . . A UNSPACED CHILDREN MAKES THE GOING TOUGH. FOR THE LOVE OF YOUR FAMILY, GO FOR CHILD SPACING TODAY. . . . . B WELL-SPACED CHILDREN ARE EVERY PARENT'S JOY. . . . . C IT'S NOT TOO LATE TO PREVENT UNWANTED PREGNANCY. . . . . D WHY IS YOUR WIFE LOOKING SO GOOD? . . . . . E OTHER _____ (SPECIFY) . X	
303	In the last few months, have you discussed family planning with a health worker or health professional?	YES . . . . . 1 NO 2	
304	Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant when she has sexual relations?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 306
305	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ (SPECIFY) 6 DON'T KNOW 8	
306	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. a) Contraception is a woman's business and a man should not have to worry about it. b) Women who use contraception may become promiscuous.	AGREE / DISAGREE / DK CONTRACEPTION WOMAN'S BUSINESS 1 2 8 WOMEN MAY BECOME PROMISCUOUS 1 2 8	
307	CHECK 301 (07): KNOWS MALE CONDOM YES ☐ NO ☐		→ 311
308	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	→ 311

309	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . A GOVT. HEALTH CENTER . . . . . B FAMILY PLANNING CLINIC . . . . . C MOBILE CLINIC . . . . . D FIELDWORKER . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . G PHARMACY . . . . . H CHEMIST/PMS . . . . . I PRIVATE DOCTOR . . . . . J MOBILE CLINIC . . . . . K FIELDWORKER . . . . . L OTHER PRIVATE MEDICAL SECTOR _____ M (SPECIFY) OTHER SOURCE SHOP . . . . . N CHURCH . . . . . O FRIENDS/RELATIVES . . . . . P NGO . . . . . Q OTHER _____ X (SPECIFY)	
310	If you wanted to, could you yourself get a condom?	YES . . . . . 1 NO 2	
311	CHECK 301 (08): KNOWS FEMALE CONDOM YES ☐ NO ☐ → 401		
312	Do you know of a place where a person can get female condoms?	YES . . . . . 1 NO . . . . . 2 → 401	
313	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . A GOVT. HEALTH CENTER . . . . . B FAMILY PLANNING CLINIC . . . . . C MOBILE CLINIC . . . . . D FIELDWORKER . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . G PHARMACY . . . . . H CHEMIST/PMS . . . . . I PRIVATE DOCTOR . . . . . J MOBILE CLINIC . . . . . K FIELDWORKER . . . . . L OTHER PRIVATE MEDICAL SECTOR _____ M (SPECIFY) OTHER SOURCE SHOP . . . . . N CHURCH . . . . . O FRIEND/RELATIVE . . . . . P NGO . . . . . Q OTHER _____ X (SPECIFY)	
314	If you wanted to, could you yourself get a female condom?	YES . . . . . 1 NO 2	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living together with a woman as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A WOMAN . . . . . 2 NO, NOT IN UNION 3	→ 404
402	Have you ever been married or lived together with a woman as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A WOMAN . . . . . 2 NO 3	→ 413
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 410
404	Is your (wife/partner) living with you now or is she staying elsewhere?	LIVING WITH HIM . . . . . 1 STAYING ELSEWHERE 2	
405	Do you have other wives or do you live with other women as if married?	YES (MORE THAN ONE) . . . . . 1 NO (ONLY ONE) 2	→ 407
406	Altogether, how many wives or live-in partners do you have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS . . .	
407	CHECK 405: ONE WIFE/ PARTNER → Please tell me the name of (your wife/the woman you are living with as if married). MORE THAN ONE WIFE/ PARTNER → Please tell me the name of each of your wives or each woman you are living with as if married. RECORD THE NAME AND THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE AND LIVE-IN PARTNER. IF A WOMAN IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME / LINE NUMBER / 408 How old was (NAME) on her last birthday? AGE _____ ☐☐ ☐☐ _____ ☐☐ ☐☐ _____ ☐☐ ☐☐ _____ ☐☐ ☐☐	
408	ASK 408 FOR EACH PERSON.		
409	CHECK 407: ONE WIFE/ PARTNER MORE THAN ONE WIFE/ PARTNER	☐	→ 411A
410	Have you been married or lived with a woman only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	→ 411A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
411 411A	In what month and year did you start living with your (wife/partner)? Now I would like to ask about your first (wife/partner). In what month and year did you start living with her?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	→ 413
412	How old were you when you first started living with her?	AGE . . . . . ☐☐	
413	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
414	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS . . . . . ☐☐ FIRST TIME WHEN STARTED LIVING WITH (FIRST) WIFE/PARTNER 95	→ 501
415	Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.		
416	When was the <u>last</u> time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 ☐☐ WEEKS AGO . . . . . 2 ☐☐ MONTHS AGO . . . . . 3 ☐☐ YEARS AGO . . . . . 4 ☐☐	→ 430

