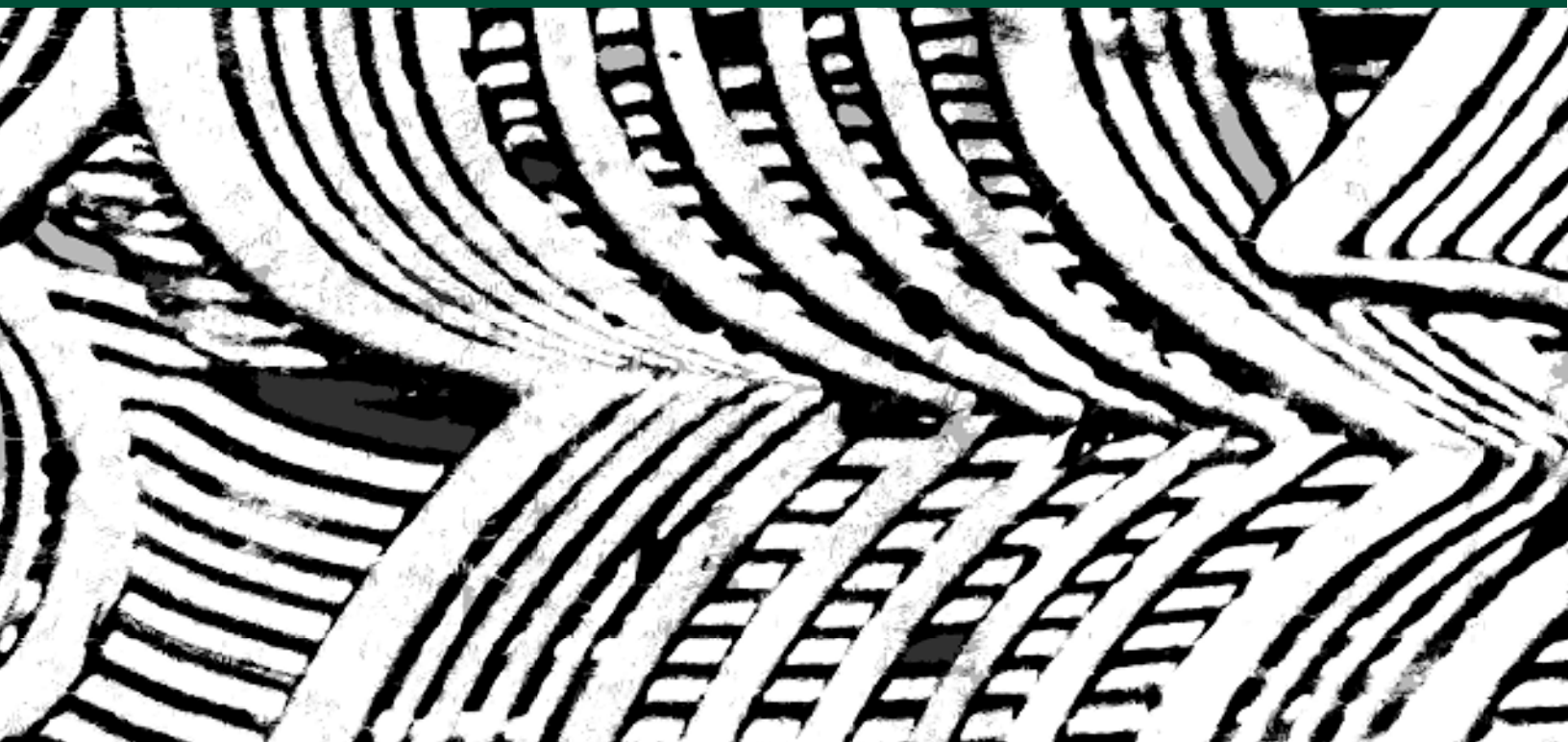


# Nigeria



**Demographic and  
Health Survey**

**2003**

# Nigeria Demographic and Health Survey 2003

National Population Commission  
Federal Republic of Nigeria

ORC Macro  
Calverton, Maryland, USA

April 2004



National  
Population  
Commission



ORC Macro



U.S. Agency for  
International  
Development

This report summarizes the findings of the 2003 Nigeria Demographic and Health Survey (2003 NDHS), which was conducted by the National Population Commission of the Federal Republic of Nigeria. ORC Macro provided technical assistance. Funding was provided by the U.S. Agency for international development (USAID).

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Additional information about the 2003 NDHS may be obtained from the headquarters of the National Population Commission, Plot 2031, Olusegun Obasanjo Way, Zone 7 Wuse, PMB 0281, Abuja, Nigeria; Telephone: (234) 09 523-9173, Fax: (234) 09 523-1024. Additional information about the DHS project may be obtained from ORC Macro, 11785 Beltsville Drive, Calverton, MD 20705; Telephone: 301-572-0200, Fax: 301-572-0999, Internet: [www.measuredhs.com](http://www.measuredhs.com).

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## MESSAGE FROM THE VICE PRESIDENT

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In the past, demographic data required for meaningful development planning was scarce and scanty. The present administration, in its efforts to ensure the production of adequate, reliable and timely demographic data, will continue to support the conduct of surveys and population censuses periodically.

The implementation of the 2003 Nigeria Demographic and Health Survey (2003 NDHS) further shows the renewed effort of government to alleviate poverty and to resolve related health problems with the goal of overall improvement in the quality of life in Nigeria.

Nigeria's commitment to population and reproductive health issues is of paramount concern to the government, and efforts will continue to be strengthened so as to ensure that the set objectives are achieved and realized.

Information provided in this report should be fully utilized by all at the three tiers of government to ensure success in the health sector. I commend USAID for the generous support provided for the study and urge the National Population Commission to continue its effort to generate additional demographic data required for meaningful planning and development.



His Excellency  
Atiku Abubakar  
(Turakin Adamawa)  
Vice President  
Federal Republic of Nigeria  
Abuja

## MESSAGE FROM THE CHAIRMAN

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I am delighted to present the final report of the 2003 Nigeria Demographic and Health Survey (2003 NDHS). The 2003 NDHS is the latest in the periodic Demographic and Health Survey (DHS) series, which started in Nigeria at the national level in 1990. The surveys are designed to measure levels, patterns, and trends of demographic and health indicators. This report, which is a sequel to the preliminary report that was produced in October of last year, is more detailed and comprehensive.

The success of the 2003 NDHS was made possible by the support and collaboration of a number of organizations and individuals. In this connection, I wish to acknowledge the assistance of the United States Agency for International Development (USAID/Nigeria), which provided the funding for the survey. I also wish to express appreciation to ORC Macro for its technical assistance in all the stages of the survey. The National Population Commission remains grateful to other development partners, especially the Department for International Development (DFID), United Nations Population Fund (UNFPA), and UNICEF for their supportive roles.

Finally, I wish to commend the report of the 2003 NDHS to policymakers, programme administrators and researchers. The text and the tables have been presented in a user-friendly manner and I hope end-users will avail themselves of this vital information.



Chief S. D. Makama  
(Ubandoman Pyem)  
Chairman  
National Population Commission  
Abuja



## PREFACE

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The 2003 Nigeria Demographic and Health Survey (2003 NDHS) is the third national Demographic and Health Survey (DHS) in a series under the worldwide Demographic and Health Surveys programme. The first Nigeria DHS survey was conducted in 1990. Funding for the 2003 NDHS survey was provided by the U.S. Agency for International Development (USAID/Nigeria), while technical assistance was provided by ORC Macro. The United Nations Population Fund (UNFPA) and United Nations Children's Fund (UNICEF) also provided logistical support. Fieldwork for the survey took place between March and September 2003 in selected clusters nationwide.

The major objective of the 2003 NDHS, which is a follow-up to the 1999 NDHS, is to obtain and provide information on fertility, fertility preferences, use and knowledge of family planning methods, maternal and childhood health, maternal and childhood mortality, breastfeeding practices, nutrition, knowledge of HIV/AIDS, and other health issues. Compared with the 1999 NDHS, the 2003 NDHS has a wider scope. For example, unlike the 1999 survey, the 2003 survey includes a module on malaria and another on testing for salt. In addition, the 2003 data are geo-referenced to allow for more detailed geographical analysis. Other innovations of the 2003 NDHS include the concurrent processing of data even as fieldwork was ongoing. This innovation served a dual purpose by facilitating field checks for errors and hastening the process of data entry and analysis.

As may be expected, the findings of the 2003 NDHS are more comprehensive than findings for the two previous DHS surveys conducted in the country. Indeed, the production of the survey report within nine months after the completion of fieldwork is unprecedented, making the findings the most timely and up to date. The enforcement of standards and consistency and a response rate of more than 90 percent also make the findings very reliable.

In addition to presenting national estimates, the report provides estimates of key indicators of fertility, mortality, and health for rural and urban areas in Nigeria and for the six geo-political zones. Overall, the report provides information on a number of key topics to guide planners, policymakers, programme managers and researchers in the planning, implementation, monitoring, and evaluation of population and health programmes in Nigeria.

Highlights of the 2003 NDHS indicate on the one hand a national total fertility rate of 5.7, and on the other hand, a national infant mortality rate of 100 deaths per 1,000 live births and an under-five mortality rate of 203 deaths per 1,000 live births. The gap between knowledge and use of family planning methods is still wide. Knowledge of HIV/AIDS remains high.

The unprecedented success of the 2003 NDHS was made possible by the contributions of a number of organizations and individuals. I wish to acknowledge the support of USAID/Nigeria for funding the survey. Similarly, I appreciate ORC Macro's technical support in the design and implementation of the survey. The personal commitment of the ORC Macro Country Manager, Ms. Holly Newby, and her colleagues is particularly remarkable and is very much appreciated.

I also acknowledge and appreciate the logistics support provided by other development partners, especially the UNFPA, DFID, and UNICEF. The 2003 NDHS witnessed the support and collaboration of other stakeholders such as the Federal Ministry of Health. Their contributions are very much appreciated.

As the National Population Commission continues with its efforts to ensure the availability and dissemination of up to date and reliable demographic and health data, it is hoped that end users will make use of the available information for programme evaluation and for socio-economic planning.

A handwritten signature in black ink, appearing to be 'A. O. Akinsanya', written in a cursive style.

Dr. A. O. Akinsanya  
Director-General  
National Population Commission

## ACKNOWLEDGMENTS

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In the recent past, adequate, timely and reliable data in Nigeria have been scarce and very limited for planning and socio-economic development. The 2003 Nigeria Demographic and Health Survey (2003 NDHS) is the latest in the series of DHS surveys conducted in Nigeria and provides indicators for the strategic management and monitoring of socio-economic activities including health programmes.

The 2003 NDHS was designed to provide data to monitor the population and health situation in Nigeria. Specifically, the 2003 NDHS collected information on fertility levels and preferences, awareness and use of family planning methods, maternal and child health, breastfeeding practices, nutritional status of mothers and young children, childhood mortality, use of bed nets, female genital cutting, marriage, sexual activity, and awareness and behaviour regarding AIDS and other sexually transmitted infections.

On behalf of the Commission, I gratefully acknowledge the support of the United States Agency for International Development (USAID/Nigeria) in providing funds to cover the cost of the 2003 NDHS. The technical support provided by ORC Macro played a key role during the implementation period. Worthy of mention is Ms. Holly Newby, the ORC Macro Country Manager who worked tirelessly during the period. Her efforts are greatly appreciated. Mr. Albert Themme and Ms. Elizabeth Britton handled data processing of the NDHS marvelously and in record time. Their efforts deserve our appreciation and gratitude. I wish to commend the efforts of Dr. Alfredo Aliaga, the Sampling Specialist at ORC Macro, who provided technical support during the sample selection exercise. Other ORC Macro officials, such as Ms. Anne Cross, Dr. Fern Greenwell and Ms. Arlinda Zhuzhuni, deserve our deep appreciation for their contributions at different stages of the 2003 NDHS implementation.

In the area of logistics, we acknowledge with gratitude the support of United Nations Population Fund (UNFPA), United Nations Children's Fund (UNICEF) and Department for International Development (DFID).

The Chairman of the Commission and his team of Federal Commissioners greatly assisted during the implementation period by providing excellent leadership and advocacy support. The unflinching support and technical assistance provided by the Director-General and all Directors is hereby acknowledged. The U.N. Chief Technical Adviser, Prof. G.B. Fosu, took pains in providing technical support, including the review of the report, and his efforts are highly appreciated. During the implementation period of the survey, the core team—also referred to as Zonal Coordinators—worked tirelessly and their efforts are hereby acknowledged. The survey could not have been conducted in such a timely and successful fashion without the commitment of the entire field staff of the 2003 NDHS. The entire data processing staff is also commended for their important role in the timely processing of the data.

A number of organizations rendered immense support during the implementation stage including the Federal Ministry of Health, the National Action Committee on AIDS, and the National Programme on Immunization. Some members of academia in various Nigerian universities served as resource persons during the report writing exercise. Their useful contributions and commitment are commendable and hereby acknowledged.

Finally, our special gratitude goes to all the households, men, and women who were selected and who responded very well during the survey; without their participation and support, this project would have been a failure. Our appreciation goes to the entire people of Nigeria for their understanding and for making possible an enabling environment conducive to the conduct of this very important survey.

A handwritten signature in black ink, appearing to read 'Samuel A. Ogunlade', with a stylized flourish at the end.

Samuel A. Ogunlade  
Project Director  
National Population Commission

## SUMMARY OF FINDINGS

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The 2003 Nigeria Demographic and Health Survey (2003 NDHS) is the third national Demographic and Health Survey conducted in Nigeria. The 2003 NDHS is based on a nationally representative sample of over 7,000 households. All women age 15-49 in these households and all men age 15-59 in a subsample of one-third of the households were individually interviewed. The survey provides up-to-date information on the population and health situation in Nigeria. Specifically, the 2003 NDHS collected information on fertility levels and preferences, awareness and use of family planning methods, maternal and child health, breastfeeding practices, nutritional status of women and young children, childhood mortality, use of bed nets, female genital cutting, marriage, sexual activity, and awareness and behaviour regarding AIDS and other sexually transmitted infections in Nigeria.

The National Population Commission conducted the survey, which was in the field from March to August 2003. ORC Macro, through the MEASURE *DHS+* project, provided technical support. The U.S. Agency for International Development (USAID)/Nigeria funded the survey. Other development partners, including the United Nations Population Fund (UNFPA), the United Nations Children's Fund (UNICEF), and Department for International Development (DFID), also provided support for the survey.

### FERTILITY

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**Fertility Levels, Trends, and Preferences.** The total fertility rate (TFR) in Nigeria is 5.7. This means that at current fertility levels, the average Nigerian woman who is at the beginning of her childbearing years will give birth to 5.7 children by the end of her lifetime. Compared with previous national surveys, the 2003 survey shows a modest decline in fertility over the last two decades: from a TFR of 6.3 in the 1981-82 National Fertility Survey (NFS) to 6.0 in the 1990 NDHS to 5.7 in the 2003 NDHS. However, the 2003 NDHS rate of 5.7 is significantly higher than the 1999 NDHS rate of 5.2. Analysis

has shown that the 1999 survey underestimated the true levels of fertility in Nigeria.

On average, rural women will have one more child than urban women (6.1 and 4.9, respectively). Fertility varies considerably by region of residence, with lower rates in the south and higher rates in the north. Fertility also has a strong negative correlation with a woman's educational attainment.

Most Nigerians, irrespective of their number of living children, want large families. The ideal number of children is 6.7 for all women and 7.3 for currently married women. Nigerian men want even more children than women. The ideal number of children for all men is 8.6 and for currently married men is 10.6. Clearly, one reason for the slow decline in Nigerian fertility is the desire for large families.

**Birth Intervals.** A 36-month interval between deliveries is best for mother and child; longer birth intervals also contribute to reduction in overall levels of fertility. The median birth interval in Nigeria is 31 months, which is close to the optimal interval. The median interval is lowest among mothers age 15-19 (26 months) and highest among mothers age 40-49 (39 months). While there is no difference in birth intervals between urban and rural women, birth intervals do vary considerably by region of residence. Women in the South West have the longest median birth interval (37 months) and women in the South East have the shortest median birth interval (27 months), a difference of almost one year.

**Initiation of Sexual Behaviour and Childbearing at Young Ages.** One-third of women age 25-49 reported that they had had sexual intercourse by age 15. By age 20, more than three-quarters of women, and by age 25, nine in ten women have had sexual intercourse. One-quarter of teenage women has given birth or is pregnant. Early childbearing is more of a rural phenomenon, with 30 percent of rural women age 15-19 having begun childbearing compared with 17 percent of urban women in the same age group. Overall, median age at first birth is increasing. Whereas median age at first birth is less than 19 years among women over age 35, it is 20.3 years among women age 25-29.

## FAMILY PLANNING

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### **Knowledge of Family Planning Methods.**

About eight in ten women and nine in ten men know at least one modern method of family planning. The pill, injectables, and the male condom are the most widely known modern methods among both women and men. Mass media is an important source of information on family planning. Radio is the most frequent source of family planning messages: 40 percent of women and 56 percent of men say they heard a radio message about family planning during the months preceding the survey. However, more than half of women (56 percent) and 41 percent men were not exposed to family planning messages from a mass media source.

**Current Use.** A total of 13 percent of currently married women are using a method of family planning, including 8 percent who are using a modern method. The most common modern methods are the pill, injectables, and the male condom (2 percent each). Urban women are more than twice as likely as rural women to use a method of contraception (20 percent versus 9 percent). Contraceptive use varies significantly by region. For example, one-third of married women in the South West use a method of contraception compared with just 4 percent of women in the North East and 5 percent of women in the North West.

### **Source of Family Planning Methods.**

Fifty-eight percent of users get their contraceptive methods from private health care providers, more than twice as many as get them from the public sector (23 percent). The private sector is the most common source for the pill (74 percent) and male condoms (59 percent). Provision of injectables for current users is shared equally by the private sector and the public sector (48 percent each).

**Unmet Need for Family Planning.** While most women want large families, there is a minority who want to limit their family size or wait a period of time before having their next birth but are not using contraception. Seventeen percent of currently married women are in these two categories and have an unmet need for family planning.

Information on contacts of nonusers with family planning providers is important for determining whether family planning initiatives are effective or not. During the year preceding the survey, 4 percent of nonusers reported that they were visited by a family planning service provider at home; 6 percent of nonusers visited a health facility and discussed family planning with a provider; and 24 percent of nonusers who visited a health facility did not discuss family planning. This is an indication of missed opportunities for increasing family planning acceptance and use.

## CHILD HEALTH

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**Mortality.** The 2003 NDHS survey estimates infant mortality to be 100 per 1,000 live births for the 1999-2003 period. This infant mortality rate is significantly higher than the estimates from both the 1990 and 1999 NDHS surveys; the earlier surveys underestimated mortality levels in certain regions of the country, which in turn biased downward the national estimates. Thus, the higher rate from the 2003 NDHS is more likely due to better data quality than an actual increase in mortality risk overall.

The rural infant mortality rate (121 per 1,000) is considerably higher than the urban rate (81 per 1,000), due in large part to the difference in neonatal mortality rates. As in other countries, low maternal education, a low position on the household wealth index, and shorter birth intervals are strongly associated with increased mortality risk. The under-five mortality rate for the 1999-2003 period was 201 per 1,000.

**Vaccinations.** Only 13 percent of Nigerian children age 12-23 months can be considered fully vaccinated, that is, have received BCG, measles, and three doses each of DPT and polio vaccine (excluding the polio vaccine given at birth). This is the lowest vaccination rate among African countries in which DHS surveys have been conducted since 1998. Less than half of children have received each of the recommended vaccinations, with the exception of polio 1 (67 percent) and polio 2 (52 percent). More than three times as many urban children as rural children are fully vaccinated (25 percent and 7 percent, respectively). WHO guidelines are that children should complete the schedule of recommended vaccinations by 12 months of age. In Nigeria, however, only 11 percent of children age 12-23

months received all of the recommended vaccinations before their first birthday.

**Childhood Illness.** In the two weeks preceding the survey, 10 percent of children experienced symptoms of acute respiratory infection (ARI), and 31 percent had a fever. Among children who experienced symptoms of ARI or fever, almost one-third (31 percent) sought treatment from a health facility or health care provider.

Approximately one-fifth of children had diarrhoea in the two weeks preceding the survey. Twenty-two percent of mothers reported that their children with diarrhoea were taken to a health provider. Overall, 40 percent received oral rehydration salts (ORS), recommended home fluids (RHF), or increased fluids. Less than one-fifth of children (18 percent) were given a solution made from ORS, despite the fact that 65 percent of mothers say they know about ORS packets. Although 20 percent of mothers said they gave their sick child more liquids than usual to drink, 38 percent of mothers said they curtailed fluid intake.

## NUTRITION

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**Breastfeeding.** Breastfeeding is almost universal in Nigeria, with 97 percent of children born in the five years preceding the survey having been breastfed. However, just one-third of children were given breast milk within one hour of birth (32 percent), and less than two-thirds were given breast milk within 24 hours of birth (63 percent). Overall, the median duration of any breastfeeding is 18.6 months, while the median duration of exclusive breastfeeding is only half a month.

**Complementary Feeding.** At age 6-9 months, the recommended age for introducing complementary foods, three-quarters of breastfeeding infants received solid or semisolid foods during the day or night preceding the interview; 56 percent received food made from grains, 25 percent received meat, fish, shellfish, poultry or eggs, and 24 percent received fruits or vegetables. Fruits and vegetables rich in vitamin A were consumed by 20 percent of breastfeeding infants age 6-9 months.

**Nutritional Status of Children.** Overall, 38 percent children are stunted (short for their age), 9 percent of children are wasted or thin (low weight-for-height), and 29 percent of children are underweight (low weight-for-age). Generally, children who live in rural areas or in the north and children of uneducated mothers are significantly more likely to be undernourished than other children. The children in the North West are particularly disadvantaged—one-third are severely stunted, which reflects extensive long-term malnutrition in the region.

**Nutritional Status of Women.** The mean body mass index (BMI) of Nigerian women is 22.3, which falls well within the internationally accepted normal range (between 18.5 and 24.9). Almost two-thirds of women (64 percent) have BMIs falling in the normal range; 15 percent are thin, including 2 percent who are severely thin. The youngest women are the most likely of all the population subgroups to be thin; one-quarter of women age 15-19 have a BMI of less than 18.5. One-fifth of Nigerian women weigh more than they should: 15 percent are overweight and 6 percent are obese. The likelihood of being overweight or obese increases with age.