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
417	When was the last time you had sexual intercourse with this person?		DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3
418	The last time you had sexual intercourse (with this second/third person), was a condom used? **(2)**	YES . . . . . 1 NO . . . . . 2 (SKIP TO 420)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 420)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 420)
419	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
420	What was your relationship to this person with whom you had sexual intercourse? IF GIRLFRIEND: Were you living together as if married? IF YES, CIRCLE '2'. IF NO, CIRCLE '3'.	WIFE . . . . . 1 LIVE-IN PARTNER . . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER _____ 6 (SPECIFY) (SKIP TO 423)	WIFE . . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER _____ 6 (SPECIFY) (SKIP TO 423)	WIFE . . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER _____ 6 (SPECIFY) (SKIP TO 423)
421	CHECK 410:	MARRIED ONLY ONCE MARRIED MORE THAN ONCE OR BLANK (SKIP TO 423)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE OR BLANK (SKIP TO 423)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE OR BLANK (SKIP TO 423)
422	CHECK 414:	FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE (SKIP TO 424) OTHER	FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE (SKIP TO 424) OTHER	FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE (SKIP TO 424) OTHER
423	How long ago did you first have sexual intercourse with this (second/third) person?	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4
424	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, WRITE '95'.	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
425	How old is this person?	AGE OF PARTNER ☐☐ DON'T KNOW 98	AGE OF PARTNER ☐☐ DON'T KNOW . . . 98	AGE OF PARTNER ☐☐ DON'T KNOW . . . 98
426	Apart from (this person/these two people), have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 (GO BACK TO 417 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 428)	YES . . . . . 1 (GO BACK TO 417 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 428)	
427	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . ☐☐ DON'T KNOW . . 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
428	CHECK 420 (ALL COLUMNS): AT LEAST ONE PARTNER IS PROSTITUTE ☐ NO PARTNERS ARE PROSTITUTES ☐ → 430		
429	CHECK 420 AND 418 (ALL COLUMNS): CONDOM USED WITH EVERY PROSTITUTE ☐ → 433 OTHER ☐ → 434		
430	In the last 12 months, did you pay anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 432
431	Have you ever paid anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 434
432	The last time you paid someone in exchange for having sexual intercourse, was a condom used?	YES . . . . . 1 NO 2	→ 434
433	Was a condom used during sexual intercourse every time you paid someone in exchange for having sexual intercourse in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
434	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . ☐☐ DON'T KNOW 98	
435	CHECK 418, MOST RECENT PARTNER (FIRST COLUMN): NOT ASKED ☐ → 438 CONDOM USED ☐ NO CONDOM USED ☐ → 438		
436	You told me that a condom was used the last time you had sex. What is the brand name of the condom used at that time? IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.	**MALE CONDOMS** GOLD CIRCLE . . . . . 01 DUREX . . . . . 02 RUGH RIDER . . . . . 03 TWIN LOTUS . . . . . 04 **FEMALE CONDOM** FEMIDOM . . . . . 05 OTHER _____ . . . 96 (SPECIFY) DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
437	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . 11 GOVT. HEALTH CENTER . . . . . 12 FAMILY PLANNING CLINIC . . . . . 13 MOBILE CLINIC . . . . . 14 FIELDWORKER . . . . . 15 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 21 PHARMACY . . . . . 22 CHEMIST/PMS . . . . . 23 PRIVATE DOCTOR . . . . . 24 MOBILE CLINIC . . . . . 25 FIELDWORKER . . . . . 27 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER SOURCE SHOP . . . . . 31 CHURCH . . . . . 32 FRIEND/RELATIVE . . . . . 33 NGO . . . . . 34 OTHER _____ 96 (SPECIFY)	
438	The last time you had sex did you or your partner use any method (other than a condom) to avoid or prevent a pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 501
439	What method did you or your partner use? PROBE: Did you or your partner use any other method to prevent pregnancy? RECORD ALL MENTIONED.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F FEMALE CONDOM . . . . . G DIAPHRAGM . . . . . H FOAM/JELLY . . . . . I LAM . . . . . J RHYTHM METHOD . . . . . K WITHDRAWAL . . . . . L OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER		→ 509
502	CHECK 439: MAN NOT STERILIZED MAN STERILIZED		→ 509
503	(Is your (wife/partner)/Are any of your (wives/partners)) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 505
504	Now I have some questions about the future. After the (child/children) you and your (wife(wives)/partner(s)) are expecting now, would you like to have another child, or would you prefer not have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 506 → 509
505	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT . . . . . 3 WIFE (WIVES)/PARTNER(S) STERILIZED . . . . . 4 UNDECIDED/DON'T KNOW 8	→ 509
506	CHECK 407: ONE WIFE/ PARTNER MORE THAN ONE WIFE/ PARTNER		→ 508
507	CHECK 503: WIFE/PARTNER NOT PREGNANT OR DON'T KNOW How long would you like to wait from now before the birth of (a/another) child? WIFE/PARTNER PREGNANT After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 COUPLE INFECUND . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 509
508	How long would you like to wait from now before the birth of (a/another) child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 HE/ALL HIS WIVES/PARTNERS ARE INFECUND . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
509	CHECK 203 AND 205: HAS LIVING CHILDREN ☐ → If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ → If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 NUMBER . . . . . ☐☐ OTHER _____ 96 (SPECIFY)	→ 601 → 601