## WOMEN'S HEALTH

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**Maternal Care.** Almost two-thirds of mothers in Nigeria (63 percent) received some antenatal care (ANC) for their most recent live birth in the five years preceding the survey. While one-fifth of mothers (21 percent) received ANC from a doctor, almost four in ten women received care from nurses or midwives (37 percent). Almost half of women (47 percent) made the minimum number of four recommended visits, but most of the women who received antenatal care did not get care within the first three months of pregnancy.

In terms of content of care, slightly more than half of women who received antenatal care said that they were informed of potential pregnancy complications (55 percent). Fifty-eight percent of women received iron tablets; almost two-thirds had a urine or blood sample taken; and 81 percent had their blood pressure measured. Almost half (47 percent) received no tetanus toxoid injections during their most recent birth.

The majority of births in Nigeria occur at home (66 percent). Only one-third of live births during the five years preceding the survey occurred in a health

facility. Slightly more than one-third of births are attended by a doctor, nurse, or midwife. A smaller proportion of women receive postnatal care, which is crucial for monitoring and treating complications in the first two days after delivery. Only 23 percent of women who gave birth outside a health facility received postnatal care within two days of the birth of their last child. More than seven in ten women who delivered outside a health facility received no postnatal care at all.

Across all maternal care indicators, rural women are disadvantaged compared with urban women, and there are marked regional differences among women. Overall, women in the south, particularly the South East and South West, received better care than women in the north, especially women in the North East and North West.

**Female Circumcision.** Almost one-fifth of Nigerian women are circumcised, but the data suggest that the practice is declining. The oldest women are more than twice as likely as the youngest women to have been circumcised (28 percent versus 13 percent). Prevalence is highest among the Yoruba (61 percent) and Igbo (45 percent), who traditionally reside in the South West and South East. Half of the circumcised respondents could not identify the type of procedure performed. Among those women who could identify the type of procedure, the most common type of circumcision involved cutting and removal of flesh (44 percent of all circumcised women). Four percent of women reported that their vaginas were sewn closed during circumcision.

Among the 53 percent of Nigerian women who had heard of female circumcision, two-thirds (66 percent) believe that female circumcision should be discontinued, while 21 percent want the practice to continue. Continuation of female circumcision finds greater support among southerners than northerners and among those who are circumcised than the uncircumcised. Even so, less than half of circumcised women want the practice to be continued (42 percent). Among men who had heard of the practice, similar to women, almost two-thirds are against continuation of female circumcision, while about one-fifth of this group were in favour if it.

### **Perceived Constraints to Use of Health Care.**

Survey respondents were asked to identify barriers to accessing health care services for themselves. Almost half of women cite at least one barrier to care. The most commonly cited problem is getting money for treatment (30 percent), followed by distance to health facility, and having to take transport (24 percent each). One in ten women say that getting permission to go is a problem.

## **WOMEN'S CHARACTERISTICS AND STATUS**

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While the majority of Nigerian women have had some education, 42 percent have never attended school. This is almost twice the proportion of men who have never attended school (22 percent).

Slightly over half of women report being currently employed (56 percent). Eighty-four percent of working women earn cash only or cash in addition to in-kind earnings. Almost three-quarters of women who receive cash earnings report that they alone decide how their earnings are used. An additional 16 percent say that they decide jointly with their husband or someone else. Only 10 percent of women report that someone else decides how their earnings will be used.

The 2003 NDHS collected information on women's participation in different types of decisions in the household. Almost half (46 percent) of currently married women reported that they did not have a final say (either alone or jointly) in any specified decision. Among married women, household decisionmaking is highly dominated by husbands.

To assess attitudes toward wife beating, respondents were asked whether a husband would be justified in beating his wife for specific reasons. A majority of both women and men (approximately six in ten) believe there are occasions when a man is justified in beating his wife. For example, approximately half of women believe that a husband is justified in hitting his wife if she goes out without telling him or if she neglects the children. These were also the most common justifications cited by men (50 percent and 47 percent, respectively).

## **MALARIA CONTROL PROGRAM INDICATORS**

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**Nets.** Although malaria is a major public health concern in Nigeria, only 12 percent of households report owning at least one mosquito net. Even fewer,



2 percent of households, own an insecticide treated net (ITN). Rural households are almost three times as likely as urban households to own at least one mosquito net. Overall, 6 percent of children under age five sleep under a mosquito net, including 1 percent of children who sleep under an ITN. Five percent of pregnant women slept under a mosquito net the night before the survey, one-fifth of them under an ITN.

**Use of Antimalarials.** Overall, 20 percent of women reported that they took an antimalarial for prevention of malaria during their last pregnancy in the five years preceding the survey. Another 17 percent reported that they took an unknown drug, and 4 percent took paracetamol or herbs to prevent malaria. Only 1 percent received intermittent preventative treatment (IPT)—or preventive treatment with sulfadoxine-pyrimethamine (Fansidar/SP) during an antenatal care visit. Among pregnant women who took an antimalarial, more than half (58 percent) used Daraprim, which has been found to be ineffective as a chemoprophylaxis during pregnancy. Additionally, 39 percent used chloroquine, which was the chemoprophylactic drug of choice until the introduction of IPT in Nigeria in 2001.

Among children who were sick with fever/convulsions, one-third took antimalarial drugs, the majority receiving the drugs the same day as the onset of the fever/convulsions or the following day.

## **HIV/AIDS AND OTHER STIS**

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**Knowledge.** Almost all men (97 percent) and a majority of women (86 percent) reported that they had heard of AIDS. Considerably fewer know how to prevent transmission of the AIDS virus; men are better informed than women. Sixty-three percent of men and 45 percent of women reported knowing that condom use protects against HIV/AIDS. More respon-

dents (six in ten women and eight in ten men) reported knowing that limiting the number of sexual partners is a way to avoid HIV/AIDS. Less than half of the population knows that mother to child transmission of HIV is possible through breastfeeding. Few people (less than one in ten) know that a woman living with HIV can take drugs during pregnancy to reduce the risk of transmission.

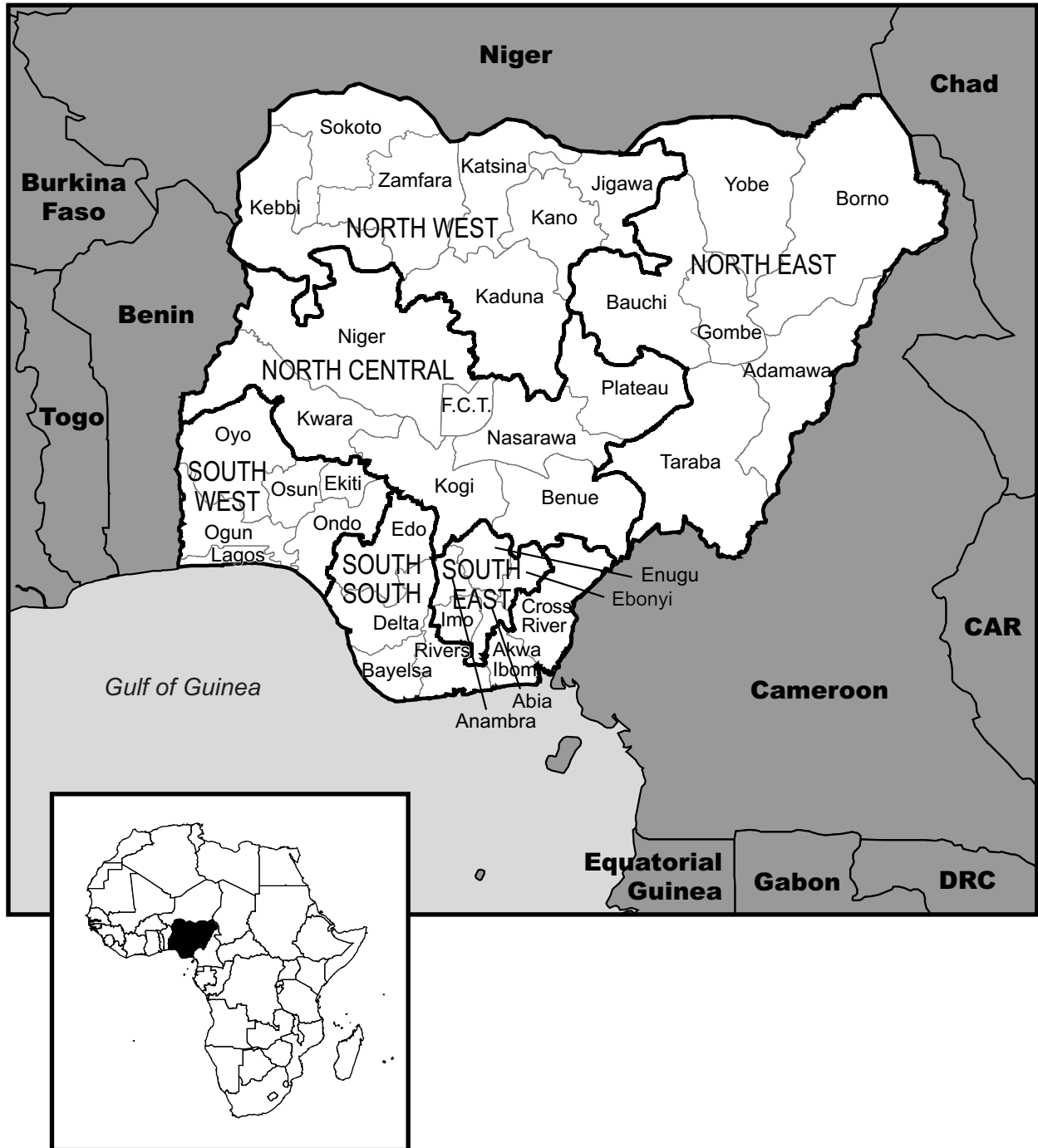
**HIV Testing and Counselling.** Six percent of women and 14 percent of men have been tested for HIV and received the results of their test. During the 12 months preceding the survey, only 3 percent of women and 6 percent of men were tested and received their test results. About one-quarter of women received counselling or information about HIV/AIDS during an antenatal care visit.

**High-risk Sex.** A much higher percentage of men than women report having had sex with a non-marital, noncohabiting partner at some time during the year preceding the survey (39 percent of men versus 14 percent of women). Less than half of men (47 percent) and less than one-quarter of women (23 percent) reported using a condom the last time they had sex with a nonmarital, noncohabiting partner. Fifteen percent of men who are currently married or cohabiting reported having high-risk sex in the past 12 months.

**Sexually Transmitted Infections.** Five percent of both women and men reported having a sexually transmitted infection (STI) or an associated symptom during the 12 months preceding the survey. The never-married population of both women and men are most at risk. Eight percent of never-married women and 7 percent of never-married men reported having an STI or STI symptom. Of these, 68 percent of women and 83 percent of men sought treatment for their STI or STI symptom; however, not everyone went to a health professional.

**Orphanhood.** Nationwide, fewer than 1 percent of children have lost both parents; 6 percent of children under age 15 have lost at least one parent.

# NIGERIA



## INTRODUCTION

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### 1.1 HISTORY, GEOGRAPHY, AND ECONOMY OF NIGERIA

#### History

The evolution of Nigeria from the mid-1800s until it attained independence in 1960 is largely the story of the transformational impact of the British on the people and culture of the Niger-Benue area. The British were in the Niger-Benue area to pursue interests that were largely economic and strategic. In the process of seeking to realize those interests, a sociopolitical aggregation—known today as Nigeria—emerged.

Nigeria came into existence as a nation-state in 1914 through the amalgamation of the North and South protectorates. Before then, there were various separate cultural, ethnic, and linguistic groups, such as the Oyo, Benin, Nupe, Jukun, Kanem-Bornu, and Hausa-Fulani empires. These peoples lived in kingdoms and emirates with traditional but sophisticated systems of government. There were also other relatively small but strong—and indeed resistant—ethnic groups (e.g., Ibo, Ibibio, and Tiv).

The British established a crown colony type of government after the amalgamation. The affairs of the colonial administration were conducted by the British until 1942, when 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; most were Nigerians. Nigeria became a federation of three regions in 1954 and remained so until its independence in October 1960, with the Lagos area as the Federal Capital Territory. Three years later, on October 1, 1963, Nigeria became a republic. Nigeria has since had different administrative structures. Within the boundaries of Nigeria are many social groups with distinct cultural traits, which are reflected in the diverse behaviour of the people. There are about 374 identifiable ethnic groups, but the Igbo, Hausa, and Yoruba are the major groups.

Presently, Nigeria is made up of 36 states and a Federal Capital Territory (FCT), which are grouped into six geopolitical regions: North Central, North East, North West, South East, South South, and South West. There are also 774 constitutionally recognized Local Government Areas (LGAs) in the country.

#### Geography

Nigeria lies between 4°16' and 13°53' north latitude and between 2°40' and 14°41' east longitude. The country is in the West African subregion and borders Niger in the north, Chad in the northeast, Cameroon in the east, and Benin in the west. To the south, Nigeria is bordered by approximately 800 kilometres of the Atlantic Ocean, stretching from Badagry in the west to the Rio del Rey in the east.

With a total land area of 923,768 square kilometres, the country is the fourth largest in Africa. Nigeria is diverse climatically and topographically and exhibits a great variety of relief features, encompassing uplands of 600 to 1,300 metres on the North Central and the east highlands and 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 includes the Jos Plateau and the Adamawa highlands in the North, extending to the Obudu Plateau and

Oban Hills in the South East. Other topographic features include the Niger-Benue Trough and Chad Basin.

Nigeria has a tropical climate with wet and dry seasons associated with the movement of the Intertropical Convergence Zone north and south of the equator. The dry season occurs from October to March with a spell of coolness and dry, dusty harmattan wind felt mostly in the north in December and January. The wet season occurs from April to September. The temperature oscillates between 25° and 40°C, while 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. Within a wide range of climatic, vegetation, and soil conditions, Nigeria possesses potential for a wide range of agricultural production.

## **Economy**

Nigeria's economic history and development have been closely tied to its agricultural sector. Before the discovery of oil, the country depended almost entirely on agriculture for food and on agro-industrial raw materials for foreign exchange earnings through commodity trade. Agriculture also provided gainful employment to over 75 percent of the country's labour force and satisfactory livelihood to over 90 percent of the population at the time of the country's independence. 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. Since 1980, oil production has accounted for more than two-thirds of the gross domestic product (GDP) and more than 80 percent of total government revenue. To date, the government has largely controlled vast industrial and commercial enterprises; however, there is now a vigorous drive to privatization. There are also large, multinational companies, as well as organized small-scale enterprises.

Since the onset of the new democratic administration in 1999, economic policies have become more favourable to investment. Consequently, there has been an improvement in the performance of the domestic economy. Nigeria's GDP was estimated at 2.7 percent in 1999, 2.8 percent in 2000, and 3.8 percent in 2001. The aggregate index of agricultural production was 3.9 percent in 2001, compared with 3.7 percent in 1999. The average industrial capacity utilization was 35.5 percent in 2001, representing an increase of 4.5 percent over the 1999 figure of 31 percent (Central Bank of Nigeria, 2002). Before the advent of the civilian administration in 1999, Nigeria had a large public sector, comprising over 550 public enterprises in most sectors of the economy and dominating activities in power, telecommunication, petroleum, and steel sectors. The public enterprise sector accounts for an estimated 50 percent of the total GDP, 57 percent of investments, and two thirds of formal sector employment.

Like other developing countries, the civilian administration in Nigeria has recognized the importance of privatization in the restructuring of its economy. The country embarked on a broader economic reform and liberalization programme designed to restore macroeconomic stability, achieve faster sustainable growth, raise living standards, and reduce poverty. The reform programme was also aimed at promoting greater private sector participation in economic activity, and it included the maintenance of sound macroeconomic policies, as well as deregulation, with emphasis on power, telecommunications, and downstream petroleum sectors. It is too early to determine the impact of privatization and liberalization on the Nigerian economy. However, it is believed that these economic policy reforms, combined with investments in human resources and physical infrastructure, as well as the establishment of macroeconomic stability and good governance, are essential to achieve a high rate of self-sustaining, long-term economic growth.

## 1.2 POPULATION AND BASIC DEMOGRAPHIC INDICATORS

In Nigeria, population has always been a contentious issue. Censuses conducted in Nigeria have been controversial and have on occasion given rise to impassioned concerns from sections of the population. To a large extent, this has been because population figures are used by the federal government as one factor in the allocation of funds. They are also used to determine representation in the Houses of Assembly and both chambers of the National Assembly.

The first attempt at a population census in Nigeria was in 1866. Subsequent censuses before 1952, such as 1911 and 1922, were restricted to some sections of the country. The 1952-53 enumeration was the first nationwide census. The first postindependence census conducted in 1962 was cancelled because of alleged irregularities in its conduct. Another census conducted in 1963 was officially accepted (Table 1.1). The 1973 exercise was declared unacceptable and was cancelled. Thereafter, no attempt was made at conducting a census until 1991.

Indicators	Census 1963	NFS 1981-1982	NDHS 1990	Census 1991	NDHS 1999 <sup>1</sup>
Population (millions)	55.7	84.7	u	88.9	u
Density (pop./sq.km)	60	92	u	96	u
Percent urban	19	23	24	36.3	u
Crude birth rate (CBR)	66	46	39	44.6	38
Crude death rate (CDR)	27	16	u	14	u
Total fertility rate (TFR)	u	6.3	6	5.9	5.2
Infant mortality rate (IMR)	u	85	87	93	78
Life expectancy at birth	36	48	u	53.2	u

u = Unknown (not available)  
<sup>1</sup> Reported rates. See 1999 NDHS final report for information on data quality.  
 Sources: National Population Commission; Federal Office of Statistics

The total population of Nigeria as reported in the 1991 census was 88,992,220. Using a growth rate of 2.83 percent per annum, the National Population Commission (NPC) estimates the current population of Nigeria to be about 126 million. This makes Nigeria the most populous nation in Africa and the tenth most populous in the world. The spatial distribution of the population within the country is uneven. Extensive areas in the Chad Basin, the middle Niger Valley, the grass plains, and the Niger Delta, among others, are sparsely populated. In contrast, there are large areas of densely populated rural districts, which support more than 400 persons per square kilometre in parts of Akwa Ibom, Imo, Anambra, and Enugu State, as well as around Kano, Katsina, and Sokoto States. However, the average population density of the country in 1991 was 96 persons per square kilometre. The most densely populated states are Lagos, Anambra, Imo, and Akwa Ibom. Except for Lagos, all states with high population densities are located in the South East of Nigeria. Kano State, with an average density of 281 persons per square kilometre, is by far the most densely populated state in the north.

The population of Nigeria is predominantly rural; approximately one-third live in urban areas. The states with the largest proportion of urban population are Lagos (94 percent), Oyo (69 percent), and Anambra (62 percent). The least urbanized states, with an urban population under 15 percent, include Sokoto (14 percent), Kebbi (12 percent), Akwa Ibom (12 percent) Taraba (10 percent), and Jigawa (7 percent) (NPC, 1998).

The effort to generate reliable demographic data has included the conduct of numerous sample surveys. These include the 1965-66 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. The first Nigeria Demographic and Health Survey (NDHS) followed in 1990. In addition to the topics covered by the NFS, the 1990 NDHS also collected information on issues related to maternal and child health. In 1994, the first sentinel survey was conducted 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 conducted in 2000.

### **1.3 POPULATION AND HEALTH POLICIES AND PROGRAMMES**

#### **Population Policies and Programmes**

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 effect on national development. Since that time, emerging issues highlighted by the 1991 National Population Census, the 1994 International Conference on Population and Development, the 1999 AIDS/HIV Summit in Abuja, and other fora resulted in a revision of the National Population Policy, which was signed by the President and Commander-in-Chief of the armed forces of the Federal Republic of Nigeria, Chief Olusegun Obasanjo (GCFR), on January 14, 2004.<sup>1</sup> The policy recognizes that population factors, social and economic development, and environmental issues are irrevocably entwined and are all critical to the achievement of sustainable development in Nigeria.

The overall goal of the 2004 National Policy on Population for Sustainable Development is the improvement of the quality of life and the standards of living of the people of Nigeria. The specific goals are the following:

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

To achieve these goals, the 2004 population policy sets out the following objectives:

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<sup>1</sup> Although the policy has been approved by the government, some changes are still expected.

- Increase understanding and awareness of the interrelationships between population factors, social and economic development, and the environment, and their mutual importance to the long-term sustainable development of Nigeria
- Expand access and coverage and improve the quality of reproductive and sexual health care services
- Strengthen and expand a comprehensive family planning and fertility management programme that ensures that all couples/individuals who want them have uninterrupted access to a reasonable range of contraceptive methods at affordable prices, and is also adequately responsive to the needs of infertile and subfertile couples
- Strengthen and improve safe motherhood programmes to reduce maternal mortality and morbidity and enhance the health of women
- Reduce infant and child mortality and improve the health and nutritional status of Nigerian children through expanded access to high-quality promotive, preventive, and curative health care services
- Promote Behavioural Change Communication (BCC) programmes to increase reproductive and sexual health knowledge, awareness, and behavioural change among Nigerians
- Empower women to participate actively and fully in all aspects of Nigeria's development and effectively address gender issues
- Enhance the involvement of men in reproductive health programmes and health care
- Increase the integration of adolescents and young people into development efforts and effectively address their reproductive health and related needs
- Increase and intensify coverage of population and family life education programmes
- Accelerate the integration of reproductive health and family planning concerns into sectoral programmes and activities
- Use effective advocacy to promote and accelerate attitudinal change towards population and reproductive health issues among public and private sector leaders
- Reduce and eventually eliminate harmful social and cultural practices that adversely affect the reproductive health of the population through the promotion of behavioural change and appropriate legislation
- Strengthen the national response to HIV/AIDS to rapidly control the spread of the epidemic and mitigate its social and economic impacts
- Encourage the integration of population groups with special needs, including nomads, refugees and displaced persons, the elderly, persons with disabilities, and remote rural dwellers into the development process
- Accelerate progress towards integrated urban and rural development and balanced population distribution

- Increase enrolment and retention of children, especially girls, in basic education and raise literacy levels among Nigerians
- Accelerate the integration of population factors into development planning at national, state and local government levels
- Improve the population, social, and economic database; promote and support population and development research; and help leadership groups recognize the important contribution that planning and data utilization make to the good governance of Nigeria
- Improve systems for monitoring and evaluating the implementation of the population policy and for reviewing the policy at periodic intervals.