510	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 604
602	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason?	YES . . . . . 1 NO 2	→ 604
603	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 607
604	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐☐ _____ _____	
605	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3	
606	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
607	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ ↓ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐		→ 612
608	CHECK 606: CODE 1 OR 2 CIRCLED ☐ ↓ OTHER ☐		→ 610
609	Who usually decides how the money you earn will be used: you, your (wife/partner), or you and your (wife/partner) jointly?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/ PARTNER JOINTLY . . . . . 3 OTHER _____ 6 (SPECIFY)	
610	Who usually makes decisions about health care for yourself: you, your (wife/partner), you and your (wife/partner) jointly, or someone else?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/ PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 (SPECIFY)	
611	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/ PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
613	Do you own any land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
614	In your opinion, is a husband justified in hitting or beating his wife in the following situations:	YES NO DK	
	If she goes out without telling him?	GOES OUT 1 2 8	
	If she neglects the children?	NEGL. CHILDREN . . . 1 2 8	
	If she argues with him?	ARGUES 1 2 8	
	If she refuses to have sex with him?	REFUSES SEX 1 2 8	
	If she burns the food?	BURNS FOOD 1 2 8	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES . . . . . 1 NO 2	→ 723
702	Can people reduce their chance of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
703	Can people get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
704	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
705	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
706	Can people get the AIDS virus because of witchcraft or other supernatural means?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
707	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
708	Can the virus that causes AIDS be transmitted from a mother to her baby: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREG. . . . . 1 2 8 DURING DELIVERY . . . 1 2 8 BREASTFEEDING . . . 1 2 8	
709	CHECK 708: AT LEAST ONE 'YES' ☐ OTHER ☐		→ 711
710	Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
711	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
712	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES . . . . . 1 NO 2	→ 716
713	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	
714	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
715	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . 11 GOVT. HEALTH CENTER . . . . . 12 STAND-ALONE VCT CENTER . . . 13 FAMILY PLANNING CLINIC . . . . . 14 MOBILE CLINIC . . . . . 15 FIELDWORKER . . . . . 16 SCHOOL BASED CLINIC . . . . . 17 OTHER PUBLIC SECTOR _____ 18 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . 21 STAND-ALONE VCT CENTER . . . 22 PHARMACY . . . . . 23 MOBILE CLINIC . . . . . 24 FIELDWORKER . . . . . 25 SCHOOL BASED CLINIC . . . . . 26 OTHER PRIVATE MEDICAL SECTOR _____ 27 (SPECIFY) OTHER SOURCE HOME . . . . . 31 CORRECTIONAL FACILITY . . . . . 32 OTHER _____ 96 (SPECIFY)	→ 718
716	Do you know of a place where people can go to get tested for the AIDS virus?	YES . . . . . 1 NO 2	→ 718
717	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . A GOVT. HEALTH CENTER . . . . . B STAND-ALONE VCT CENTER . . . C FAMILY PLANNING CLINIC . . . . . D MOBILE CLINIC . . . . . E FIELDWORKER . . . . . F OTHER PUBLIC SECTOR _____ G (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . H STAND-ALONE VCT CENTER . . . I PHARMACY . . . . . J MOBILE CLINIC . . . . . K FIELDWORKER . . . . . L OTHER PRIVATE MEDICAL SECTOR _____ M (SPECIFY) OTHER _____ X (SPECIFY)	
718	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
719	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
720	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
721	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED . . . . . 1 SHOULD NOT BE ALLOWED . . . . . 2 DK/NOT SURE/DEPENDS 8	
721A	Do you personally know someone who has been denied health services in the last 12 months because he or she has or is suspected to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DK ANYONE WITH AIDS 3	→ 721F
721B	Do you personally know someone who has been denied involvement in social events, religious services, or community events in the last 12 months because he or she has or is suspected to have the AIDS virus?	YES . . . . . 1 NO 2	
721C	Do you personally know someone who has been verbally abused or teased in the last 12 months because he or she has or is suspected to have the AIDS virus?	YES . . . . . 1 NO 2	
721D	CHECK 721A, 721B, AND 721C: NOT A SINGLE 'YES' ☐ ↓ AT LEAST ONE 'YES' ☐ →		721F
721E	Do you personally know someone who has or is suspected to have the AIDS virus?	YES . . . . . 1 NO 2	
721F	Do you agree or disagree with the following statement: People with the AIDS virus should be ashamed of themselves.	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/NO OPINION 8	
721G	Do you agree or disagree with the following statement: People with the AIDS virus should be blamed for bringing the disease into the community.	AGREE . . . . . 1 DISAGREE . . . . . 2 DON'T KNOW/NO OPINION 8	
722	Should children age 12-14 be taught about using a condom to avoid getting AIDS?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
723	CHECK 701: HEARD ABOUT AIDS ☐ ↓ Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT AIDS ☐ ↓ Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
724	CHECK 414: HAS HAD SEXUAL INTERCOURSE ☐ ↓ HAS NOT HAD SEXUAL INTERCOURSE ☐ →		732
725	CHECK 723: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ☐ ↓ NO ☐ →		727