The Government of Nigeria has set the goal of a 2-percent population growth rate by 2015 or beyond in its National Economic Policy. The targets for reduction in the total fertility rate and increases in modern contraceptive prevalence indicated below are consistent with this goal. The following key targets have been set to guide policy, programme planning, and implementation:

- Achieve a reduction of the national population growth rate to 2 percent or lower by the year 2015
- Achieve a reduction in the total fertility rate of at least 0.6 children every five years
- Increase the modern contraceptive prevalence rate by at least 2 percentage points per year
- Reduce the infant mortality rate to 35 deaths per 1,000 live births by 2015
- Reduce the child mortality rate to 45 deaths per 1,000 live births by 2015
- Reduce the maternal mortality ratio to 125 deaths per 100,000 live births by 2010 and to 75 per 100,000 live births by 2015
- Achieve sustainable universal basic education as soon as possible prior to 2015
- Eliminate the gap between men and women in enrolment in secondary, tertiary, vocational and technical education and training by 2015
- Eliminate illiteracy by 2020
- Achieve a 25 percent reduction in the adult prevalence of HIV every five years.

## **Health Policies and Programmes**

The Federal Government has several programmes and policies aimed at improving health care delivery services. The fourth National Development Plan (1981-1985) established a government commitment to provide adequate and effective primary health care that is promotive, protective, preventive, restorative, and rehabilitative to the entire population by the year 2000. A national health policy was consequently adopted in 1988. Its goal is to provide a formal framework for the direction of health management in Nigeria. The objective is to provide the population with access not only to primary health care but also to secondary and tertiary care, as needed, through a functional referral system. It defines the roles and responsibilities of the three tiers of government, as well as of civil society and nongovernmental organizations (NGOs).



In general, the provision of health services is the responsibility of federal, state, and local governments as well as religious organizations and individuals. The services are organized in a three-tier health care system:

- 1) Primary health care, which is largely the responsibility of local governments, with the support of the State Ministry of Health
- 2) Secondary health care, which provides specialized services to patients referred from the primary health care level and is the responsibility of the state government
- 3) Tertiary health care, which provides highly specialized referral services to the primary and secondary levels of the health care delivery system and is in the domain of the federal and state governments.

The national health policy regards primary health care as the framework to achieve improved health for the population. Primary health care services include health education; adequate nutrition; safe water and sanitation; reproductive health, including family planning; immunization against five major infectious diseases; provision of essential drugs; and disease control. The policy document requires that a comprehensive health care system delivered through the primary health centers should include maternal and child health care, including family planning services.

The health sector is characterized by wide regional disparities in status, service delivery, and resource availability. More health services are located in the southern states than in the north. The health sector has deteriorated despite Nigeria's high number of medical personnel per capita. The current priorities in the health sector are in the area of childhood immunization and prevention of HIV/AIDS.

## **1.4 EDUCATION**

Education in Nigeria has evolved over a long period of time, with a series of policy changes. As a result, there have been increases in the enrolment of children and in the number of educational institutions both in the public and private sectors. The 1976 National Policy on Universal Primary Education gives every child the right to tuition-free primary education. Later, the 6-3-3-4 system was introduced, establishing six years of primary education, followed by three years of junior secondary and three years of senior secondary education; the last segment of four years is for university or polytechnic education. Subsequently, the National Literacy Programme for Adults was launched, followed by the establishment of nomadic education to address the needs of children of migrant cattle herders and fishermen in the riverine areas. In October 1999, Universal Basic Education (UBE) was launched, making it compulsory for every child to be educated free of tuition up to the junior secondary school level in an effort to meet Nigeria's manpower requirement for national development.

## **1.5 ORGANIZATION AND OBJECTIVES OF THE 2003 NIGERIA DEMOGRAPHIC AND HEALTH SURVEY**

The 2003 Nigeria Demographic and Health Survey (2003 NDHS) is the latest in a series of nationally representative population and health surveys conducted in Nigeria. The 2003 NDHS was conducted by the National Population Commission (NPC); all activities were coordinated by a 12-member committee. The survey was funded by USAID/Nigeria, while ORC Macro provided technical support through MEASURE *DHS+*, a project sponsored by the U.S Agency for International Development (USAID) to assist countries worldwide in conducting surveys to obtain information on key population and health indicators. Other development partners, including the Department for International Development (DFID), the United Nations Population Fund (UNFPA), and the United Nations Children's Fund (UNICEF), also provided support for the survey.

The 2003 NDHS was designed to provide estimates for key indicators such as fertility, contraceptive use, infant and child mortality, immunization levels, use of family planning, maternal and child health, breastfeeding practices, nutritional status of mothers and young children, use of mosquito nets, female genital cutting, marriage, sexual activity, and awareness and behaviour regarding AIDS and other sexually transmitted infections in Nigeria.

## Sample Design

The sample for the 2003 NDHS was designed to provide estimates of population and health indicators (including fertility and mortality rates) for Nigeria as a whole, urban and rural areas, and six major subdivisions.

A representative probability sample of 7,864 households was selected for the 2003 NDHS sample. The sample was selected in two stages. In the first stage, 365 clusters were selected from a list of enumeration areas developed from the 1991 population census. In the second stage, a complete listing of households was carried out in each selected cluster. Households were then systematically selected for participation in the survey.

All women age 15-49 who were either permanent residents of the households in the 2003 NDHS sample or visitors present in the household on the night before the survey were eligible to be interviewed. In addition, in a subsample of one-third of all households selected for the survey, all men age 15-59 were eligible to be interviewed if they were either permanent residents or visitors present in the household on the night before the survey.

## Questionnaires

Three questionnaires were used for the 2003 NDHS: the Household Questionnaire, the Women's Questionnaire, and the Men's Questionnaire. The content of these questionnaires was based on the model questionnaires developed by the MEASURE *DHS+* programme for use in countries with low levels of contraceptive use.

The questionnaires were adapted during a technical workshop organized by the National Population Commission to reflect relevant issues in population and health in Nigeria. The workshop was attended by experts from the government, NGOs, and international donors. The adapted questionnaires were translated from English into the three major languages (Hausa, Igbo, and Yoruba) and pretested during November 2002.

The Household Questionnaire was used to list all usual members and visitors in the selected households. Some basic information was collected on the characteristics of each person listed, including age, sex, education, and relationship to the head of the household. The main purpose of the Household Questionnaire was to identify women and men who were eligible for the individual interview. The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as the source of water, type of toilet facilities, materials used for the floor of the house, ownership of various durable goods, and ownership and use of mosquito nets. Additionally, the Household Questionnaire was used to record height and weight measurements of women age 15-49 and children under the age of 6.

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

- Background characteristics (e.g., education, residential history, media exposure)
- Birth history and childhood mortality

- Knowledge and use of family planning methods
- Fertility preferences
- Antenatal and delivery care
- Breastfeeding and child feeding practices
- Vaccinations and childhood illnesses
- Marriage and sexual activity
- Woman's work and husband's background characteristics
- Awareness and behaviour regarding AIDS and other sexually transmitted infections
- Female genital cutting.

The Men's Questionnaire was administered to all men age 15-59 living in every third household in the 2003 NDHS sample. The Men's Questionnaire collected much of the same information found in the Women's Questionnaire, but was shorter because it did not contain a reproductive history or questions on maternal and child health or nutrition.

### **Training of Field Staff**

Over 100 people were recruited by the NPC to serve as supervisors, field editors, male and female interviewers, quality control personnel, and reserve interviewers. Efforts were made to recruit high-calibre personnel who came from all of the 36 states and the FCT to ensure appropriate linguistic and cultural diversity. They all participated in the main interviewer training, which was conducted from February 17 to March 8, 2003. The training was conducted in English and included lectures, presentations by outside experts, practical demonstrations, and practice interviewing in small groups. The practice interviews were conducted in the languages that the questionnaires were translated into: English, Hausa, Igbo, and Yoruba. Practice in certain less common dialects was also accomplished by translating directly from the English questionnaires. All of the field staff participated in three days of field practice. Finally, a series of special lectures was held specifically for the group comprising supervisors, field editors, quality control personnel, and field coordinators.

### **Fieldwork**

Fieldwork for the 2003 NDHS took place over a five-month period, from March to August 2003. Twelve interviewing teams carried out data collection. Each team consisted of one team supervisor, one field editor, four female interviewers, one male interviewer, and one driver. Special care was taken to monitor the quality of data collection. First, the field editor was responsible for reviewing all questionnaires for quality and consistency before the team's departure from the cluster. The field editor and supervisor would also sit in on interviews periodically. Twelve staff assigned from the NPC coordinated fieldwork activities and visited the teams at regular intervals to monitor the work. In addition, quality control personnel independently reinterviewed selected households after the departure of the teams. These checks were performed periodically through the duration of the fieldwork. ORC Macro also participated in field supervision.

### **Data Processing**

The processing of the 2003 NDHS results began shortly after the fieldwork commenced. Completed questionnaires were returned periodically from the field to NPC headquarters in Abuja, where they were entered and edited by data processing personnel who were specially trained for this task. The data processing personnel included two supervisors, a questionnaire administrator (who ensured that the expected numbers of questionnaires from all clusters were received), three office editors, 12 data entry operators, and a secondary editor. The concurrent processing of the data was an advantage since the NPC was able to advise field teams of problems detected during the data entry. In particular, tables were gener-

ated to check various data quality parameters. As a result, specific feedback was given to the teams to improve performance. The data entry and editing phase of the survey was completed in September 2003.

## 1.6 RESPONSE RATES

Table 1.2 shows household and individual response rates for the 2003 NDHS. A total of 7,864 households were selected for the sample, of which 7,327 were found. The shortfall is largely due to structures that were found to be vacant. Of the 7,327 existing households, 7,225 were successfully interviewed, yielding a household response rate of 99 percent. In these households, 7,985 women were identified as eligible for the individual interview. Interviews were completed with 95 percent of them. Of the 2,572 eligible men identified, 91 percent were successfully interviewed. There is little difference between urban and rural response rates.

Table 1.2 Results of the household and individual interviews			
Number of households, number of interviews, and response rates, according to residence, Nigeria 2003			
Result	Residence		Total
	Urban	Rural	
<b>Household interviews</b>			
Households selected	3,163	4,701	7,864
Households occupied	2,979	4,348	7,327
Households interviewed	2,931	4,294	7,225
<b>Household response rate</b>	98.4	98.8	98.6
<b>Interviews with women</b>			
Number of eligible women	3,181	4,804	7,985
Number of eligible women interviewed	3,057	4,563	7,620
<b>Eligible woman response rate</b>	96.1	95.0	95.4
<b>Interviews with men</b>			
Number of eligible men	1,073	1,499	2,572
Number of eligible men interviewed	986	1,360	2,346
<b>Eligible man response rate</b>	91.9	90.7	91.2

# HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS

# 2

This chapter presents a descriptive summary of some demographic and socioeconomic characteristics of the population in the sampled households. Also examined are environmental conditions such as housing facilities and physical features of the dwelling units in which the population lives.

All usual residents of each sampled household, plus all visitors who slept in that household the night before the interview, were listed using the household questionnaire. Some basic information was collected for each person, including age, sex, marital status, and education. In addition, information was collected on whether each person is a usual resident of the household or a visitor, and whether the person slept in the household the night prior to the survey interview. This allows the analysis of either de jure (usual residents) or de facto (those who are physically present there at the time of the survey) populations.

## 2.1 HOUSEHOLD POPULATION BY AGE, SEX, AND RESIDENCE

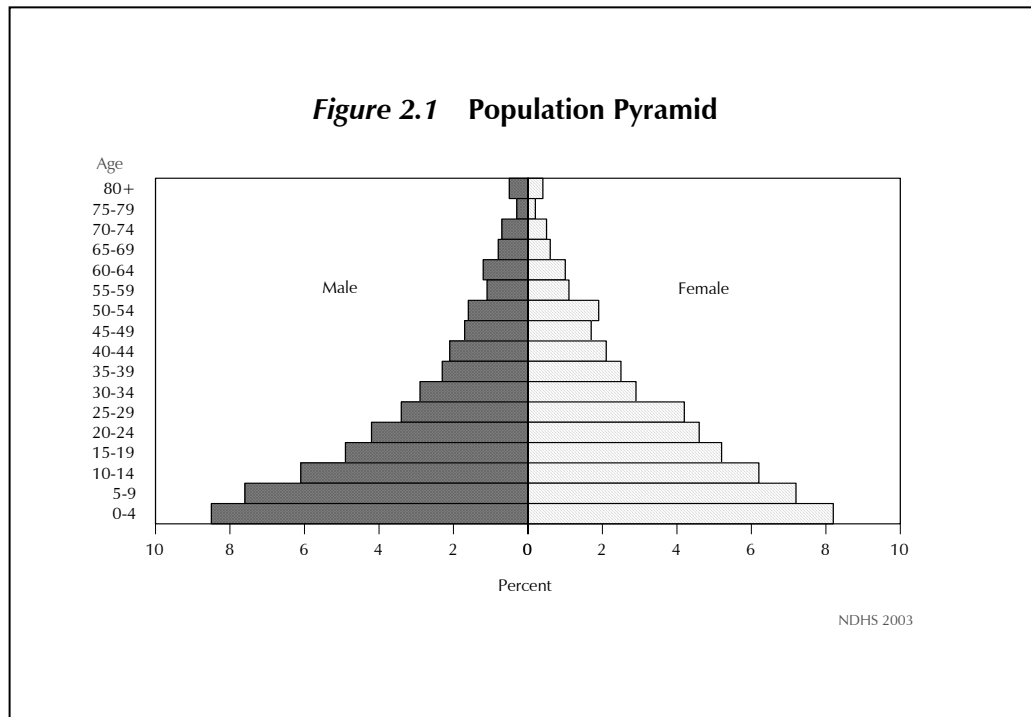
Table 2.1 shows the distribution of the de facto household population in the 2003 Nigeria Demographic and Health Survey (2003 NDHS) by five-year age groups, according to sex and urban-rural residence. The 2003 NDHS households constitute a population of 35,173 persons. The population age structure indicates the history of the population of Nigeria and also its future course (Figure 2.1). About 50 percent of the population is female, and 50 percent is male. The proportion of persons in the younger age groups is substantially larger than the proportion in the older age groups for each sex in both urban and rural areas, which reflects the young age structure of the Nigerian population and is an indication of a population with high fertility. Forty-four percent of the population is below 15 years of age and 4 percent is age 65 or older.

Table 2.1 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 2003

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	14.8	15.2	15.0	18.2	16.7	17.4	17.0	16.2	16.6
5-9	14.4	13.1	13.7	15.7	14.9	15.3	15.2	14.3	14.8
10-14	12.4	13.4	12.9	12.2	11.8	12.0	12.3	12.3	12.3
15-19	10.8	10.4	10.6	9.5	10.3	9.9	9.9	10.3	10.1
20-24	9.6	9.4	9.5	7.8	8.9	8.4	8.4	9.1	8.8
25-29	7.7	8.8	8.3	6.4	8.1	7.3	6.8	8.4	7.6
30-34	6.3	5.7	6.0	5.7	5.9	5.8	5.9	5.8	5.9
35-39	4.4	5.7	5.1	4.7	4.5	4.6	4.6	4.9	4.7
40-44	4.4	4.1	4.2	4.0	4.2	4.1	4.1	4.2	4.2
45-49	4.1	3.5	3.8	3.2	3.2	3.2	3.5	3.3	3.4
50-54	3.0	3.5	3.3	3.2	3.8	3.5	3.1	3.7	3.4
55-59	2.2	2.1	2.1	2.1	2.4	2.2	2.1	2.3	2.2
60-64	2.1	1.7	1.9	2.5	2.0	2.3	2.4	1.9	2.1
65-69	1.5	1.1	1.3	1.6	1.1	1.4	1.6	1.1	1.4
70-74	1.0	0.8	0.9	1.5	1.0	1.3	1.3	1.0	1.1
75-79	0.4	0.4	0.4	0.6	0.4	0.5	0.5	0.4	0.5
80 +	0.8	0.9	0.8	1.0	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	6,017	5,870	11,887	11,441	11,844	23,286	17,459	17,714	35,173

**Figure 2.1 Population Pyramid**



## 2.2 HOUSEHOLD COMPOSITION

Information about the composition of households by sex of the head of the household and size of the household is presented in Table 2.2. The data show that households in Nigeria are predominantly headed by men (83 percent) and less than one in five (17 percent) are headed by women. Female-headed households are more common in urban areas (19 percent) than in rural areas (15 percent). There is significant variation by region: the proportion of households headed by a female ranges from a low of 7 percent in the North East to a high of 28 percent in the South South.

The average household size in Nigeria is 5.0 persons. The household size is slightly higher in rural areas than in urban areas (5.1 versus 4.7 persons). It is also higher in the north than the south.

Table 2.2 Household composition

Percent distribution of households by sex of head of household and household size, according to residence, Nigeria 2003

Characteristic	Residence		Region						Total
	Urban	Rural	North Central	North East	North West	South East	South South	South West	
<b>Sex of head of household</b>									
Male	81.0	84.8	84.3	93.5	92.1	73.5	71.8	76.8	83.4
Female	19.0	15.2	15.7	6.5	7.9	26.5	28.2	23.2	16.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Number of usual members</b>									
0	0.1	0.2	0.3	0.0	0.2	0.4	0.1	0.1	0.2
1	14.9	9.8	10.7	9.1	7.1	16.8	15.1	15.9	11.7
2	12.7	11.5	10.2	9.2	11.1	15.4	13.0	14.8	12.0
3	14.0	14.2	12.3	10.8	15.8	13.8	12.4	18.9	14.1
4	12.8	13.4	13.9	12.8	14.0	11.5	12.9	13.1	13.2
5	12.2	12.0	10.9	11.0	13.3	11.6	10.7	14.0	12.1
6	10.4	11.0	11.1	11.8	9.9	12.2	10.5	10.2	10.8
7	8.4	8.4	9.8	8.8	8.6	9.2	8.6	5.2	8.4
8	4.5	5.5	5.9	6.7	5.6	3.4	5.6	2.5	5.1
9+	10.0	14.0	14.9	19.9	14.4	5.7	11.0	5.3	12.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	2,598	4,627	1,040	1,185	1,911	690	1,315	1,083	7,225
Mean size	4.7	5.1	5.4	5.9	5.2	4.1	4.7	4.0	5.0

Note: Table is based on de jure members, i.e., usual residents.

### 2.3 EDUCATIONAL ATTAINMENT

Educational attainment is perhaps the most important characteristic of household members. Many phenomena such as reproductive behaviour, use of contraception, children's health, and proper hygienic habits are related to the education of household members. Table 2.3 shows the classification of the household members by educational attainment, according to age group, residence, and geopolitical region for each sex. Although the majority of the household population age 6 and older has some education, 46 percent of females and 31 percent of males have never attended school.

With the exception of the youngest age group, some of whom will begin to attend school in the future, the proportion with no education increases with age. For example, the proportion of women who have never attended any formal schooling increases from 27 percent among those age 10-14 to 89 percent among those age 65 and above. For men, the proportion increases from 18 percent of those age 10-14 to 70 percent of those age 65 and older. Approximately one-quarter of women and one-third of men have attended at least some secondary schooling, however, the median number of years of schooling is 0.2 for females and 3.6 for males.

Educational attainment is higher in urban areas than in rural areas. The proportion of the population that has achieved any education varies among Nigeria's geopolitical regions. The North West and North East have the highest proportion of persons with no education—seven in ten women and half of men—while the South East has the lowest percentage who have never been to school among females (18 percent) and South South among males (9 percent).

**Table 2.3 Educational attainment of household population**

Percent distribution of the de facto female and male household populations age six and over by highest level of education attended or completed, according to background characteristics, Nigeria 2003

Background characteristic	Highest level of schooling attended or completed							Total	Number	Median number of years
	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary	Don't know/missing			
<b>FEMALE</b>										
<b>Age</b>										
6-9	45.9	51.6	0.0	0.0	0.0	0.0	2.4	100.0	2,041	0.0
10-14	26.8	53.2	4.6	14.0	0.1	0.0	1.3	100.0	2,176	2.3
15-19	30.2	11.2	10.1	39.6	7.3	0.9	0.8	100.0	1,832	5.6
20-24	33.9	5.6	11.9	17.3	23.3	7.1	0.9	100.0	1,609	5.8
25-29	39.7	5.5	14.6	13.0	18.6	8.0	0.6	100.0	1,481	5.3
30-34	47.5	7.4	15.5	13.4	9.1	6.3	0.8	100.0	1,031	2.1
35-39	49.8	7.3	14.9	15.0	3.9	8.7	0.4	100.0	867	0.0
40-44	60.4	8.9	12.4	10.0	2.4	5.5	0.5	100.0	736	0.0
45-49	68.0	11.5	8.7	3.6	1.1	4.4	2.7	100.0	584	0.0
50-54	76.3	6.2	8.1	4.6	0.8	2.9	1.1	100.0	653	0.0
55-59	80.9	6.2	5.1	2.4	0.3	2.1	3.0	100.0	404	0.0
60-64	85.5	6.8	1.5	3.7	0.1	1.0	1.5	100.0	341	0.0
65+	88.7	3.5	2.5	1.0	0.3	1.0	3.1	100.0	594	0.0
<b>Residence</b>										
Urban	31.9	21.3	9.6	18.6	10.8	6.8	1.0	100.0	4,839	3.9
Rural	53.4	20.4	7.9	10.7	4.4	1.7	1.4	100.0	9,521	0.0
<b>Region</b>										
North Central	40.9	27.2	9.7	13.4	5.3	2.5	1.1	100.0	2,248	0.9
North East	68.0	17.1	4.3	5.7	2.7	1.5	0.7	100.0	2,593	0.0
North West	72.2	13.6	4.2	4.1	2.5	1.5	2.0	100.0	3,823	0.0
South East	17.8	25.1	12.1	20.6	16.2	5.6	2.6	100.0	1,314	5.4
South South	20.6	27.5	12.5	23.6	9.4	5.4	0.9	100.0	2,559	5.1
South West	23.2	19.9	13.6	24.3	11.4	7.1	0.5	100.0	1,823	5.4
Total	46.1	20.7	8.5	13.4	6.6	3.4	1.3	100.0	14,360	0.2
<b>MALE</b>										
<b>Age</b>										
6-9	41.1	56.1	0.0	0.0	0.0	0.0	2.8	100.0	2,175	0.0
10-14	18.2	62.1	3.1	15.4	0.1	0.0	1.2	100.0	2,144	2.7
15-19	15.4	15.6	8.9	51.2	7.4	0.8	0.9	100.0	1,736	6.7
20-24	16.2	6.4	13.2	27.9	24.7	10.0	1.5	100.0	1,473	8.7
25-29	20.6	4.3	16.7	15.5	27.4	14.2	1.3	100.0	1,195	8.6
30-34	23.7	5.9	14.4	19.3	18.1	17.5	1.0	100.0	1,029	8.3
35-39	27.2	7.0	15.8	18.3	12.9	17.7	1.0	100.0	796	6.4
40-44	35.7	8.9	15.7	15.5	6.1	17.6	0.5	100.0	724	5.5
45-49	38.7	12.1	15.9	12.6	4.2	15.9	0.6	100.0	613	5.3
50-54	47.0	14.1	16.0	10.0	2.8	8.1	2.1	100.0	550	1.5
55-59	52.8	14.3	12.2	6.8	2.9	9.3	1.8	100.0	372	0.0
60-64	66.0	9.3	11.1	6.6	1.1	4.0	1.8	100.0	411	0.0
65+	70.4	9.9	6.9	5.7	1.2	3.8	2.1	100.0	760	0.0
<b>Residence</b>										
Urban	19.9	24.0	9.3	21.5	12.3	11.9	1.1	100.0	4,971	5.6
Rural	36.3	25.2	9.6	15.9	6.7	4.6	1.6	100.0	9,028	2.0
<b>Region</b>										
North Central	21.9	29.5	9.1	21.1	10.1	7.5	0.7	100.0	2,222	4.9
North East	50.2	22.9	4.6	11.8	4.9	4.9	0.8	100.0	2,626	0.0
North West	50.0	23.1	6.2	9.3	5.0	4.4	2.1	100.0	3,670	0.0
South East	14.0	23.6	16.0	20.2	11.5	10.8	4.0	100.0	1,124	5.6
South South	8.7	28.1	14.1	25.8	13.0	9.2	1.1	100.0	2,557	5.8
South West	13.9	21.0	13.4	27.7	12.5	10.7	0.8	100.0	1,800	5.9
Total	30.5	24.8	9.5	17.9	8.7	7.2	1.4	100.0	13,999	3.6

Note: Totals include 10 women and 20 men with missing information on age.

<sup>1</sup> Completed 6 years at the primary level

<sup>2</sup> Completed 6 years at the secondary level



## School Attendance Rates

Table 2.4 provides net attendance ratios (NAR) and gross attendance ratios (GAR) by sex, residence, geopolitical region, and household economic status according to school level. The NAR for primary school is the percentage of the primary school-age (6-11 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary school age (12-17 years) population that is attending secondary school. By definition, the NAR cannot exceed 100 percent. The GAR for primary school is the total number of primary school students of any age, expressed as the percentage of the official primary school age population. The GAR for secondary school is the total number of secondary school students up to age 24, expressed as the percentage of the official secondary school age population. If there are significant numbers of over-age and under-age students at a given level of schooling, the GAR can exceed 100 percent. Children are considered to be attending school currently if they attended at any point during the current school year.

Table 2.4 shows that 60 percent of primary school age children in Nigeria are attending primary school. The NAR is higher in urban areas than in rural areas (70 and 56 percent, respectively), as is the GAR (100 and 82 percent, respectively). There is significant variation by region: the NARs in the North East and North West are just over half the ratios in the three southern regions. At the secondary school level, the NAR is 35 percent and the GAR is 61 percent. Regional disparities at the secondary school level are even more pronounced than at the primary school level: the NAR, for example, ranges from a low of 15 percent in the North West, to a high of 61 percent in the South West.

The Gender Parity Index (GPI) represents the ratio of the GAR for females to the GAR for males. It is presented for both the primary and secondary school levels and offers a summary measure to the extent to which there are gender differences in attendance rates. A GPI of less than 1 indicates that a smaller proportion of females than males attends school. The GPI for primary school is 0.86 and for secondary school is 0.77. Although there is little urban-rural differential at the primary school level, there is significant difference at the secondary school level. Once again, regional differentials are significant; the data indicate that girls residing in the North West and North East are particularly disadvantaged. Gender disparities by age in school attendance at any level are shown in Figure 2.2.

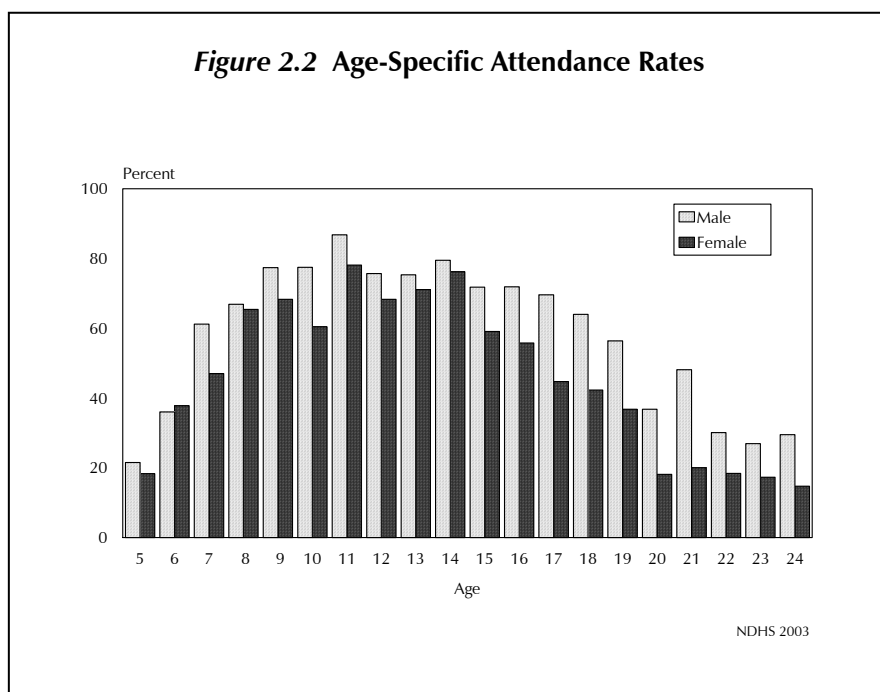


Table 2.4 also shows school attendance ratios and GPIs by wealth quintile, an indicator of the economic status of households. The wealth index is a recently developed measure that has been tested in a number of countries in relation to inequities in household income, use of health services, and health outcomes (Rutstein, 2004; Rutstein et al., 2000). It is an indicator of the level of wealth that is consistent with expenditure and income measures (Rutstein, 1999). The wealth index was constructed using household asset data and principal components analysis. Asset information was collected in the 2003 NDHS Household Questionnaire and covers information on household ownership of a number of consumer items ranging from a television to a bicycle or car, as well as dwelling characteristics such as source of drinking water, type of sanitation facilities, and type of material used in flooring.

Each asset was assigned a weight (factor score) generated through principal component analysis, and the resulting asset scores were standardized in relation to a standard normal distribution with a mean of zero and standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for each household; individuals were ranked according to the total score of the household in which they resided. The sample was then divided into quintiles from one (lowest) to five (highest)

The data in Table 2.4 show that there is a high correlation between economic status of the household and school attendance. For example, the NAR at the primary school level is 40 percent for the poorest households and 83 percent for the most advantaged households. The data indicate that unless there is an effective policy on free education, many young Nigerians will continue to be denied educational opportunities.

Table 2.4 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de jure household population by level of schooling and sex, according to background characteristics, Nigeria 2003

Background characteristic	Net attendance ratio <sup>1</sup>			Gross attendance ratio <sup>2</sup>			Gender parity index <sup>3</sup>
	Male	Female	Total	Male	Female	Total	
<b>PRIMARY SCHOOL</b>							
<b>Residence</b>							
Urban	71.0	68.0	69.5	105.5	93.8	99.8	0.89
Rural	60.2	51.1	55.7	89.4	75.3	82.4	0.84
<b>Region</b>							
North Central	71.4	68.9	70.2	109.1	110.0	109.5	1.01
North East	49.5	39.1	44.4	71.1	51.8	61.6	0.73
North West	49.0	34.2	41.7	77.6	48.6	63.3	0.63
South East	82.4	78.3	80.2	124.5	117.0	120.4	0.94
South South	83.2	81.1	82.2	124.5	114.4	119.5	0.92
South West	81.2	84.6	82.8	104.6	114.9	109.4	1.10
<b>Wealth quintile</b>							
Lowest	45.0	35.7	40.4	71.5	57.1	64.4	0.80
Second	55.6	42.2	48.9	88.5	63.4	75.9	0.72
Middle	64.9	56.6	60.9	97.2	83.7	90.7	0.86
Fourth	75.4	72.7	74.1	111.8	106.0	109.0	0.95
Highest	82.9	82.8	82.9	108.4	103.8	106.0	0.96
Total	63.7	56.5	60.1	94.6	81.2	88.0	0.86
<b>SECONDARY SCHOOL</b>							
<b>Residence</b>							
Urban	47.2	45.3	46.3	75.6	67.2	71.6	0.89
Rural	31.7	25.9	28.7	65.0	45.9	55.3	0.71
<b>Region</b>							
North Central	42.7	32.6	37.7	90.7	55.6	73.3	0.61
North East	22.9	14.9	19.1	41.6	23.1	32.9	0.55
North West	19.8	9.5	14.7	41.0	14.6	27.8	0.36
South East	44.9	51.4	48.5	84.7	93.7	89.8	1.11
South South	51.6	51.5	51.5	90.9	90.8	90.9	1.00
South West	62.2	59.9	61.0	94.1	80.2	87.0	0.85
<b>Wealth quintile</b>							
Lowest	17.5	12.0	14.6	40.9	23.8	32.1	0.58
Second	24.8	16.2	20.9	50.1	31.3	41.5	0.63
Middle	37.3	26.7	32.0	71.2	49.8	60.4	0.70
Fourth	43.5	40.1	41.8	84.5	63.1	73.9	0.75
Highest	62.6	64.9	63.8	95.0	94.2	94.6	0.99
Total	37.5	32.6	35.1	69.0	53.3	61.2	0.77

<sup>1</sup> The NAR for primary school is the percentage of the primary-school-age (6-11 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary-school age (12-17 years) population that is attending secondary school. By definition the NAR cannot exceed 100 percent.

<sup>2</sup> The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary-school-age population. 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 over-age and under-age students at a given level of schooling, the GAR can exceed 100 percent.

<sup>3</sup> The Gender Parity Index for primary school is the ratio of the primary school GAR for females to the GAR for males. The Gender Parity Index for secondary school is the ratio of the secondary school GAR for females to the GAR for males.

## Dropout and Repetition Rates

By asking about the grade or class that children were attending during the previous school year, it is possible to calculate dropout rates and repetition rates. These rates describe the flow of students through the school system. Repetition and dropout rates approach zero where students nearly always progress to the next grade at the end of the school year. Repetition and dropout rates often vary across grades, indicating points in the school system where students are not regularly promoted to the next grade or they decide to drop out of school.

Although an automatic promotion policy does not operate officially in Nigeria, very few primary school students repeat grades. Table 2.5 indicates that apart from first grade, which 4 percent are repeating, the rates for grades 2 to 6 are all below 3 percent. Dropout rates are also low (less than 2 percent) from grades 1 through 5. At the sixth grade, the dropout rate is 17 percent. The reason for the high dropout rate at grade 6 is probably because many of the pupils who attend primary school are unable to move

Table 2.5 Grade repetition and dropout rates						
Repetition and dropout rates for the de jure household population age 5-24 years by school grade, according to background characteristics, Nigeria 2003						
Background characteristic	School grade					
	1	2	3	4	5	6
REPETITION RATE <sup>1</sup>						
<b>Sex</b>						
Male	3.8	2.8	1.7	1.6	2.9	2.4
Female	4.0	1.8	3.5	1.9	1.8	1.9
<b>Residence</b>						
Urban	4.5	0.9	1.7	2.3	4.4	2.9
Rural	3.5	3.2	3.0	1.4	1.2	1.5
<b>Region</b>						
North Central	2.4	1.1	2.2	0.0	2.1	0.0
North East	1.1	0.7	1.1	0.0	0.0	4.0
North West	6.1	4.2	5.6	1.3	5.7	(5.9)
South East	0.8	6.9	2.0	1.3	2.0	3.1
South South	6.6	0.0	1.6	2.2	1.1	1.1
South West	2.4	3.3	0.9	5.1	3.5	2.2
Total	3.9	2.4	2.5	1.7	2.4	2.1
DROPOUT RATE <sup>2</sup>						
<b>Sex</b>						
Male	0.0	0.4	0.8	0.0	2.0	15.8
Female	0.1	0.3	0.9	3.3	0.1	17.9
<b>Residence</b>						
Urban	0.0	0.2	0.6	0.3	0.3	7.0
Rural	0.1	0.4	1.1	2.1	1.6	23.7
<b>Region</b>						
North Central	0.0	0.3	1.0	1.1	0.0	24.9
North East	0.0	0.4	0.3	0.0	0.0	14.2
North West	0.0	0.6	0.4	0.0	2.3	(26.8)
South East	0.0	0.4	0.0	0.7	0.6	4.0
South South	0.2	0.0	2.5	4.3	2.5	21.3
South West	0.0	0.0	0.0	0.0	0.0	3.4
Total	0.0	0.3	0.9	1.4	1.1	16.9

Note: Figures in parentheses are based on 25-49 unweighted cases.  
<sup>1</sup> The repetition rate is the percentage of students in a given grade in the previous school year who are repeating that grade in the current school year.  
<sup>2</sup> The dropout rate is the percentage of students in a given grade in the previous school year who are not attending school.

to the next educational level (i.e., secondary school). There is great variation by residence and region. For example, rural children are more than three times as likely as urban children to drop out of school at grade 6.

## 2.4 HOUSEHOLD CHARACTERISTICS

The 2003 NDHS gathered information on housing characteristics such as source of water, electricity, cooking fuel, type of toilet facilities, number of sleeping rooms in the house, and housing material. Table 2.6 presents this information by urban–rural residence and region. These characteristics are correlated with health and are also an indication of socioeconomic status.

About half of households in Nigeria have electricity. Electricity is much more common in urban areas than in rural areas (85 and 34 percent, respectively). Indeed, urban dwellers are more advantaged overall in terms of household characteristics than rural dwellers. Nonetheless, living conditions across the entire country are mixed, with a majority of Nigerians having no access to potable water and using traditional pit toilets.

The source of water and availability of sanitary facilities are important determinants of the health status of household members. Sources of water expected to be relatively free of disease are piped water and water drawn from protected wells and deep boreholes. Other sources, like unprotected wells and surface water (rivers, streams, ponds, and lakes), are more likely to carry disease-causing agents. The table shows that 42 percent of Nigerian households have access to clean water sources (17 percent from piped water, 24 percent from a protected well, and 1 percent from spring water).

Sources of drinking water differ considerably by place of residence. Thirty-three percent of urban households obtain water from pipes into dwelling/yard/plot or from public taps, compared with just 9 percent of rural households. It is notable that in rural areas, approximately one-fifth obtain drinking water from open public wells and 27 percent from a river or stream. A majority of Nigerians (56 percent) have access to water within 15 minutes. About two-thirds of urban households obtain water within 15 minutes, compared with about half of rural households. The median time to the source of drinking water is 5 minutes for the urban households and 10 minutes for the rural households.

The lack of availability of sanitary facilities poses a serious public health problem. Only 15 percent of households have a flush toilet, while the majority (57 percent) use traditional pit toilets, and one-quarter have no facility. There are differences in the type of toilet facilities by both residence and region. Urban households are more than four times as likely to have a modern flush toilet as rural areas (29 and 7 percent, respectively). Households in the North West and North East are the least likely to have a flush toilet.

The type of material used for flooring is an indicator of the economic situation of households and therefore the potential exposure of household members to disease-causing agents. Forty-two percent of households live in dwellings with cement floors and 31 percent in dwellings with earth or sand floors. There are substantial differences in the flooring materials by urban-rural residence. Almost half of rural households have a floor made of earth, sand, or dung, compared with 10 percent of urban households.

Firewood and straw is the most common fuel used for cooking, reported by two-thirds of households. An additional 27 percent use kerosene. Rural households are twice as likely as urban households to use firewood or straw (84 and 41 percent, respectively).

Table 2.6 Household characteristics

Percent distribution of households by household characteristics, according to residence and region, Nigeria 2003

Household characteristic	Residence		Region					Total	
	Urban	Rural	North Central	North East	North West	South East	South South		South West
<b>Electricity</b>									
Yes	84.9	33.8	47.2	30.9	42.0	70.2	57.9	79.9	52.2
No	15.0	66.0	52.6	68.9	57.8	29.4	42.1	20.0	47.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Source of drinking water</b>									
Piped into dwelling/yard/plot	14.4	2.3	7.8	4.6	10.2	8.3	3.2	4.6	6.6
Public tap	18.5	6.2	8.1	9.7	11.8	11.8	4.6	18.8	10.6
Open well in dwelling/yard/plot	9.4	14.2	12.6	15.1	22.9	1.8	3.3	9.2	12.5
Open public well	6.7	21.2	9.4	30.8	25.0	1.5	5.2	12.7	16.0
Protected well in dwelling/yard/plot	6.7	3.7	5.5	1.8	3.3	10.8	7.0	3.5	4.8
Protected public well	24.4	16.3	11.5	5.3	12.1	33.1	35.8	25.6	19.2
Spring	0.6	1.3	1.5	0.2	0.5	4.8	0.5	1.2	1.1
River/stream	6.7	26.9	34.9	17.3	10.4	10.6	33.0	13.5	19.6
Pond/lake/dam	0.8	1.7	2.0	1.9	0.4	1.3	1.3	2.1	1.4
Rainwater	0.5	2.1	0.1	0.0	0.0	6.7	4.2	0.5	1.5
Tanker truck	5.9	1.9	5.9	4.4	0.6	7.3	1.4	4.2	3.3
Other	5.2	2.0	0.6	8.9	2.9	1.8	0.5	4.1	3.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Time to water source</b>									
Percentage <15 minutes	64.9	51.4	51.1	58.2	62.1	59.4	45.8	59.4	56.3
Median time to source	4.6	9.9	10.0	9.4	6.5	4.9	14.8	9.2	9.4
<b>Sanitation facility</b>									
Flush toilet	28.7	6.7	9.6	4.5	4.5	41.3	21.2	23.4	14.6
Traditional pit toilet	55.6	56.9	50.1	74.6	74.3	39.8	42.3	39.1	56.5
Ventilated improved pit (vip) latrine	5.5	1.9	1.9	0.5	1.6	0.9	8.5	5.5	3.2
Bush/field	9.7	31.6	38.0	20.1	19.2	17.6	19.7	30.7	23.7
River	0.3	2.7	0.4	0.3	0.3	0.1	8.2	1.2	1.9
Other	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Flooring material</b>									
Earth/sand	9.9	43.6	28.3	57.3	41.8	12.8	21.7	11.8	31.4
Dung	0.4	3.6	1.4	4.5	4.2	0.2	1.1	1.2	2.4
Cement	47.4	39.6	48.5	31.5	45.4	53.1	35.9	44.4	42.4
Carpet	39.0	12.1	20.8	6.2	7.4	27.8	38.4	40.9	21.8
Other	2.0	0.8	0.8	0.1	1.1	1.3	2.7	1.3	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Cooking fuel</b>									
Electricity	0.5	0.1	0.5	0.4	0.2	0.1	0.1	0.4	0.3
Kerosene	53.4	12.1	16.1	4.8	10.3	51.0	36.2	64.2	26.9
Firewood, straw	41.1	84.4	79.5	92.6	83.8	45.0	61.1	30.7	68.8
Dung	0.1	0.8	0.5	0.1	1.5	0.0	0.1	0.0	0.5
Other	4.7	2.5	3.4	2.0	3.6	3.7	2.5	4.7	3.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Persons per sleeping room	2.9	3.6	4.0	3.7	3.3	3.0	3.6	2.2	3.3
Number of households	2,598	4,627	1,040	1,185	1,911	690	1,315	1,083	7,225

Note: Percentages may not add to 100 due to missing cases.

Crowded conditions may affect health as well as the quality of life. The number of persons per sleeping room in the household is used as a measure of household room density. On average, there are 3.3 persons per sleeping room in Nigeria. Rural households have more people per sleeping room than urban households (3.6 and 2.9 percent, respectively).

## Household Durable Goods

The availability of durable consumer goods is an indicator of a household's socioeconomic status. Moreover, particular goods have specific advantages. For example, having access to a radio or a television exposes household members to innovative ideas, a refrigerator prolongs the wholesomeness of foods, and a means of transport allows greater access to services away from the local area.

Table 2.7 shows the availability of selected consumer goods by residence. Nationally, almost three-fourths of households own a radio, and almost one-third own a television. Fewer households own a refrigerator—just 18 percent. In each case, urban households are much more likely than rural households to own these goods. Indeed, urban households are more likely than rural households to own each of the items except for bicycles, work animals, and boats, which are more commonly owned in rural areas. Rural households are also disadvantaged in terms of communications. Less than 2 percent of the rural households have telephones or cell phones, compared with 12 percent of urban households.

The data presented in this chapter vividly portray the level of poverty in Nigeria. Less than half of Nigerians have access to potable water and just one-third of rural households have electricity. There is a need for vigorous policies to improve access to the basic necessities of life. Furthermore, the data on education illustrate the need for better schooling of the population, especially females.

Table 2.7 Household durable goods

Percentage of households possessing various durable consumer goods, by residence and region, Nigeria 2003

Durable consumer goods	Residence		Region						Total
	Urban	Rural	North Central	North East	North West	South East	South South	South West	
Radio	85.3	65.8	75.0	60.8	72.5	87.7	69.4	79.1	72.8
Television	58.6	15.4	23.6	14.0	19.9	52.9	37.3	54.4	31.0
Telephone/cell phone	11.8	1.9	1.6	1.1	2.3	14.0	6.5	12.8	5.5
Refrigerator	36.1	7.9	13.6	9.2	8.9	35.4	24.8	28.8	18.0
Gas cooker	7.5	2.1	2.7	1.1	1.7	12.2	6.3	4.9	4.0
Iron	57.3	16.8	24.6	13.2	20.6	51.4	40.7	52.5	31.3
Fan	69.2	19.6	32.9	17.9	23.1	58.3	47.0	63.6	37.4
Bicycle	17.9	41.0	36.5	44.9	40.8	24.7	33.2	5.8	32.7
Motorcycle/scooter	17.5	13.8	23.3	13.9	14.9	14.2	14.4	10.4	15.1
Car/truck	17.8	4.9	8.4	6.3	4.9	21.3	9.7	15.0	9.6
Donkey/horse/camel	1.5	8.0	0.8	4.8	18.0	0.1	0.0	0.0	5.7
Canoe/boat/ship	1.2	7.1	3.9	1.2	7.5	0.1	12.2	0.2	5.0
None of the above	7.0	19.9	14.7	22.6	14.3	7.8	15.4	14.0	15.2
Number of households	2,598	4,627	1,040	1,185	1,911	690	1,315	1,083	7,225

The purpose of this chapter is to provide a demographic and socioeconomic profile of individual female and male respondents. This information is essential for the interpretation of the findings presented later in the report and can provide an approximate indication of the representativeness of the survey.