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
726	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
727	Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
728	Sometimes men have a sore or ulcer near their penis. During the last 12 months, have you had a sore or ulcer near your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
729	CHECK 726, 727, AND 728: HAS HAD AN INFECTION (ANY 'YES') ☐ ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW ☐ →		732
730	The last time you had (PROBLEM FROM 726/727/728), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 732
731	Where did you go? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . A GOVT. HEALTH CENTER . . . . . B STAND-ALONE VCT CENTER . . . C FAMILY PLANNING CLINIC . . . . . D MOBILE CLINIC . . . . . E FIELDWORKER . . . . . F OTHER PUBLIC SECTOR _____ G (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . H STAND-ALONE VCT CENTER . . . I PHARMACY . . . . . J CHEMIST/PMS STORE . . . . . K MOBILE CLINIC . . . . . L FIELDWORKER . . . . . M OTHER PRIVATE MEDICAL SECTOR _____ N (SPECIFY) OTHER SOURCE SHOP . . . . . O OTHER _____ X (SPECIFY)	
732	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
733	Is a wife justified in refusing to have sex with her husband when she knows her husband has sex with women other than his wives?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Some men are circumcised, that is, the foreskin is completely removed from the penis. Are you circumcised?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 805
802	How old were you when you got circumcised?	AGE IN COMPLETED YEARS . . . . . [ ][ ] DURING CHILDHOOD (<5 YEARS) 95 DON'T KNOW 98	
803	Who did the circumcision?	TRADITIONAL PRACTITIONER/ FAMILY/FRIEND . . . . . 1 HEALTH WORKER/PROFESSIONAL 2 OTHER . . . . . 3 DON'T KNOW 8	
804	Where was it done?	HEALTH FACILITY . . . . . 1 HOME OF A HEALTH WORKER/ PROFESSIONAL . . . . . 2 CIRCUMCISION DONE AT HOME . . . 3 RITUAL SITE . . . . . 4 OTHER HOME/PLACE . . . . . 5 DON'T KNOW 8	
805	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . [ ][ ] NONE 00	→ 808
806	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . [ ][ ] NONE 00	→ 808
807	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
808	Do you currently smoke cigarettes?	YES . . . . . 1 NO 2	→ 810
809	In the last 24 hours, how many cigarettes did you smoke?	NUMBER OF CIGARETTES . . . . . [ ][ ]	
810	Do you currently smoke or use any (other) type of tobacco?	YES . . . . . 1 NO 2	→ 812
811	What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPE . . . . . A CHEWING TOBACCO . . . . . B SNUFF . . . . . C OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
812	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→ 901
813	What type of health insurance are you covered by? RECORD ALL MENTIONED.	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B SOCIAL SECURITY . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE D OTHER _____ X (SPECIFY)	