The chapter begins by describing basic background characteristics, including age, marital status, residence, education, religion, ethnicity, and economic status of respondents' households. The chapter also includes more detailed information on education, employment, and indicators of women's status.

## 3.1 CHARACTERISTICS OF SURVEY RESPONDENTS

Table 3.1 shows the distribution of women age 15-49 and men age 15-59 by background characteristics. The proportions of women and men decline with increasing age, which reflects the young age structure of the Nigerian population.

A little more than two-thirds (68 percent) of all women are currently married, and an additional 2 percent are in informal unions ("living together"). One-quarter of women age 15-49 have never been married, while negligible proportions of women are divorced or separated (3 percent) or widowed (2 percent). Slightly more than half of men are currently married or living together, 45 percent have never been married, 2 percent are divorced or separated, and 1 percent widowed.

With regard to residence, the majority of women and men live in rural areas (approximately two-thirds). Sixty percent of women and 58 percent of men are from the north, while 40 percent of women and 42 percent of men are from the south.

The majority of respondents have had some education, however, 42 percent of women and 22 percent of men have never attended school. One-fifth of women and one-quarter of men have attained primary education only, while 37 percent of women and 53 percent of men have attended secondary school or higher.

The table also shows that half of all respondents are Muslims, approximately one in seven respondents are Catholics, an additional one in seven are Protestants, and one in five say that they follow another Christian church. A negligible proportion belongs to other religions.

The ethnic composition of the sample indicates that the Hausa, Igbo, and Yoruba are the major ethnic groups in Nigeria. However, other ethnic groups constitute almost half of the total sample, underscoring the multiplicity of ethnic groups in Nigeria.

## 3.2 EDUCATIONAL ATTAINMENT BY BACKGROUND CHARACTERISTICS

Table 3.2 provides an overview of the relationship between respondents' level of education and other background characteristics. The data show that younger respondents are more likely than older respondents to have some education. For example, more than twice as many of the oldest women than the youngest women report that they have no education (68 and 29 percent, respectively).



**Table 3.1 Background characteristics of respondents**

Percent distribution of women and men by background characteristics, Nigeria 2003

Background characteristic	Weighted percent	Number of women		Weighted percent	Number of men	
		Weighted	Un-weighted		Weighted	Un-weighted
<b>Age</b>						
15-19	22.5	1,716	1,749	19.3	453	453
20-24	19.6	1,494	1,464	18.2	426	441
25-29	18.1	1,382	1,356	14.0	328	336
30-34	12.4	941	940	12.8	299	280
35-39	10.7	816	798	9.4	220	203
40-44	9.0	688	695	8.8	208	206
45-49	7.7	583	618	6.8	159	167
50-54	na	na	na	5.7	133	134
55-59	na	na	na	5.1	120	126
<b>Marital status</b>						
Never married	25.3	1,926	2,087	44.7	1,048	1,090
Married	68.0	5,182	4,991	50.8	1,191	1,141
Living together	2.0	154	166	2.3	54	55
Divorced/separated	2.9	219	209	1.8	42	47
Widowed	1.8	139	167	0.5	11	13
<b>Residence</b>						
Urban	34.5	2,629	3,057	37.2	872	986
Rural	65.5	4,991	4,563	62.8	1,474	1,360
<b>Region</b>						
North Central	14.7	1,121	1,256	14.9	348	416
North East	17.9	1,368	1,413	17.9	421	423
North West	27.5	2,095	1,791	25.7	602	547
South East	9.7	737	1,081	8.8	207	265
South South	17.6	1,342	938	19.0	445	313
South West	12.6	958	1,141	13.7	322	382
<b>Education</b>						
No education	41.6	3,171	3,005	21.6	507	493
Primary	21.4	1,628	1,666	25.7	603	604
Secondary	31.1	2,370	2,462	40.9	960	966
Higher	5.9	451	487	11.8	276	283
<b>Religion</b>						
Catholic	13.1	998	1,161	14.3	335	373
Protestant	15.2	1,162	1,300	14.7	345	373
Other Christian	19.6	1,494	1,423	19.5	457	436
Muslim	50.7	3,862	3,601	50.2	1,177	1,125
Other	1.4	104	135	1.3	32	39
<b>Ethnic group</b>						
Fulani	6.1	463	484	5.9	139	132
Hausa	27.0	2,055	1,735	25.0	586	542
Igbo	13.6	1,037	1,390	13.4	315	382
Kanuri	3.0	232	187	2.5	59	47
Tiv	2.2	170	201	2.2	52	66
Yoruba	11.4	865	1,042	12.0	281	340
Other	36.7	2,797	2,581	38.9	914	837
<b>Wealth quintile</b>						
Lowest	18.6	1,414	1,479	18.0	423	423
Second	18.9	1,439	1,399	17.8	418	393
Middle	19.9	1,513	1,510	18.6	436	445
Fourth	20.0	1,526	1,544	21.6	507	527
Highest	22.7	1,728	1,688	24.0	563	558
Total	100.0	7,620	7,620	100.0	2,346	2,346

Note: Education categories refer to the highest level of education attended, whether or not that level was completed. The ethnic groups are the six largest in the sample and are listed in alphabetical order.  
na = Not applicable

Table 3.2 Educational attainment by background characteristics

Percent distribution of women and men by highest level of schooling attended or completed, and median number of years of schooling, according to background characteristics, Nigeria 2003

Background characteristic	Highest level of schooling attended or completed						Total	Number of respondents	Median years of schooling
	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	More than secondary			
<b>WOMEN</b>									
<b>Age</b>									
15-19	29.2	11.1	9.9	39.6	8.9	1.4	100.0	1,716	5.8
20-24	33.9	6.6	11.2	17.9	23.0	7.4	100.0	1,494	5.8
25-29	37.8	6.2	14.7	13.4	19.6	8.3	100.0	1,382	5.4
30-34	45.9	8.5	15.3	14.2	9.0	7.2	100.0	941	3.0
35-39	49.9	9.4	15.0	14.2	3.7	7.8	100.0	816	0.0
40-44	58.7	9.9	13.9	9.3	2.5	5.7	100.0	688	0.0
45-49	68.0	13.5	8.4	3.5	1.3	5.2	100.0	583	0.0
<b>Residence</b>									
Urban	24.9	7.6	12.0	24.3	19.1	12.1	100.0	2,629	7.7
Rural	50.4	9.6	12.7	16.5	8.1	2.7	100.0	4,991	0.0
<b>Region</b>									
North Central	35.9	12.9	17.1	20.5	9.4	4.2	100.0	1,121	5.1
North East	67.8	8.9	7.6	8.3	5.0	2.4	100.0	1,368	0.0
North West	75.0	5.7	6.1	6.1	4.8	2.2	100.0	2,095	0.0
South East	7.7	10.5	14.3	27.9	27.6	12.1	100.0	737	9.2
South South	8.1	12.5	17.8	34.5	17.5	9.7	100.0	1,342	7.6
South West	10.8	5.0	19.0	33.9	20.3	11.0	100.0	958	8.9
<b>Wealth quintile</b>									
Lowest	68.7	10.8	10.1	8.7	1.7	0.1	100.0	1,414	0.0
Second	63.3	10.2	11.3	11.5	2.7	1.0	100.0	1,439	0.0
Middle	49.2	10.7	13.4	18.7	6.4	1.6	100.0	1,513	0.9
Fourth	29.2	10.3	15.9	24.2	16.3	4.1	100.0	1,526	5.7
Highest	5.8	3.4	11.5	30.4	28.8	20.1	100.0	1,728	10.9
Total	41.6	8.9	12.5	19.2	11.9	5.9	100.0	7,620	5.0
<b>MEN</b>									
<b>Age</b>									
15-19	10.4	18.2	6.9	56.3	7.8	0.5	100.0	453	7.0
20-24	12.4	7.6	12.1	30.0	27.6	10.3	100.0	426	8.9
25-29	15.6	7.1	18.0	18.0	22.8	18.5	100.0	328	8.4
30-34	15.3	8.0	18.5	24.4	16.9	17.0	100.0	299	8.3
35-39	23.9	12.2	18.2	17.7	11.7	16.4	100.0	220	6.2
40-44	34.9	9.5	13.3	19.0	4.9	18.4	100.0	208	5.7
45-49	39.7	19.3	9.9	12.4	3.2	15.5	100.0	159	4.8
50-54	44.3	17.0	16.1	8.6	6.6	7.4	100.0	133	2.3
55-59	52.8	12.9	19.9	4.9	1.2	8.2	100.0	120	0.0
<b>Residence</b>									
Urban	11.2	9.7	13.3	29.7	17.6	18.5	100.0	872	9.1
Rural	27.8	13.1	14.2	25.2	12.0	7.8	100.0	1,474	5.7
<b>Region</b>									
North Central	13.4	10.0	13.4	36.4	13.8	12.9	100.0	348	6.9
North East	41.9	12.2	10.2	17.6	7.8	10.2	100.0	421	4.7
North West	41.5	16.7	9.7	16.7	6.7	8.9	100.0	602	3.3
South East	2.5	8.4	17.7	33.4	20.7	17.3	100.0	207	9.2
South South	3.0	12.7	18.7	31.7	22.4	11.4	100.0	445	8.6
South West	4.8	5.2	17.9	36.8	20.5	14.9	100.0	322	10.1
<b>Wealth quintile</b>									
Lowest	42.6	17.8	14.6	16.5	7.9	0.6	100.0	423	2.8
Second	36.2	14.2	13.9	24.1	7.3	4.2	100.0	418	5.1
Middle	24.7	14.4	12.9	28.2	11.7	8.0	100.0	436	5.8
Fourth	11.0	12.6	16.3	29.4	17.0	13.7	100.0	507	8.0
Highest	2.2	2.8	11.8	33.4	22.8	27.0	100.0	563	11.0
Total	21.6	11.8	13.9	26.9	14.1	11.8	100.0	2,346	6.6

<sup>1</sup> Completed 6th grade at the primary level

<sup>2</sup> Completed 6th grade at the secondary level

Table 3.2 also shows that the level of education varies by residence. Women in rural areas are disadvantaged and far less likely to be educated than their urban counterparts. One-half of rural women have not attended school, which is twice the proportion of urban women (50 and 25 percent, respectively). The urban-rural difference is more pronounced at the level of secondary school or higher. For example, only 11 percent of women in rural areas have completed secondary school or gone on to post-secondary study, compared with 31 percent of women in urban areas. Among male respondents, those in urban areas also have higher levels of educational attainment. Only 11 percent of urban males compared with 28 percent of their rural counterparts have no formal education. While 36 percent of urban males have completed secondary or higher levels of education, only 20 percent of their rural counterparts have done so. Among both male and female respondents, the level of educational attainment is higher in the south relative to the north. For example, women in the North West are 10 times as likely as women in the South East and South West to say that they have no education.

Educational attainment increases as the economic status of the household increases. For example, 69 percent of the women in the poorest households have no formal education compared with just 6 percent of women in the most advantaged households. Half of women in the highest wealth quintile have completed secondary or higher levels of education, compared with just 2 percent of women in the lowest quintile. The pattern of men's educational attainment by economic status is similar.

## **Literacy**

The ability to read is an important personal asset allowing women and men increased opportunities in life. Knowing the distribution of the literate population can help programme planners know how best to reach women and men with their messages. In the 2003 NDHS, literacy was established by a respondent's ability to read all or part of a simple sentence in any of the major language groups of Nigeria. The test on literacy was only applied to respondents who had less than secondary education, and those with secondary or higher are assumed to be literate.

Table 3.3 shows that almost half (48 percent) of women are literate. The level of literacy is much higher for younger women than older women, ranging from a high of 61 percent for women age 15-19 to a low of 22 percent for women age 45-49. Urban women have a higher level of literacy than rural women (68 and 38 percent, respectively). Literacy levels also vary widely among the regions. Patterns of men's literacy are similar to women's, although a greater proportion of men are literate (73 percent compared with 48 percent).

Table 3.3 Literacy

Percent distribution of women and men by level of schooling attended and by level of literacy, and percent literate, according to background characteristics, Nigeria 2003

Background characteristic	No schooling or primary school						Total	Number of respondents	Percent literate <sup>1</sup>
	Secondary school or higher	Can read whole sentence	Can read part of sentence	Cannot read at all	No card with required language	Missing			
<b>WOMEN</b>									
<b>Age</b>									
15-19	49.8	5.4	6.1	37.7	0.8	0.2	100.0	1,716	61.3
20-24	48.3	3.6	4.5	42.4	0.7	0.5	100.0	1,494	56.4
25-29	41.3	5.4	5.2	46.9	1.0	0.2	100.0	1,382	51.9
30-34	30.4	5.2	5.7	58.3	0.3	0.1	100.0	941	41.3
35-39	25.7	7.8	6.4	58.9	1.2	0.1	100.0	816	39.8
40-44	17.5	6.2	7.4	67.8	0.5	0.5	100.0	688	31.1
45-49	10.0	7.9	4.5	75.8	1.2	0.6	100.0	583	22.4
<b>Residence</b>									
Urban	55.6	6.1	5.9	31.6	0.7	0.2	100.0	2,629	67.5
Rural	27.3	5.2	5.5	60.8	0.9	0.4	100.0	4,991	38.0
<b>Region</b>									
North Central	34.1	4.9	4.4	55.2	1.1	0.3	100.0	1,121	43.4
North East	15.7	4.2	5.7	72.9	1.3	0.2	100.0	1,368	25.6
North West	13.1	3.1	4.7	78.6	0.1	0.5	100.0	2,095	20.9
South East	67.5	10.6	7.5	14.1	0.1	0.2	100.0	737	85.6
South South	61.7	7.3	6.0	22.6	1.9	0.6	100.0	1,342	75.0
South West	65.2	7.1	6.8	20.5	0.4	0.0	100.0	958	79.1
Total	37.0	5.5	5.6	50.7	0.8	0.3	100.0	7,620	48.2
<b>MEN</b>									
<b>Age</b>									
15-19	64.6	4.4	10.2	18.6	2.3	0.0	100.0	453	79.2
20-24	67.9	6.0	6.4	15.0	4.7	0.0	100.0	426	80.3
25-29	59.4	11.0	8.6	16.8	4.3	0.0	100.0	328	78.9
30-34	58.3	8.7	8.7	20.7	3.7	0.0	100.0	299	75.6
35-39	45.7	12.8	11.8	23.7	5.9	0.0	100.0	220	70.4
40-44	42.3	12.0	10.3	27.3	8.1	0.0	100.0	208	64.6
45-49	31.1	14.7	14.2	30.1	9.7	0.2	100.0	159	60.0
50-54	22.6	15.4	17.2	37.9	6.9	0.0	100.0	133	55.2
55-59	14.3	20.5	12.4	42.1	10.7	0.0	100.0	120	47.2
<b>Residence</b>									
Urban	65.8	11.3	9.7	9.3	3.9	0.0	100.0	872	86.8
Rural	45.0	8.8	10.2	30.0	6.0	0.0	100.0	1,474	64.0
<b>Region</b>									
North Central	63.1	6.9	5.2	24.6	0.2	0.0	100.0	348	75.2
North East	35.7	13.9	10.4	37.8	2.2	0.0	100.0	421	59.9
North West	32.2	8.0	15.5	27.2	17.1	0.0	100.0	602	55.7
South East	71.4	5.7	15.8	7.0	0.0	0.2	100.0	207	92.9
South South	65.6	6.7	8.2	18.1	1.4	0.0	100.0	445	80.5
South West	72.1	17.4	3.5	5.9	1.1	0.0	100.0	322	93.0
Total	52.7	9.7	10.0	22.3	5.2	0.0	100.0	2,346	72.5

<sup>1</sup> Refers to respondents who attended secondary school or higher and respondents who can read a whole sentence or part of a sentence

### 3.3 ACCESS TO MASS MEDIA

The 2003 NDHS collected information on the exposure of respondents to common print and electronic media. Respondents were asked how often they read a newspaper, listen to the radio, or watch television. These data are important because they provide an indication of the extent to which Nigerians are regularly exposed to the mass media, which are often used to disseminate messages on family planning and other health topics.

Tables 3.4.1 and 3.4.2 show that slightly more than one-third of both women and men are not exposed to any media. However, a majority of all respondents listen to the radio at least once a week, and more than one-third watch television at least once a week. About one in ten respondents reads a newspaper weekly. As expected, women and men living in urban areas are much more likely to be exposed to mass media. The proportion of women who are exposed to any media at least once a week declines with age. Urban respondents are more likely than rural respondents to be exposed to all three types of media.

Among the regions, exposure to all three types of media is highest among those who live in the south compared with their northern counterparts. There is a positive relationship between the level of education and exposure to mass media. Similarly, wealth quintile is positively related to exposure to mass media. For instance, whereas 65 percent of women in the lowest quintile have no weekly exposure to any media source, just 6 percent of those in the highest quintile have no exposure. The corresponding figures for the male respondents are 59 and 13 percent, respectively.

Table 3.4.1 Exposure to mass media: women

Percentage of women who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, Nigeria 2003

Background characteristic	Type of mass media exposure					Number of women
	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three specified media	No exposure to specified media	
<b>Age</b>						
15-19	12.2	41.3	58.4	10.3	34.4	1,716
20-24	17.7	40.9	65.0	14.7	28.9	1,494
25-29	12.8	39.4	61.5	10.3	30.8	1,382
30-34	10.6	31.2	57.7	9.5	38.3	941
35-39	9.8	33.2	59.7	7.7	37.5	816
40-44	7.6	24.8	51.7	6.1	45.0	688
45-49	6.2	23.8	51.1	5.3	45.4	583
<b>Residence</b>						
Urban	21.1	63.1	73.0	18.6	18.4	2,629
Rural	7.3	21.6	51.8	5.5	44.2	4,991
<b>Region</b>						
North Central	7.7	28.0	44.7	6.4	48.6	1,121
North East	4.8	15.9	34.1	3.0	61.0	1,368
North West	6.7	23.8	70.9	5.6	27.1	2,095
South East	25.9	50.9	69.4	21.4	24.2	737
South South	19.2	53.9	59.2	16.1	30.9	1,342
South West	18.5	63.5	78.3	16.5	15.6	958
<b>Education</b>						
No education	0.1	12.0	47.2	0.1	50.2	3,171
Primary	3.7	32.0	54.5	2.7	39.2	1,628
Secondary	24.8	62.0	72.9	20.5	18.3	2,370
Higher	59.0	81.2	88.0	51.3	5.6	451
<b>Wealth quintile</b>						
Lowest	1.0	3.6	33.5	0.4	64.8	1,414
Second	3.2	8.0	45.0	2.1	53.0	1,439
Middle	5.2	17.8	57.7	2.9	39.7	1,513
Fourth	13.4	52.6	70.6	10.4	19.8	1,526
Highest	33.2	86.8	83.1	30.3	6.2	1,728
Total	12.1	35.9	59.2	10.0	35.3	7,620

Table 3.4.2 Exposure to mass media: men

Percentage of men who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, Nigeria 2003

Background characteristic	Type of mass media exposure					Number of men
	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three specified media	No exposure to specified media	
<b>Age</b>						
15-19	10.6	39.6	61.4	6.9	32.0	453
20-24	12.8	37.7	60.9	8.9	33.8	426
25-29	14.6	35.8	57.7	12.2	37.9	328
30-34	11.7	42.3	63.1	10.5	33.0	299
35-39	6.1	29.6	51.7	5.7	45.7	220
40-44	13.3	32.9	53.4	12.2	39.8	208
45-49	13.3	37.1	56.8	9.2	37.4	159
50-54	6.0	41.4	58.3	5.2	33.1	133
55-59	10.4	30.0	51.9	8.7	42.6	120
<b>Residence</b>						
Urban	19.8	59.0	72.1	15.4	20.3	872
Rural	6.5	24.0	50.3	5.2	45.6	1,474
<b>Region</b>						
North Central	8.4	34.8	50.0	6.6	44.2	348
North East	3.1	13.5	31.8	1.8	65.6	421
North West	7.7	27.5	70.4	5.9	26.8	602
South East	22.3	46.6	72.5	19.3	25.0	207
South South	14.3	51.4	53.6	11.4	35.1	445
South West	21.5	61.7	77.5	16.7	15.8	322
<b>Education</b>						
No education	4.9	16.3	48.9	4.0	48.5	507
Primary	9.1	32.1	54.1	6.9	39.6	603
Secondary	14.0	45.1	63.7	10.4	30.7	960
Higher	19.7	57.6	67.0	17.4	25.3	276
<b>Wealth quintile</b>						
Lowest	2.1	11.0	38.6	1.5	59.4	423
Second	3.8	13.0	43.2	1.7	53.1	418
Middle	6.1	23.2	56.7	4.3	39.5	436
Fourth	14.8	50.6	64.2	11.4	26.5	507
Highest	25.2	72.7	80.7	21.3	12.5	563
Total	11.4	37.0	58.4	9.0	36.2	2,346

### 3.4 EMPLOYMENT

Like education, employment can also be a source of empowerment for women, especially if it puts them in control of income. The measurement of women's employment, however, is difficult. The difficulty arises largely because some of the work that women do, especially work on family farms, family businesses, or in the informal sector, is often not perceived by women themselves as employment, and hence not reported as such. To avoid underestimating women's employment, the NDHS survey asked women several questions to probe for their employment status and to ensure complete coverage of employment in any sector, formal or informal. Employed women are those who say that they are currently working and those who worked at any time during the 12 months preceding to the survey. Additional information was also obtained on the type of work women were doing, whether they worked continuously throughout the year, whom they worked for, and the form in which they received their earnings. Men were also asked about employment.

Tables 3.5.1 and 3.5.2 show the percent distribution of women and men by employment status, according to background characteristics. Fifty-six percent of women reported being currently employed and additional 2 percent worked during the 12 months prior to the survey. About two in five women (42 percent) did not work at all in the 12 months preceding the survey. Seventy percent of men are currently employed, while an additional 3 percent were employed in the 12 months preceding the survey. Figure 3.1 shows the distribution of women and men by current employment status.

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Missing	Total	Number of women
	Currently employed	Not currently employed				
<b>Age</b>						
15-19	24.8	2.0	73.1	0.1	100.0	1,716
20-24	47.0	2.8	50.1	0.1	100.0	1,494
25-29	63.4	2.0	34.7	0.0	100.0	1,382
30-34	70.7	2.4	26.9	0.1	100.0	941
35-39	78.2	1.8	20.0	0.0	100.0	816
40-44	75.4	1.5	23.0	0.0	100.0	688
45-49	77.4	2.5	20.1	0.0	100.0	583
<b>Marital status</b>						
Never married	30.6	2.4	67.0	0.0	100.0	1,926
Married or living together	64.4	2.1	33.4	0.1	100.0	5,336
Divorced/separated/widowed	70.7	1.7	27.6	0.0	100.0	358
<b>Number of living children</b>						
0	34.4	2.8	62.8	0.0	100.0	2,499
1-2	57.3	1.7	40.8	0.1	100.0	2,009
3-4	69.0	1.9	29.0	0.1	100.0	1,526
5+	76.5	2.0	21.5	0.0	100.0	1,586
<b>Residence</b>						
Urban	57.8	2.2	40.0	0.0	100.0	2,629
Rural	55.3	2.2	42.5	0.1	100.0	4,991
<b>Region</b>						
North Central	63.2	1.8	35.0	0.0	100.0	1,121
North East	50.0	4.7	45.1	0.2	100.0	1,368
North West	51.5	1.4	47.1	0.0	100.0	2,095
South East	57.0	1.9	41.0	0.0	100.0	737
South South	55.0	1.8	43.2	0.0	100.0	1,342
South West	67.8	1.5	30.8	0.0	100.0	958
<b>Education</b>						
No education	56.4	2.2	41.2	0.1	100.0	3,171
Primary	65.9	2.1	32.0	0.0	100.0	1,628
Secondary	48.0	2.1	49.9	0.0	100.0	2,370
Higher	61.7	2.0	36.3	0.0	100.0	451
Total	56.1	2.2	41.6	0.1	100.0	7,620



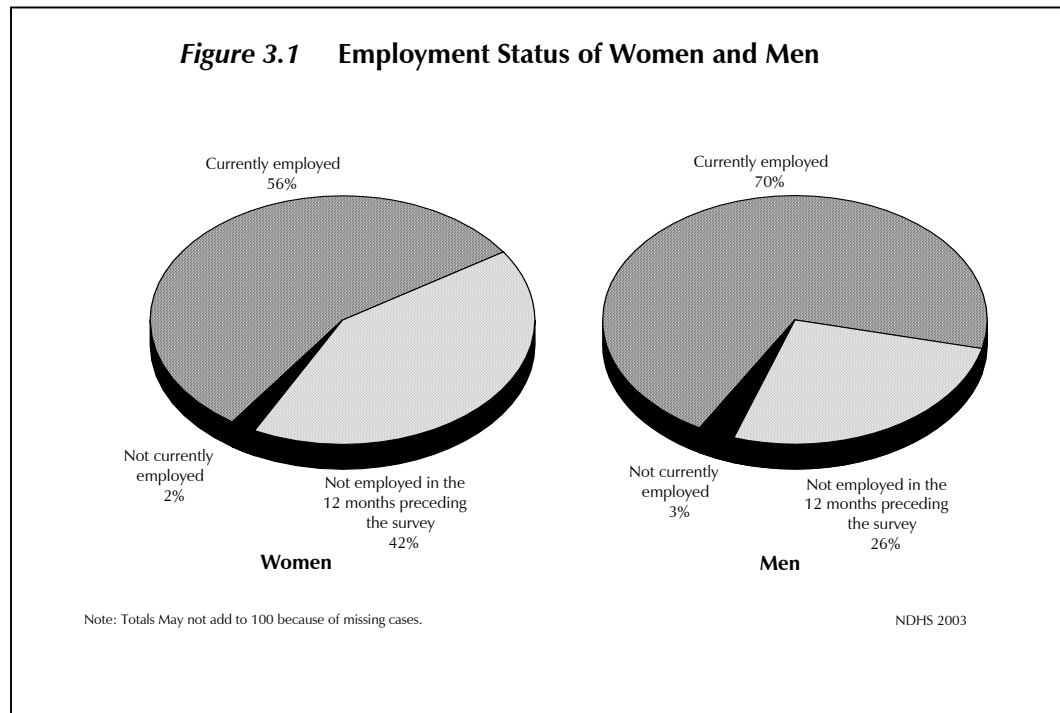
Tables 3.5.1 and 3.5.2 show that current employment increases with age of respondents for both men and women, although the percentage of men employed declines among the oldest age group. Women who are divorced, separated, or widowed are most likely to be employed (71 percent), followed by those who are married or living together (64 percent), while never-married women are the least likely to be employed (31 percent). Also, 94 percent of men who are currently or formerly married are employed, compared with 40 percent of never-married men. Table 3.5.1 shows that as the number of living children a woman has increases, the proportion who work also increases. Women with no living children are the least likely to be employed (34 percent). Similarly, twice as many men with one or more living children are employed than men with no children.

**Table 3.5.2 Employment status: men**

Percent distribution of men by employment status, according to background characteristics, Nigeria 2003

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Missing	Total	Number of men
	Currently employed	Not currently employed				
<b>Age</b>						
15-19	25.4	2.6	68.3	3.7	100.0	453
20-24	49.6	6.6	43.4	0.5	100.0	426
25-29	73.4	4.3	21.8	0.5	100.0	328
30-34	90.6	2.5	6.9	0.0	100.0	299
35-39	95.1	2.4	1.6	0.9	100.0	220
40-44	96.9	1.9	1.2	0.0	100.0	208
45-49	97.0	0.9	2.1	0.0	100.0	159
50-54	96.6	0.0	3.4	0.0	100.0	133
55-59	88.4	0.0	11.4	0.2	100.0	120
<b>Marital status</b>						
Never married	39.9	4.6	53.6	1.9	100.0	1,048
Married or living together	94.0	1.9	4.0	0.2	100.0	1,245
Divorced/separated/widowed	93.8	1.8	4.4	0.0	100.0	53
<b>Number of living children</b>						
0	46.0	4.2	48.1	1.7	100.0	1,168
1-2	90.7	3.0	6.3	0.0	100.0	379
3-4	93.4	2.4	3.5	0.6	100.0	316
5+	95.5	1.0	3.4	0.1	100.0	482
<b>Residence</b>						
Urban	64.8	2.8	31.6	0.8	100.0	872
Rural	72.7	3.2	22.9	1.1	100.0	1,474
<b>Region</b>						
North Central	61.8	2.0	36.0	0.2	100.0	348
North East	84.9	3.6	11.1	0.5	100.0	421
North West	80.6	4.5	13.6	1.3	100.0	602
South East	67.9	3.2	28.0	0.9	100.0	207
South South	51.8	2.9	42.8	2.4	100.0	445
South West	64.4	1.2	34.5	0.0	100.0	322
<b>Education</b>						
No education	96.3	1.2	2.1	0.4	100.0	507
Primary	80.2	2.1	16.8	0.9	100.0	603
Secondary	51.1	4.1	43.3	1.5	100.0	960
Higher	63.3	5.1	31.2	0.4	100.0	276
Total	69.8	3.1	26.2	1.0	100.0	2,346

**Figure 3.1 Employment Status of Women and Men**



The percentage of men currently employed is significantly higher in rural areas than in urban areas (73 and 65 percent, respectively). Women’s employment does not vary greatly by urban-rural residence. There is significant difference, however, in levels of employment by region of residence. For example, employment among women ranges from a low of 50 percent in the North East to a high of 68 percent in the South West. Among men, employment ranges from a low of 52 percent in the South South to a high of 85 percent in the North East. There is no uniform pattern of employment status by level of education.

### Occupation

Respondents who are currently employed or worked within the year before the survey were asked to state their occupation.

Table 3.6.1 shows that the sales and services sector employs more than half (56 percent) of working women. In addition, 21 percent of working women are in agriculture, 10 percent work at skilled manual jobs, and 8 percent are engaged in professional, technical, and managerial work. Negligible proportions of working women are engaged in unskilled manual labour (3 percent), clerical jobs (2 percent), or domestic service (1 percent). Table 3.6.2 shows that the highest proportion of men work in agriculture (38 percent), followed by skilled manual occupations (21 percent) and sales and services (19 percent). Twice as many men as women are employed in the professional, technical, or managerial sector (16 and 8 percent, respectively).

The majority of women are employed in sales and services regardless of urban-rural residence. Urban women, however, are more likely than rural women to be employed in either the skilled manual or professional sectors, while rural women are more likely to be in agriculture. More than half of rural men work in agriculture; eight in ten urban men are working in the professional, sales and services, or skilled manual sectors. There is considerable variation by geopolitical region. For example, men in the north are more likely to be in agriculture compared with those in the south. In general, southern women and men are more likely to be in professional/technical/managerial occupations than their northern counterparts, perhaps reflecting differential levels of education.

Table 3.6.1 Occupation: women

Percent distribution of women employed in the 12 months preceding the survey by occupation, according to background characteristics, Nigeria 2003

Background characteristic	Professional/technical/managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Total	Number of women
<b>Age</b>									
15-19	2.5	1.7	53.3	9.6	5.5	4.6	22.8	100.0	459
20-24	7.3	2.1	53.8	13.9	3.8	1.5	17.5	100.0	744
25-29	7.7	1.8	57.3	14.6	2.0	0.5	16.1	100.0	903
30-34	7.8	1.7	56.6	11.2	2.1	1.1	19.6	100.0	688
35-39	9.9	2.0	60.7	6.5	2.0	1.1	17.8	100.0	653
40-44	11.2	1.3	54.4	3.0	1.7	1.3	26.7	100.0	530
45-49	9.0	0.5	55.4	2.0	1.8	0.3	30.9	100.0	466
<b>Marital status</b>									
Never married	11.8	4.8	44.2	13.0	5.6	3.3	17.2	100.0	635
Married or living together	7.2	1.0	58.7	9.2	2.2	1.0	20.7	100.0	3,548
Divorced/separated/widowed	10.0	2.7	49.5	6.4	1.4	2.0	28.0	100.0	259
<b>Number of living children</b>									
0	9.8	3.7	49.7	12.2	4.9	3.1	16.6	100.0	930
1-2	8.0	1.3	54.8	13.8	2.4	1.0	18.7	100.0	1,186
3-4	6.5	1.0	61.4	8.0	1.9	0.9	20.4	100.0	1,082
5+	8.0	1.1	57.6	4.9	1.8	0.8	25.6	100.0	1,245
<b>Residence</b>									
Urban	13.2	3.4	58.0	13.3	3.5	1.6	7.0	100.0	1,576
Rural	5.1	0.7	55.1	7.5	2.1	1.2	28.1	100.0	2,867
<b>Region</b>									
North Central	7.0	0.6	45.2	6.5	2.2	1.8	36.7	100.0	728
North East	4.6	1.2	63.5	11.4	1.1	2.0	16.2	100.0	749
North West	3.3	0.4	68.3	12.9	4.3	1.4	9.4	100.0	1,107
South East	15.2	3.7	45.1	8.1	2.1	0.3	25.5	100.0	434
South South	12.0	2.9	42.8	8.1	3.3	0.7	30.0	100.0	761
South West	11.5	2.7	61.9	7.8	1.7	1.6	12.7	100.0	663
<b>Education</b>									
No education	0.7	0.1	64.3	8.6	2.4	1.6	22.4	100.0	1,860
Primary	3.3	0.8	53.7	8.3	2.4	1.2	30.1	100.0	1,108
Secondary	11.3	3.5	54.2	12.6	3.6	1.2	13.6	100.0	1,188
Higher	59.9	8.0	20.1	8.0	1.4	1.1	1.6	100.0	287
Total	8.0	1.7	56.1	9.5	2.6	1.4	20.6	100.0	4,443

Note: Percentages may not add to 100 due to missing cases (no more than 0.3 percent of cases in any category).

Table 3.6.2 Occupation: men

Percent distribution of men employed in the 12 months preceding the survey by occupation, according to background characteristics, Nigeria 2003

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Un- skilled manual	Domestic service	Agri- culture	Total	Number of men
<b>Age</b>									
15-19	0.0	0.0	12.1	29.9	7.7	0.3	50.0	100.0	127
20-24	5.0	0.5	22.9	26.7	11.4	0.0	33.4	100.0	239
25-29	13.3	1.5	26.7	22.3	3.2	0.9	32.0	100.0	255
30-34	18.6	0.7	20.9	22.3	5.0	0.2	32.4	100.0	279
35-39	25.2	0.0	20.5	12.9	5.1	0.0	36.3	100.0	215
40-44	23.3	3.4	15.0	18.0	2.8	0.0	37.4	100.0	205
45-49	23.5	2.4	8.8	23.1	3.0	0.0	39.2	100.0	156
50-54	15.4	2.7	13.9	16.5	4.0	0.0	47.4	100.0	128
55-59	14.5	0.4	12.7	12.0	3.5	0.0	56.9	100.0	106
<b>Marital status</b>									
Never married	9.5	0.9	21.2	29.1	7.7	0.6	31.0	100.0	466
Married or living together	18.4	1.4	17.4	17.4	4.2	0.0	41.1	100.0	1,193
Divorced/separated/ widowed	14.5	0.0	19.9	23.3	7.1	0.0	35.2	100.0	50
<b>Number of living children</b>									
0	12.6	0.7	22.5	24.8	7.8	0.5	31.1	100.0	586
1-2	14.5	1.0	21.4	20.0	6.4	0.1	36.6	100.0	355
3-4	19.0	2.2	15.0	21.1	3.3	0.0	39.3	100.0	303
5+	19.1	1.4	13.5	16.2	2.4	0.0	47.5	100.0	465
<b>Residence</b>									
Urban	23.3	2.0	26.5	32.0	6.3	0.5	9.4	100.0	590
Rural	12.0	0.9	14.3	14.9	4.7	0.0	53.3	100.0	1,120
<b>Region</b>									
North Central	17.3	1.2	14.1	21.2	3.8	0.2	42.1	100.0	222
North East	15.9	1.0	19.0	18.4	2.8	0.0	43.0	100.0	372
North West	8.3	0.5	17.5	13.1	7.9	0.0	52.7	100.0	513
South East	22.4	0.3	30.4	25.2	10.2	0.0	11.5	100.0	147
South South	21.1	4.3	18.6	23.7	1.6	1.1	29.5	100.0	244
South West	22.4	0.7	16.0	36.9	5.3	0.0	18.7	100.0	211
<b>Education</b>									
No education	3.8	0.0	11.8	13.8	3.0	0.0	67.6	100.0	494
Primary	6.7	1.3	16.5	31.8	4.1	0.0	39.7	100.0	496
Secondary	13.3	2.5	29.7	23.4	8.9	0.6	21.7	100.0	530
Higher	79.0	1.0	9.9	3.1	3.8	0.0	3.3	100.0	189
Total	15.9	1.3	18.5	20.8	5.2	0.2	38.1	100.0	1,709

## Earnings, Employers, and Continuity of Employment

Table 3.7.1 presents information on women's employment status, the form of earnings, and the continuity of employment. The table takes into account whether women are involved in agricultural or nonagricultural occupations, since all of the employment variables shown in the table are strongly influenced by the sector in which a woman is employed.

Table 3.7.1 Type of employment: women

Percent distribution of women 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 2003

Employment characteristic	Agricultural work	Nonagricultural work	Total
<b>Type of earnings</b>			
Cash only	24.5	88.5	75.3
Cash and in-kind	21.6	5.7	9.0
In-kind only	8.8	0.7	2.4
Not paid	45.0	4.4	12.8
Missing	0.2	0.7	0.6
Total	100.0	100.0	100.0
<b>Type of employer</b>			
Employed by family member	25.6	8.5	12.0
Employed by nonfamily member	2.0	15.1	12.4
Self-employed	72.4	75.7	75.0
Missing	0.0	0.8	0.6
Total	100.0	100.0	100.0
<b>Continuity of employment</b>			
All year	38.3	77.0	69.0
Seasonal	59.3	14.3	23.6
Occasional	2.1	7.9	6.7
Missing	0.3	0.8	0.7
Total	100.0	100.0	100.0
Number of women	916	3,525	4,443

Note: Total includes 2 women with missing information on type of employment who are not shown separately

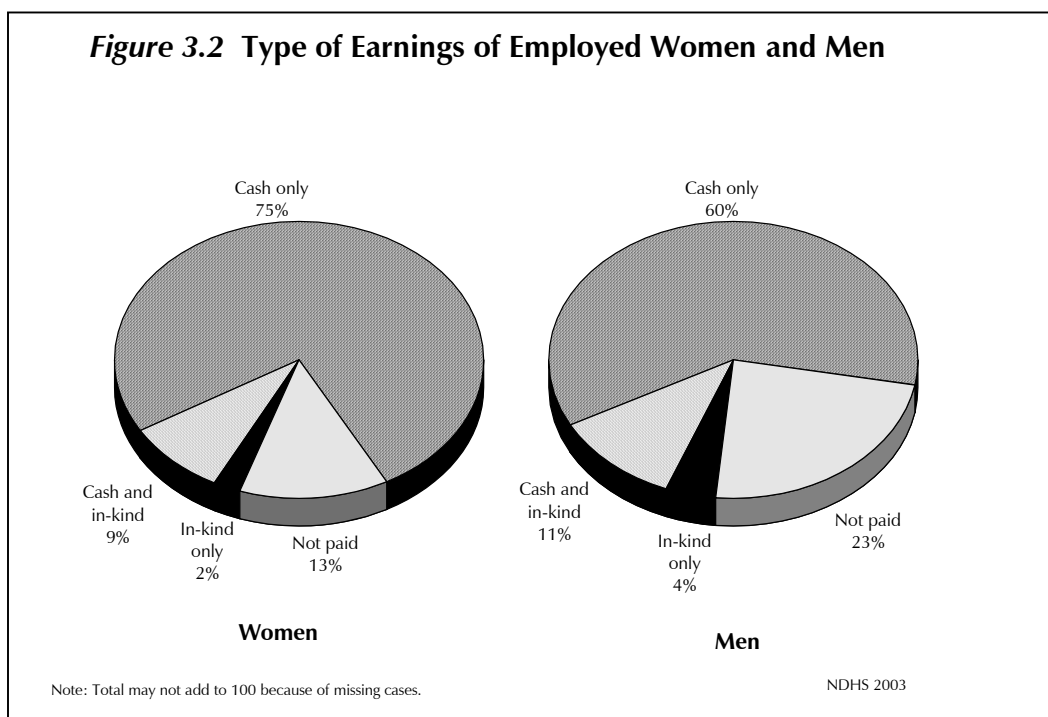
The data show that almost half of women employed in agricultural work are not paid (45 percent). A majority of women in this sector report that they are self-employed (72 percent) and that they work seasonally (59 percent). Among women employed in nonagricultural work, most earn cash only (89 percent), say that they are self-employed (76 percent) and work all year (77 percent).

Information was also collected on men's earnings (Table 3.7.2 and Figure 3.2). Similar to women, the majority of men in agriculture (53 percent) state that they are not paid for their work, while 85 percent of those in nonagricultural jobs state they earn cash only.

Table 3.7.2 Type of employment: men

Percent distribution of men employed in the 12 months preceding the survey by type of earnings, according to type of employment (agricultural or nonagricultural), Nigeria 2003

Employment characteristic	Agricultural work	Nonagricultural work	Total
<b>Type of earnings</b>			
Cash only	18.6	84.9	59.6
Cash and in-kind	19.5	6.2	11.3
In-kind only	8.6	1.7	4.3
Not paid	53.3	4.7	23.3
Missing	0.0	2.5	1.5
Total	100.0	100.0	100.0
Number of men	652	1,057	1,709



### 3.5 MEASURES OF WOMEN'S EMPOWERMENT

#### Decision on Use of Earnings

As means of assessing women's autonomy, respondents in the 2003 NDHS who had received cash earnings for work in the 12 months before the survey were asked who mainly decides how these earnings will be used. This information allows the assessment of women's control over their own earnings. In addition, they were asked about the proportion of household expenditures supported by their earnings. This information not only allows an evaluation of the relative importance of women's earnings in the household economy, but has implications for the empowerment of women. It is expected that employment and earnings are more likely to empower women if their earnings are important for meeting the needs of their households.

Table 3.8 shows women's degree of control over the use of their earnings and the extent to which the earnings of women meet household expenditures by background characteristics. Almost three-quarters of women who receive cash earnings report that they alone decide how their earnings are used, and an additional 16 percent say that they decide jointly with their husband or someone else. Only 10 percent of women report that someone else decides how their earnings will be used.

Women age 15-19 are more likely than older women to report that someone else decides how their earnings are to be used. Almost all women who are divorced, separated, or widowed say that they alone are responsible for deciding how to use their earnings. Among currently married women, seven out of ten report that they alone decide how their earnings are used, while one-fifth say that such decisions are made jointly with their husbands or someone else. More than three-quarters of never-married women make independent decisions on how to use their earnings. The data suggest that the proportion of women who make joint decisions with their husbands or someone else increases with parity.

More urban women than rural women report that they alone decide how to spend their earnings, although the difference is not great (78 and 71 percent, respectively). Among the geopolitical regions, women in North West and South West are most likely to decide on how to use their earnings relative to women in other regions. Surprisingly, there is no difference by level of education.