SECTION 9. FEMALE GENITAL CUTTING

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	Have you ever heard of female circumcision, that is, a practice in which a girl may have part of her genitals cut, for example, excision of the clitoris and the labia minora, scraping of tissue surrounding the vaginal orifice (angurya cuts) or cutting of the vagina (gishiri cuts) and even use of corrosive substances or herbs into vagina to tighten or norrow it or to cause bleeding. . Have you ever heard about this practice?	YES . . . . . 1 NO 2	→ 1001
902	Do you believe that this practice is required by your religion?	YES . . . . . 1 NO . . . . . 2 NO RELIGION . . . . . 3 DON'T KNOW 8	
903	Do you think that female circumcision should be continued, or should it be stopped?	CONTINUED . . . . . 1 STOPPED . . . . . 2 DEPENDS . . . . . 3 DON'T KNOW 8	

SECTION 10. MATERNAL AND ADULT MORTALITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your natural mother, including those who are living with you, those living elsewhere and those who have died. How many children did your mother give birth to, including you?	NUMBER OF BIRTHS TO NATURAL MOTHER	
1002	CHECK 1001: TWO OR MORE BIRTHS ☐ ONLY ONE BIRTH (RESPONDENT ONLY) ☐ →		1014
1003	How many of these births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS	

1004	What was the name given to your oldest (next oldest) brother or sister?	(1) _____	(2) _____	(3) _____	(4) _____	(5) _____	(6) _____
1005	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2
1006	Is (NAME) still alive?	YES . . . 1 NO . . . 2 (GO TO 1008) DK . . . 8 (GO TO (2))	YES . . . 1 NO . . . 2 (GO TO 1008) DK . . . 8 (GO TO (3))	YES . . . 1 NO . . . 2 (GO TO 1008) DK . . . 8 (GO TO (4))	YES . . . 1 NO . . . 2 (GO TO 1008) DK . . . 8 (GO TO (5))	YES . . . 1 NO . . . 2 (GO TO 1008) DK . . . 8 (GO TO (6))	YES . . . 1 NO . . . 2 (GO TO 1008) DK . . . 8 (GO TO (7))
1007	How old is (NAME)?	☐☐ GO TO (2)	☐☐ GO TO (3)	☐☐ GO TO (4)	☐☐ GO TO (5)	☐☐ GO TO (6)	☐☐ GO TO (7)
1008	How many years ago did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1009	How old was (NAME) when he/she died?	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (2)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (3)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (4)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (5)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (6)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (7)
1010	Was (NAME) pregnant when she died?	YES . . . 1 (GO TO 1013) NO . . . 2 DK . . . 8	YES . . . 1 (GO TO 1013) NO . . . 2 DK . . . 8	YES . . . 1 (GO TO 1013) NO . . . 2 DK . . . 8	YES . . . 1 (GO TO 1013) NO . . . 2 DK . . . 8	YES . . . 1 (GO TO 1013) NO . . . 2 DK . . . 8	YES . . . 1 (GO TO 1013) NO . . . 2 DK . . . 8
1011	Did (NAME) die during childbirth?	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2
1012	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2
1013	How many live born children did (NAME) give birth to during her lifetime?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐

IF NO MORE BROTHERS OR SISTERS, GO TO 1014.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES					SKIP
1004	What was the name given to your oldest (next oldest) brother or sister?	(7) _____	(8) _____	(9) _____	(10) _____	(11) _____	(12) _____
1005	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2
1006	Is (NAME) still alive?	YES . . . 1 NO . . . 2 (GO TO 1008) DK . . . 8 (GO TO (8))	YES . . . 1 NO . . . 2 (GO TO 1008) DK . . . 8 (GO TO (9))	YES . . . 1 NO . . . 2 (GO TO 1008) DK . . . 8 (GO TO (10))	YES . . . 1 NO . . . 2 (GO TO 1008) DK . . . 8 (GO TO (11))	YES . . . 1 NO . . . 2 (GO TO 1008) DK . . . 8 (GO TO (12))	YES . . . 1 NO . . . 2 (GO TO 1008) DK . . . 8 (GO TO (13))
1007	How old is (NAME)?	☐☐ GO TO (8)	☐☐ GO TO (9)	☐☐ GO TO (10)	☐☐ GO TO (11)	☐☐ GO TO (12)	☐☐ GO TO (13)
1008	How many years ago did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1009	How old was (NAME) when he/she died?	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO [8]	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (9)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (10)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (11)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (12)	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (13)
1010	Was (NAME) pregnant when she died?	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2
1011	Did (NAME) die during childbirth?	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2	YES . . . 1 (GO TO 1013) NO . . . 2
1012	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2
1013	How many live born children did (NAME) give birth to during her lifetime?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐

IF NO MORE BROTHERS OR SISTERS, GO TO 1014.

TICK HERE IF CONTINUATION SHEET USED . . . . . ☐

1014	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR: _____ DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR: _____ DATE: _____