**Table 3.8 Decision on use of earnings and contribution of earnings to household expenditures**

Percent distribution of women employed in the 12 months preceding the survey receiving cash earnings by person who decides how earnings are to be used and by proportion of household expenditures met by earnings, according to background characteristics, Nigeria 2003

Background characteristic	Person who decides how earnings are used					Proportion of household expenditures met by earnings					Number of women	
	Self only	Jointly <sup>1</sup>	Someone else only <sup>2</sup>	Missing	Total	Almost none/ none	Less than half	Half or more	All	Missing		Total
<b>Age</b>												
15-19	62.8	14.7	22.1	0.4	100.0	41.2	31.2	23.3	2.7	1.6	100.0	330
20-24	77.7	10.4	11.9	0.0	100.0	32.9	31.9	28.6	6.4	0.2	100.0	591
25-29	74.1	17.1	8.5	0.3	100.0	27.5	36.1	28.8	7.6	0.0	100.0	801
30-34	75.1	16.2	8.6	0.1	100.0	19.4	33.7	38.2	8.6	0.1	100.0	605
35-39	72.5	18.2	9.3	0.0	100.0	17.8	38.1	36.8	7.3	0.0	100.0	589
40-44	69.8	21.5	8.7	0.0	100.0	13.9	26.5	42.9	16.3	0.4	100.0	441
45-49	77.0	17.8	5.1	0.1	100.0	15.9	32.2	37.7	13.8	0.4	100.0	388
<b>Marital status</b>												
Never married	78.0	7.2	14.8	0.0	100.0	33.8	22.5	31.9	11.5	0.3	100.0	462
Married or living together	71.0	19.0	9.9	0.1	100.0	23.1	36.7	34.2	5.8	0.3	100.0	3,062
Divorced/separated/widowed	97.4	0.4	2.1	0.2	100.0	14.3	11.1	30.0	44.2	0.4	100.0	220
<b>Number of living children</b>												
0	73.8	11.2	14.8	0.2	100.0	37.9	26.0	28.1	7.8	0.2	100.0	704
1-2	75.0	15.4	9.6	0.0	100.0	23.6	34.8	32.7	8.2	0.6	100.0	1,015
3-4	75.2	16.4	8.0	0.3	100.0	22.0	36.0	32.9	9.0	0.1	100.0	966
5+	69.9	20.9	9.2	0.0	100.0	16.7	34.7	38.9	9.6	0.1	100.0	1,059
<b>Residence</b>												
Urban	77.8	14.2	8.0	0.0	100.0	22.2	31.9	35.5	10.4	0.0	100.0	1,414
Rural	70.7	17.8	11.3	0.2	100.0	24.9	34.4	32.6	7.8	0.4	100.0	2,331
<b>Region</b>												
North Central	64.9	14.9	19.8	0.5	100.0	23.6	31.2	39.1	6.1	0.0	100.0	515
North East	71.0	18.8	10.1	0.1	100.0	43.7	31.2	22.0	2.9	0.3	100.0	656
North West	80.6	14.0	5.3	0.1	100.0	25.6	44.4	26.7	2.7	0.7	100.0	1,053
South East	74.5	18.4	7.1	0.1	100.0	17.9	38.3	33.8	9.8	0.3	100.0	296
South South	63.5	23.3	13.2	0.0	100.0	8.3	23.0	43.6	25.0	0.0	100.0	617
South West	80.2	11.6	8.2	0.0	100.0	18.8	26.9	43.4	11.0	0.0	100.0	607
<b>Education</b>												
No education	74.9	16.2	8.6	0.3	100.0	29.9	37.1	27.4	5.1	0.5	100.0	1,612
Primary	71.1	17.3	11.6	0.0	100.0	18.0	31.5	38.1	12.3	0.1	100.0	886
Secondary	72.6	15.8	11.6	0.0	100.0	21.2	31.6	37.1	9.9	0.1	100.0	972
Higher	74.6	17.0	8.4	0.0	100.0	17.5	24.1	44.0	14.4	0.0	100.0	274
Total	73.4	16.4	10.1	0.1	100.0	23.9	33.4	33.7	8.7	0.3	100.0	3,744

<sup>1</sup> With husband or someone else

<sup>2</sup> Includes husband

Table 3.8 also shows the proportion of household expenditures met by earnings. More than half of women who receive cash earnings say that less than half or none of their household expenditures are met by their earnings. One-third of the women say their earnings contribute to half or more of their household expenditures. Only 9 percent of the women say that their earnings meet all household expenditures. Younger women are more likely to contribute nothing or almost nothing, while older women are more likely to meet all household expenditures. Divorced, separated, and widowed women are more

likely to meet all household expenditures with their earnings, compared with never married or currently married women.

Table 3.9 shows the relationship between women's control over earnings and their contribution to household expenditures based on marital status. Seventy-one percent of women who are currently married or living together with their partner, decide by themselves how their earnings are used, while almost one-fifth decide jointly with their husband or partner. One in ten women says that her husband alone decides. Eighty-four percent of unmarried women report that they alone decide how their earnings are used, while 11 percent report that someone else only makes the decision. The greater a woman's contribution to household expenditures, the more likely she is to decide jointly with her husband how earnings are used. It is notable that one in ten women who contribute at least half of the money used for household expenditures say that their husband alone decides how their money is used.

In addition to information on women's education, employment status, and earnings control, the 2003 NDHS also obtained information from both women and men on other measures of women's empowerment and status. Specifically, questions were asked on women's participation in household decisionmaking, on acceptance of wife-beating, and on opinions about when a wife should be able to refuse to have sex with her husband. These data provide insights into women's control over their environment and their attitudes toward gender roles; both factors are relevant to understanding women's health behaviours and outcomes.

Table 3.9 Women's control over earnings

Percent distribution of women who received cash earnings for work in the past 12 months by person who decides how earnings are used, according to marital status, and the proportion of household expenditures met by earnings, Nigeria 2003

Contribution to household expenditures	Currently married or living together						Number of women	Not married <sup>1</sup>				
	Self only	Jointly with husband	Jointly with someone else	Husband only	Someone else only	Total		Self only	Jointly with someone else	Someone else only	Total	Number of women
Almost none/none	84.3	8.5	0.5	5.7	0.6	100.0	708	83.2	4.2	12.6	100.0	188
Less than half	73.2	16.0	1.2	9.1	0.4	100.0	1,122	77.8	6.0	16.3	100.0	129
Half or more	63.2	23.5	0.6	11.5	1.1	100.0	1,047	83.7	6.5	9.7	100.0	213
All	49.4	39.7	0.3	10.4	0.3	100.0	177	92.6	2.2	5.2	100.0	150
Total	71.0	18.2	0.8	9.2	0.7	100.0	3,062	84.2	5.0	10.7	100.0	682

Note: Totals include 8 currently married women and 2 unmarried women with missing information on contribution to household expenditures. Percentages for currently married women may not add to 100 due to missing cases (no more than 0.3 percent of cases in any category).

<sup>1</sup> Never-married, divorced, separated, or widowed women

## Household Decisionmaking

To assess women's decisionmaking autonomy, information was collected on women's participation in seven different types of decisions: the respondent's own health care, making large household purchases, making household purchases for daily needs, visits to family or friends, what food should be cooked each day, and children's health care and education. The ability of women to make decisions that affect the circumstances of their own lives is an essential aspect of empowerment. Table 3.10 shows the percent distribution of women according to who in the household usually has the final say on each one of the different types of decisions.



Among married women, decisionmaking is highly dominated by husbands. For each specified decision, the majority of women state that their husband has the final say. At least two-thirds of women state that their husband alone makes decisions regarding the children’s health care and education, large household purchases, and even the respondent’s own health care. Women are most likely to have a final say in what food to cook each day—46 percent state that they alone or jointly decide what to cook—followed by visits to friends and relatives (38 percent), and daily household purchases (33 percent). Among unmarried women, the majority also report that, when applicable, someone else has the final say in each of the specified decisions.

Table 3.10 Women’s participation in decisionmaking

Percent distribution of women by person who has the final say in making specific decisions, according to current marital status and type of decision, Nigeria 2003

Decision	Currently married or living together							Not married <sup>1</sup>							
	Self only	Jointly with husband	Jointly with someone else	Husband only	Decision		Total	Number of women	Self only	Jointly with someone else	Some-one else only	Decision		Total	Number of women
					Some-one only	not made/not applicable						Some-one else only	not made/not applicable		
Own health care	12.8	10.3	0.1	73.4	3.1	0.1	100.0	5,336	22.5	4.7	67.0	5.7	100.0	2,284	
Large household purchases	7.1	12.4	0.1	77.5	2.6	0.2	100.0	5,336	16.4	5.4	65.2	13.0	100.0	2,284	
Daily household purchases	19.0	13.9	0.2	64.5	2.4	0.0	100.0	5,336	18.4	5.3	64.0	12.1	100.0	2,284	
Visits to family or relatives	17.7	20.4	0.2	59.7	1.7	0.2	100.0	5,336	23.1	6.1	62.1	8.6	100.0	2,284	
What food to cook each day	33.5	11.7	0.8	51.0	2.9	0.0	100.0	5,336	19.8	6.0	62.8	11.3	100.0	2,284	
Children's health care	9.3	17.3	0.3	66.8	2.1	4.1	100.0	5,336	13.8	4.3	36.2	45.6	100.0	2,284	
Children's education	4.8	16.5	0.3	67.7	2.0	8.6	100.0	5,336	13.3	4.6	35.3	46.7	100.0	2,284	

<sup>1</sup> Never-married, divorced, separated, or widowed women

Table 3.11.1 and Figure 3.3 show how participation in decisionmaking varies by background characteristics. Women are considered to participate in a decision if they alone or jointly with a husband or someone else have the final say in that decision. The results indicate that just 14 percent of women participate in all of the five specified decisions, while 46 percent of women report that they do not participate in any of the decisions. The table shows that women’s involvement in all the specified decisions increases with age, from a low of 5 percent among women age 15-19 to a high of 31 percent among women age 45-49. Divorced, separated, or widowed women are much more likely to be involved in all types of decisions than currently married women and never-married women (56, 13, and 11 percent, respectively). Women who have no living children, no education, those living in rural areas and in the north, and those who are not employed are the least likely to participate in all the specified decisions.

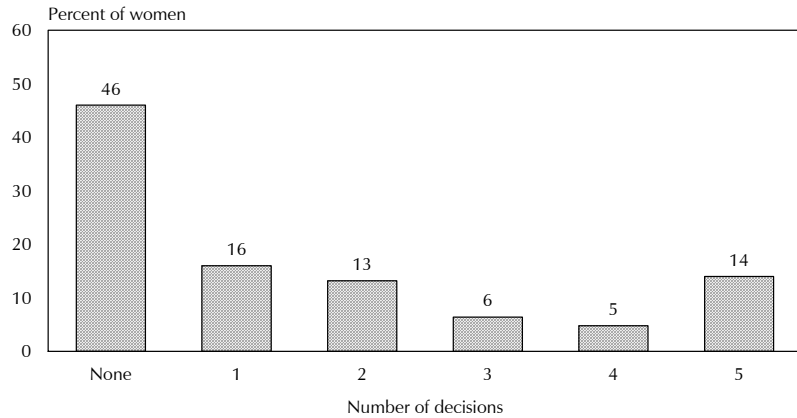
Table 3.11.1 Women's participation in decisionmaking by background characteristics: women

Percentage of women who say that they alone or jointly have the final say in specific decisions, by background characteristics, Nigeria 2003

Background characteristic	Alone or jointly has final say in:							Number of women
	Own health care	Making large purchases	Making daily purchases	Visits to family or relatives	What food to cook each day	All specified decisions	None of the specified decisions	
<b>Age</b>								
15-19	9.7	6.3	8.3	16.1	15.5	4.6	73.8	1,716
20-24	19.7	13.3	21.0	27.1	31.2	8.8	53.4	1,494
25-29	25.2	20.6	35.8	39.6	45.5	13.7	37.7	1,382
30-34	29.9	25.9	38.6	45.4	50.6	19.0	34.3	941
35-39	33.1	31.2	44.1	47.4	55.2	22.6	32.3	816
40-44	34.6	32.9	46.9	46.3	54.3	22.8	33.2	688
45-49	45.8	39.3	52.5	59.4	65.0	30.8	22.9	583
<b>Marital status</b>								
Never married	20.1	14.2	16.4	21.2	18.2	10.8	68.8	1,926
Married or living together	23.3	19.6	33.0	38.3	46.0	13.0	40.0	5,336
Divorced/separated/widowed	65.7	62.8	63.6	72.1	66.3	56.0	20.6	358
<b>Number of living children</b>								
0	17.2	12.7	16.3	22.8	21.2	9.0	65.6	2,499
1-2	25.0	19.9	31.2	36.4	43.5	14.7	41.8	2,009
3-4	27.5	23.1	37.2	42.8	49.0	16.1	36.8	1,526
5+	32.4	30.1	44.2	47.7	56.1	21.1	31.1	1,586
<b>Residence</b>								
Urban	30.3	24.4	36.3	40.3	44.6	17.9	41.1	2,629
Rural	21.4	18.1	27.0	33.0	37.4	12.6	49.1	4,991
<b>Region</b>								
North Central	21.3	12.7	26.1	23.2	39.5	8.8	50.6	1,121
North East	12.4	11.4	15.3	39.8	38.8	6.8	46.9	1,368
North West	13.1	11.7	16.8	28.0	26.4	8.4	57.5	2,095
South East	48.9	42.9	59.0	57.1	57.6	34.9	30.9	737
South South	32.7	31.2	44.4	36.7	47.6	21.4	41.2	1,342
South West	39.8	28.0	43.8	42.3	47.2	19.7	35.4	958
<b>Education</b>								
No education	17.5	14.6	20.7	32.7	34.8	10.2	50.5	3,171
Primary	30.1	28.4	41.8	40.7	49.7	19.7	39.1	1,628
Secondary	26.1	19.9	31.2	32.4	37.1	14.2	49.4	2,370
Higher	44.7	33.3	50.1	53.5	55.4	26.8	28.0	451
<b>Employment</b>								
Not employed	12.4	8.6	12.3	21.3	22.2	6.2	66.5	3,326
Employed for cash	35.4	30.6	44.8	48.1	53.7	22.0	30.0	3,630
Employed, not for cash	25.5	22.9	41.9	37.3	54.3	15.4	34.8	622
Total	24.5	20.3	30.2	35.5	39.9	14.4	46.4	7,620

Note: Total includes 42 cases with missing information on employment.

**Figure 3.3 Number of Decisions in Which Women Participate in the Final Say**



NDHS 2003

The 2003 NDHS also sought men’s opinions concerning women’s participation in decisionmaking in five specified areas. Table 3.11.2 shows that only 5 percent of men said a wife should participate in all decisions either alone or jointly, while 42 percent said that she should not participate in any decision. Among the five specified decisions, men were most likely to think that women should participate in the decision on how many children to have (44 percent), followed by visits to family or relatives and how to spend her money (31 and 26 percent, respectively).

More rural men (46 percent) disapprove of wives’ participation in any of the specified decisions than urban men (36 percent). There is significant variation by region with the South West, South East, and North Central having lower proportions of men who believe wives should not participate in any decisions. The data indicate that men with higher education are more likely to support their wives participation in all specified decisions than men with no education (11 and 2 percent, respectively).

Table 3.11.2 Women's participation in decisionmaking by background characteristics: men

Percentage of men who say that the wife alone or jointly should have the final say in specific decisions, by background characteristics, Nigeria 2003

Background characteristic	Wife alone or jointly should have final say in:							Number of men
	Making large purchases	Making daily purchases	Visits to family or relatives	What to do with the money she earns	How many children to have	All specified decisions	None of the specified decisions	
<b>Age</b>								
15-19	13.8	51.5	32.8	52.5	42.7	8.1	23.8	453
20-24	16.7	48.0	34.8	59.8	53.3	8.9	19.4	426
25-29	14.5	52.9	32.0	43.3	43.7	5.4	25.0	328
30-34	21.1	49.8	36.6	58.3	54.9	11.4	23.7	299
35-39	13.5	40.9	30.7	59.6	45.3	8.7	21.7	220
40-44	21.0	42.6	31.7	58.9	47.5	7.5	21.9	208
45-49	13.2	44.4	33.9	53.7	45.0	5.7	25.5	159
50-54	11.4	50.9	33.8	60.1	45.2	5.4	18.9	133
55-59	10.8	38.9	34.1	54.4	38.8	3.8	25.1	120
<b>Marital status</b>								
Never married	16.1	57.2	37.8	57.2	50.0	9.2	17.5	1,048
Married or living together	15.6	40.7	30.0	52.8	44.4	6.6	27.2	1,245
Divorced/separated/ widowed	7.1	33.7	26.9	70.5	51.1	6.6	19.9	53
<b>Number of living children</b>								
0	17.5	53.6	37.1	56.5	49.0	9.7	19.3	1,168
1-2	13.1	40.0	31.6	56.0	49.8	5.5	25.1	379
3-4	15.1	43.3	30.5	52.7	43.1	6.2	27.5	316
5+	13.5	43.5	28.1	52.8	43.0	5.8	25.9	482
<b>Residence</b>								
Urban	18.0	50.5	38.9	65.0	51.8	9.0	14.9	872
Rural	14.2	46.4	30.2	49.3	44.3	7.0	27.4	1,474
<b>Region</b>								
North Central	20.3	75.1	46.4	63.2	52.3	10.6	11.8	348
North East	1.9	15.2	12.2	32.2	36.0	0.5	51.1	421
North West	5.2	12.3	16.8	58.2	42.8	0.5	32.5	602
South East	39.0	62.3	56.7	55.3	57.4	13.2	10.1	207
South South	17.3	83.9	37.5	49.3	45.4	10.6	10.9	445
South West	30.6	68.8	57.8	78.7	59.6	20.3	3.6	322
<b>Education</b>								
No education	4.8	17.4	15.8	44.7	33.6	1.5	43.1	507
Primary	14.6	46.1	31.5	51.4	41.7	7.2	27.1	603
Secondary	18.8	61.9	40.3	58.9	53.7	9.1	12.8	960
Higher	26.7	58.9	46.3	69.5	60.7	16.0	10.2	276
<b>Employment</b>								
Not employed	18.8	61.5	37.0	57.1	48.5	11.0	15.0	703
Employed for cash	17.4	52.0	39.5	61.0	52.7	8.3	16.6	1,179
Employed, not for cash	5.1	16.9	11.3	36.3	29.6	1.5	50.8	450
Missing	48.1	15.3	51.2	71.9	60.2	0.0	24.5	14
Total	15.6	47.9	33.4	55.1	47.1	7.8	22.7	2,346

Note: Total includes 14 cases with missing information on employment.

## Women's Agreement with Reasons for Wife Beating

The 2003 NDHS gathered information on women's attitudes toward wife beating, a proxy for women's perception of their status. Women who believe that a husband is justified in hitting or beating his wife for any reason at all may also believe themselves to be of low status both absolutely and relative to men. Such perceptions by women could act as a barrier to accessing health care for themselves and their children, could affect their attitude toward contraceptive use, and could impact their general well-being. Women were asked whether a husband is justified in beating his wife under a series of circumstances. Possible reasons that justified a man beating his wife included her burning the food, her not having the food prepared on time, her arguing with him, her going out without telling him, her neglecting the children, and her refusing sexual relations. The results are summarized in Table 3.12.1.

Approximately two-thirds (65 percent) of women believe that a husband is justified in beating his wife for at least one of the specified reasons. More than half of women believe that a husband is justified in beating his wife if she goes out without telling him, and about half agree that she should be beaten if she neglects the children. Slightly smaller percentages agree if a woman argues with her husband (44 percent) or refuses to have sex with her husband (38 percent). Approximately one-third feel that a husband is justified in beating his wife if the food is not cooked on time or if she burns the food.

There is little variation in these beliefs by age. Women who are married, have at least one child, or who reside in rural areas are the most likely to agree with at least one of these reasons. There are large variations by geopolitical region. Almost all women in the North East agree with at least one reason for wife-beating (90 percent), compared with less than one-third of women in the South East (31 percent). Differences are also notable by level of education. Agreement with at least one reason ranges from a high of 78 percent among women with no education to a low of 31 percent among women with higher education. Women who participate in more household decisions are less likely to feel that wife beating is justified for any reason.

Table 3.12.2 presents the percentage of men who agree that a husband is justified in beating his wife for specific reasons by background characteristics. Sixty-one percent of men agree with at least one specified reason for wife beating, a proportion similar to women (65 percent). The most prevalent reasons given for wife beating include, going out without telling the husband (50 percent), neglecting the children (47 percent), arguing with the husband (40 percent), and refusing to have sex with him (34 percent).

Men who are divorced, separated, or widowed are more likely than currently married or never married men to agree with at least one specified reason for wife beating (75 percent compared with 63 percent and 59 percent). Men in rural areas are more likely to agree with at least one specified reason for wife beating than those in urban areas (66 and 54 percent, respectively). Similar to women, men's beliefs vary greatly by region. Men who have no education and who are employed but do not earn cash are also more likely to agree with at least one specified reason. The table shows that men who support women's participation in decisionmaking are less likely to agree with any of the reasons justifying wife beating.

Table 3.12.1 Women's attitude toward wife beating

Percentage of women who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, Nigeria 2003

Background characteristic	Husband is justified in hitting or beating his wife if she:						Percentage who agree with at least one specified reason	Number of women
	Burns the food	Doesn't cook food on time	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sex with him		
<b>Age</b>								
15-19	29.6	33.8	42.5	51.1	49.3	33.3	63.4	1,716
20-24	29.6	32.1	43.4	51.6	48.0	36.1	63.0	1,494
25-29	27.6	31.0	40.1	51.5	47.8	36.6	63.3	1,382
30-34	30.7	32.2	42.6	53.9	51.4	37.3	67.5	941
35-39	33.0	36.6	45.6	54.1	48.2	40.5	65.7	816
40-44	33.1	33.3	45.5	56.1	51.0	43.8	66.2	688
45-49	38.4	38.1	51.0	56.4	53.8	44.9	66.6	583
<b>Marital status</b>								
Never married	21.0	25.9	32.4	35.3	40.5	20.8	51.4	1,926
Married or living together	34.3	36.0	47.3	59.2	52.7	43.4	69.4	5,336
Divorced/separated/widowed	30.4	34.2	46.3	51.3	48.6	39.6	62.2	358
<b>Number of living children</b>								
0	24.2	27.9	36.8	42.1	43.2	27.6	56.4	2,499
1-2	34.0	36.1	47.2	58.6	52.7	41.2	68.7	2,009
3-4	32.3	35.3	45.3	57.9	51.6	42.1	68.0	1,526
5+	35.3	36.5	47.5	57.5	53.0	44.2	68.7	1,586
<b>Residence</b>								
Urban	22.7	24.9	35.4	42.2	41.1	28.1	56.6	2,629
Rural	35.0	37.8	47.8	58.4	53.8	42.5	68.7	4,991
<b>Region</b>								
North Central	27.4	31.8	34.0	39.7	44.2	28.8	52.9	1,121
North East	65.7	67.5	80.3	83.2	81.4	73.5	90.2	1,368
North West	29.8	28.9	41.4	71.8	49.4	47.7	75.3	2,095
South East	8.8	13.2	16.4	17.4	20.9	9.3	31.3	737
South South	25.9	30.5	39.8	43.5	46.8	26.1	62.0	1,342
South West	10.5	15.6	32.7	23.4	35.6	12.0	46.9	958
<b>Education</b>								
No education	42.7	43.1	55.8	71.1	60.6	54.2	77.9	3,171
Primary	30.3	33.9	43.6	51.0	49.9	35.5	64.3	1,628
Secondary	19.6	24.5	32.6	36.5	39.8	21.9	53.1	2,370
Higher	7.0	8.9	14.1	15.7	19.5	10.0	30.6	451
<b>Employment</b>								
Not employed	31.4	33.6	43.4	54.7	49.8	39.1	65.0	3,326
Employed for cash	29.4	31.9	43.2	51.3	48.4	36.6	63.3	3,630
Employed, not for cash	33.4	39.1	44.3	50.7	52.5	33.1	68.3	622
<b>Number of decisions in which woman has final say<sup>1</sup></b>								
0	32.7	35.3	44.9	57.2	49.9	39.3	67.5	3,534
1-2	35.2	37.3	48.7	58.6	57.4	42.8	70.2	2,160
3-4	23.1	27.4	38.3	40.7	43.7	31.4	58.8	825
5	21.5	23.6	32.4	36.3	36.5	26.3	48.1	1,100
Total	30.7	33.3	43.5	52.8	49.4	37.5	64.5	7,620

Note: Total includes 42 cases with missing information on employment.

<sup>1</sup> Either by herself or jointly with others

Table 3.12.2 Men's attitude toward wife beating

Percentage of men who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, Nigeria 2003

Background characteristic	Husband is justified in hitting or beating his wife if she:						Percentage who agree with at least one specified reason	Number of men
	Burns the food	Doesn't cook food on time	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sex with him		
<b>Age</b>								
15-19	21.9	23.3	35.4	50.0	43.6	31.9	60.1	453
20-24	17.7	21.7	40.9	49.2	47.9	33.8	59.4	426
25-29	14.9	15.9	42.1	45.5	46.9	31.4	60.2	328
30-34	10.2	12.0	39.6	51.3	47.4	31.1	62.5	299
35-39	13.8	12.5	45.1	54.5	48.9	36.1	68.8	220
40-44	13.3	14.3	37.4	49.0	44.6	31.5	58.0	208
45-49	12.9	16.2	43.0	50.8	47.4	38.9	61.5	159
50-54	13.3	14.8	49.8	53.4	50.5	44.4	69.2	133
55-59	10.3	11.7	30.6	48.3	41.6	29.7	55.1	120
<b>Marital status</b>								
Never married	17.4	19.9	37.2	46.3	44.1	29.3	58.7	1,048
Married or living together	13.6	14.4	41.9	52.8	47.8	36.7	62.8	1,245
Divorced/separated/widowed	19.5	27.8	52.0	51.9	62.4	41.7	75.2	53
<b>Number of living children</b>								
0	17.3	19.4	38.0	47.3	44.3	29.7	59.0	1,168
1-2	13.3	14.3	39.3	52.5	46.0	35.8	61.7	379
3-4	13.2	14.3	43.0	50.0	47.5	35.4	64.8	316
5+	14.3	15.9	43.6	53.9	51.5	39.6	64.2	482
<b>Residence</b>								
Urban	8.9	10.7	29.8	38.9	36.9	24.4	53.7	872
Rural	19.3	21.0	46.1	56.3	52.1	38.9	65.8	1,474
<b>Region</b>								
North Central	13.8	21.5	33.2	37.1	42.4	22.4	50.7	348
North East	30.2	28.9	74.9	74.5	74.7	69.3	82.0	421
North West	14.0	14.6	35.2	66.3	45.1	43.9	70.8	602
South East	9.0	9.0	15.0	28.3	25.3	4.2	36.6	207
South South	12.9	13.7	40.8	45.6	45.0	25.6	60.5	445
South West	8.4	11.9	26.0	20.4	32.2	9.1	44.8	322
<b>Education</b>								
No education	21.1	20.8	49.9	65.4	55.5	51.8	73.5	507
Primary	15.2	18.6	41.2	51.6	46.7	31.7	61.0	603
Secondary	14.8	17.3	35.9	42.4	41.8	26.7	56.0	960
Higher	8.0	6.9	34.0	43.6	45.6	27.6	57.8	276
<b>Employment</b>								
Not employed	16.6	19.2	34.1	43.9	44.8	28.1	57.8	703
Employed for cash	11.4	13.0	41.8	48.6	46.2	31.4	59.9	1,179
Employed, not for cash	24.2	24.9	45.7	62.9	51.1	48.1	71.0	450
<b>Number of decisions in which woman should have final say<sup>1</sup></b>								
0	28.9	25.8	50.8	60.9	55.4	47.4	69.3	533
1-2	15.5	18.2	38.5	53.9	45.9	35.0	62.4	979
3-4	7.9	12.3	35.7	38.0	40.3	24.0	54.2	652
5	3.3	3.6	32.3	38.5	45.4	18.7	56.9	182
Total	15.5	17.2	40.0	49.9	46.5	33.5	61.3	2,346

Note: Total includes 14 cases with missing information on employment.

<sup>1</sup> Either by herself or jointly with others

## Women's Attitude Toward Refusing Sex with Husband

The extent of control women have over when and with whom they have sex has important implications for demographic and health outcomes. The 2003 NDHS asked respondents if a woman would be justified in refusing sex with her husband in each of the following four situations: if she knows husband has a sexually transmitted infection; if she knows her husband has sex with women other than herself (or his wives); if she has recently given birth; and if she is tired or not in the mood.

Table 3.13.1 shows that a majority of women agree with each specified reason for refusing to have sex. Women are most likely to agree that a woman can refuse to have sex with her husband if she knows he has a sexually transmitted infection (84 percent), although more than two-thirds believe that a woman can refuse sex if she has recently given birth or if she knows her husband has sex with other women. Less than half of women (44 percent) agree with all of the specified reasons for refusing sex and 12 percent agree with none of the specified reasons.

Although there is little difference by urban-rural residence in the reasons women agree justify refusing to have sex with their husbands, there are substantial variations by region. Interestingly, never-married women are twice as likely as currently or formerly married women to agree that there is no reason for refusing sex with a husband. Table 3.13.2 shows that male respondents are more likely to agree with each specified reason. Approximately half of men agree with all reasons.



Table 3.13.1 Women's attitude toward refusing sex with husband

Percentage of women who believe that a wife is justified in refusing to have sex with her husband for specific reasons, according to background characteristics, Nigeria 2003

Background characteristic	Wife is justified in refusing sex with her husband if she:				Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Number of women
	Knows husband has a sexually transmitted infection	Knows husband has sex with women other than wife/wives	Has recently given birth	Is tired or not in the mood			
<b>Age</b>							
15-19	73.5	61.4	60.1	50.7	40.8	21.2	1,716
20-24	84.1	70.1	71.3	56.7	44.5	11.2	1,494
25-29	88.3	69.7	74.3	57.7	45.3	7.4	1,382
30-34	87.2	72.0	72.2	54.7	45.1	7.8	941
35-39	86.8	70.5	68.5	54.9	44.4	9.7	816
40-44	86.0	70.3	69.0	53.9	44.0	11.4	688
45-49	85.8	68.3	72.1	54.2	44.6	11.5	583
<b>Marital status</b>							
Never married	75.3	61.1	65.4	59.8	45.4	20.3	1,926
Married or living together	86.0	70.5	69.6	52.7	43.4	9.5	5,336
Divorced/separated/widowed	89.1	72.6	78.3	55.6	42.5	9.7	358
<b>Number of living children</b>							
0	77.2	62.5	64.5	55.1	42.4	18.1	2,499
1-2	87.4	72.4	72.9	56.9	46.1	8.2	2,009
3-4	85.7	68.4	69.8	51.1	41.4	9.8	1,526
5+	86.1	71.8	70.2	54.4	45.8	10.4	1,586
<b>Residence</b>							
Urban	86.3	68.4	71.2	58.5	44.7	10.1	2,629
Rural	82.0	68.1	67.8	52.6	43.4	13.3	4,991
<b>Region</b>							
North Central	77.1	62.4	68.4	58.2	49.2	19.5	1,121
North East	90.1	78.0	73.3	55.0	49.1	7.6	1,368
North West	83.6	71.4	58.0	35.2	32.1	11.5	2,095
South East	71.5	54.3	58.6	52.1	40.5	24.7	737
South South	86.2	66.9	81.2	67.9	47.0	7.2	1,342
South West	86.3	66.8	78.2	75.6	54.2	9.3	958
<b>Education</b>							
No education	83.1	69.4	65.9	44.6	38.8	12.2	3,171
Primary	81.5	66.9	68.4	59.4	48.1	14.8	1,628
Secondary	83.3	66.9	71.7	63.0	47.4	11.9	2,370
Higher	93.9	71.9	77.8	64.1	45.7	4.4	451
<b>Employment</b>							
Not employed	79.3	62.7	62.5	48.3	38.1	16.2	3,326
Employed for cash	87.3	73.2	73.8	59.0	47.8	8.8	3,630
Employed, not for cash	85.2	69.5	75.9	64.5	52.9	10.9	622
<b>Number of decisions in which woman has final say<sup>1</sup></b>							
0	80.0	65.5	65.4	52.0	42.8	15.7	3,534
1-2	87.9	73.3	69.8	53.5	42.8	7.1	2,160
3-4	88.1	66.4	75.0	60.8	43.7	7.3	825
5	82.5	68.6	74.4	60.7	49.3	14.9	1,100
<b>Number of reasons wife beating is justified</b>							
0	74.4	58.1	61.0	51.3	40.1	22.3	2,704
1-2	89.4	65.8	69.1	48.1	37.4	6.7	1,563
3-4	89.2	74.0	74.4	57.4	43.3	5.5	1,250
5-6	87.2	79.6	75.9	62.1	53.8	7.4	2,104
<b>Total</b>	<b>83.5</b>	<b>68.2</b>	<b>69.0</b>	<b>54.6</b>	<b>43.9</b>	<b>12.2</b>	<b>7,620</b>

Note: Total includes 42 cases with missing information on employment.

<sup>1</sup> Either by herself or jointly with others

Table 3.13.2 Men's attitude toward wife refusing sex with husband

Percentage of men who believe that a wife is justified in refusing to have sex with her husband for specific reasons, according to background characteristics, Nigeria 2003

Background characteristic	Wife is justified in refusing sex with her husband if she:				Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Number of men
	Knows husband has a sexually transmitted infection	Knows husband has sex with women other than wife/wives	Has recently given birth	Is tired or not in the mood			
<b>Age</b>							
15-19	80.9	62.8	73.5	51.5	39.7	14.9	453
20-24	90.8	69.8	79.8	61.4	49.2	7.2	426
25-29	93.5	74.4	85.3	65.8	53.2	3.5	328
30-34	97.4	82.2	87.4	75.1	62.2	0.5	299
35-39	96.1	79.6	86.3	66.4	52.1	1.2	220
40-44	92.9	74.8	84.0	58.2	43.9	1.6	208
45-49	96.0	79.4	86.1	64.3	50.6	1.0	159
50-54	91.6	76.3	82.3	70.4	51.1	4.0	133
55-59	91.9	67.2	84.2	60.9	45.1	3.0	120
<b>Marital status</b>							
Never married	86.9	68.4	78.9	60.5	48.5	9.9	1,048
Married or living together	94.8	77.2	84.3	64.8	50.8	1.8	1,245
Divorced/separated/widowed	94.1	60.0	94.3	58.0	33.1	2.5	53
<b>Number of living children</b>							
0	88.1	69.2	80.4	61.2	48.6	8.9	1,168
1-2	94.8	72.7	84.3	63.6	49.6	2.3	379
3-4	95.0	79.8	85.5	60.6	49.1	1.4	316
5+	93.6	77.6	82.3	67.1	51.3	2.2	482
<b>Residence</b>							
Urban	93.2	70.0	82.0	64.8	48.8	4.9	872
Rural	90.1	74.7	82.2	61.5	49.7	5.8	1,474
<b>Region</b>							
North Central	93.4	84.2	93.1	79.6	70.4	3.0	348
North East	96.3	74.0	83.5	55.6	40.0	1.4	421
North West	93.1	70.7	69.9	42.6	32.1	3.5	602
South East	94.1	77.1	84.8	76.3	61.7	5.1	207
South South	78.9	66.8	78.4	59.3	50.1	16.2	445
South West	94.1	69.2	94.7	87.4	62.3	2.3	322
<b>Education</b>							
No education	92.2	74.4	76.6	50.8	37.5	2.9	507
Primary	88.5	71.4	78.6	59.9	46.3	7.3	603
Secondary	91.6	71.6	84.9	67.1	53.4	6.1	960
Higher	94.3	78.1	90.0	75.6	63.8	3.8	276
<b>Employment</b>							
Not employed	84.3	68.5	77.0	61.8	50.2	12.2	703
Employed for cash	95.2	74.0	88.2	68.1	52.2	1.8	1,179
Employed, not for cash	91.7	76.5	74.1	49.9	40.2	4.6	450
<b>Number of decisions in which woman has final say<sup>1</sup></b>							
0	85.3	73.2	71.9	52.1	41.2	10.8	533
1-2	92.5	69.2	80.4	57.0	41.7	3.5	979
3-4	93.8	75.9	90.4	73.6	60.3	3.9	652
5	93.1	81.4	91.4	85.4	75.6	5.8	182
<b>Number of reasons wife beating is justified</b>							
0	91.1	69.3	80.4	61.3	49.5	6.7	1,353
1-2	92.5	76.2	86.1	64.0	47.8	2.7	469
3-4	89.6	79.4	85.0	68.3	50.6	5.1	304
5-6	91.7	79.1	79.8	61.2	50.3	4.1	220
<b>Total</b>	<b>91.2</b>	<b>72.9</b>	<b>82.1</b>	<b>62.7</b>	<b>49.4</b>	<b>5.5</b>	<b>2,346</b>

Note: Total includes 14 cases with missing information on employment.

<sup>1</sup> Either by herself or jointly with others

## FERTILITY

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 initiate child-bearing. Data on fertility were collected in the 2003 NDHS in several ways. First, each woman was asked a series of questions on the number of sons and daughters who were living with her, the number living elsewhere, and the number who had died. Next, a complete history of all of the women's births was obtained, including the month and year each child was born; the name and sex; if deceased, the age at death; and if alive, the current age and whether the child was living with the mother. The information from those questions was used to calculate measures of current and completed fertility, i.e., the number of children ever born.

### 4.1 CURRENT FERTILITY

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). These rates are generally presented for the three-year period preceding the survey. The three-year period was chosen as a compromise among three criteria: to get the most current information, to reduce sampling error, and to avoid problems noted in the 1999 NDHS of the displacement of births from five to six years before the survey.

ASFRs are useful in understanding the age pattern of fertility. Table 4.1 shows that Nigerian women experience their prime reproductive years during their twenties and early thirties. At every age, rural women bear more children than urban women. The rural ASFRs rise sharply from age 15-19 years to age 20-24, peak at age 25-29 and then decline. On the other hand, the urban ASFRs assume a more gradual pattern, an indication both of delayed marriage and some deliberate attempt to postpone or terminate births by urban women. Figure 4.1 shows that whereas the urban ASFR pattern depicts a narrow peak at age 25-29, the rural ASFR depicts a broad peak that extends from age 20-24 to 30-34.

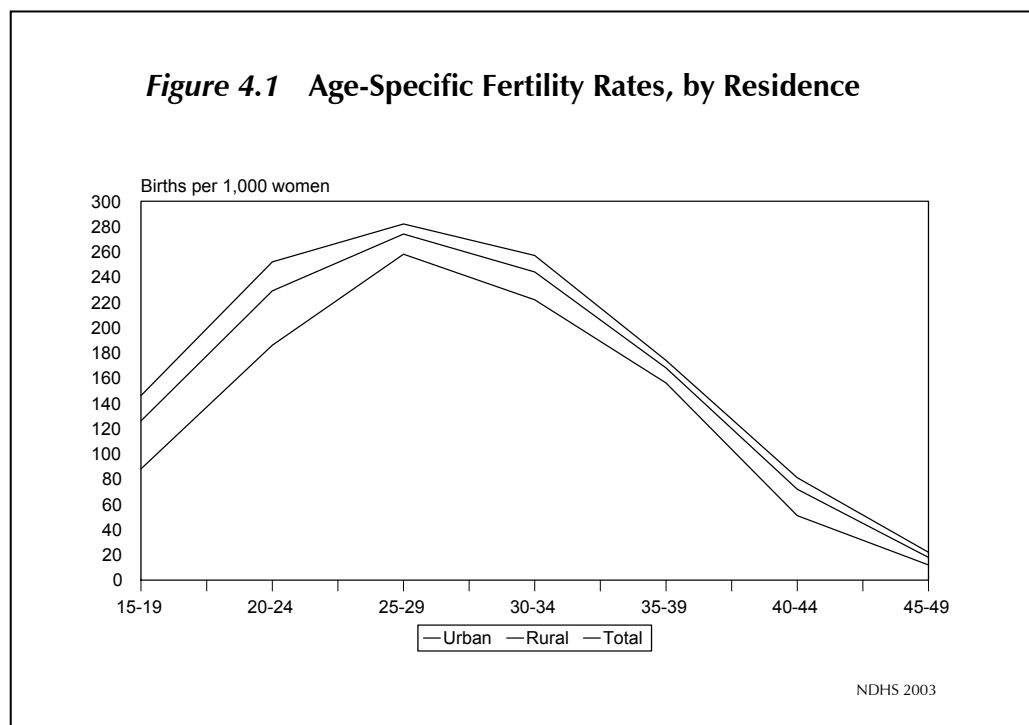
The total fertility rate is a useful measure for examining the overall level of fertility. It is interpreted as the number of children the average woman would bear in her lifetime if she experienced the currently-observed age-specific fertility rates throughout her reproductive years. According to the results of the 2003 NDHS, the total fertility rate for Nigeria is 5.7. As expected, the TFR for rural women is significantly higher than that of urban women. On average, rural women will give birth to one more child during their reproductive years than urban women (6.1 and 4.9, respectively).

Table 4.1 Current fertility

Age-specific and cumulative fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by urban-rural residence, Nigeria 2003

Age group	Residence		Total
	Urban	Rural	
15-19	88	146	126
20-24	186	252	229
25-29	258	282	274
30-34	222	257	244
35-39	156	174	168
40-44	51	81	72
45-49	12	22	18
TFR	4.9	6.1	5.7
GFR	164	204	190
CBR	36.3	44.5	41.7

Note: Rates are for the period 1-36 months preceding the survey. Rates for age group 45-49 may be slightly biased due to truncation. TFR: Total fertility rate for ages 15-49, expressed per woman  
GFR: General fertility rate (births divided by number of women age 15-44) expressed per 1,000 women  
CBR: Crude birth rate expressed per 1,000 population



The TFR of 5.7 computed in the 2003 NDHS is significantly higher than the 1999 NDHS rate of 5.2. This confirms the analysis in the Data Quality Chapter of the 1999 NDHS final report that detailed evidence of an underreporting of births during the five years preceding the survey. Indeed, the results of that analysis indicated that the TFR was closer to 6.0 (NPC, 2000). On the other hand, there is no evidence of omission or transference of births in the 2003 NDHS (see Table C.4).

The crude birth rate in Nigeria is 42 births per 1,000 population. As with the TFR, there is a clear differential in this rate by residence: 45 births per 1,000 in rural areas versus 36 births per 1,000 in urban areas. The GFR of 190 indicates that 1,000 women age 15-44 would have 190 live births per year and also indicates a significant urban-rural difference. Higher rural than urban fertility has been explained with respect to the underlying socioeconomic differences and the changing proximate determinants of fertility, especially delayed marriage and higher use of modern contraceptives in urban areas (Isiugo Abanihe, 1996).

## 4.2 FERTILITY DIFFERENTIALS

Table 4.2 shows total fertility rates, the percentage of women who are currently pregnant, and the mean number of children ever born (CEB) to women age 40-49, by residence, region, education, and wealth quintile.

The large urban-rural differentials in fertility have already been noted. Region of residence also shows considerable variation in fertility. Table 4.2 shows a pattern of lower rates in the south and higher rates in the north. The TFR is lowest in the South West and South East (4.1), followed closely by the South South (4.6). The North Central shows a rate corresponding to the national average of 5.7. The rates for the North West and North East are significantly higher at 6.7 and 7.0, respectively (Figure 4.2).

Table 4.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage of women 15-49 currently pregnant, and mean number of children ever born to women age 40-49, by background characteristics, Nigeria 2003

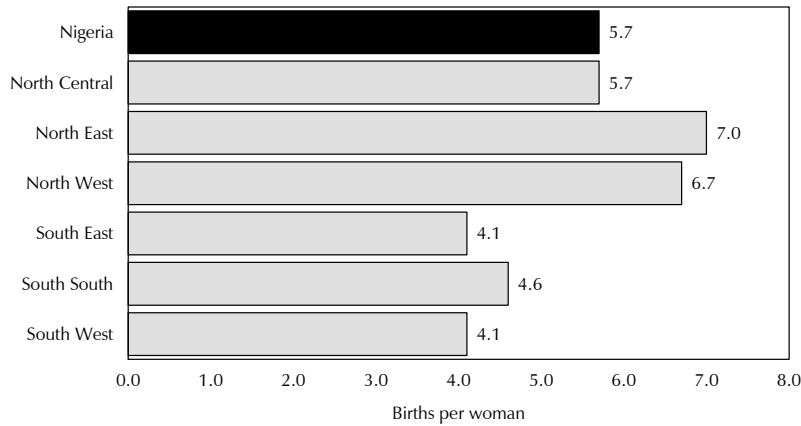
Background characteristic	Total fertility rate <sup>1</sup>	Percentage currently pregnant <sup>1</sup>	Mean number of children ever born to women age 40-49
<b>Residence</b>			
Urban	4.9	9.4	6.2
Rural	6.1	12.4	7.1
<b>Region</b>			
North Central	5.7	9.4	7.4
North East	7.0	14.2	7.4
North West	6.7	16.2	6.7
South East	4.1	6.8	6.6
South South	4.6	9.0	6.9
South West	4.1	6.0	5.5
<b>Education</b>			
No education	6.7	14.8	7.1
Primary	6.3	11.0	7.1
Secondary	4.7	8.1	5.5
Higher	2.8	6.2	4.3
<b>Wealth quintile</b>			
Lowest	6.5	12.8	7.2
Second	6.3	13.8	7.2
Middle	5.7	13.2	6.7
Fourth	5.9	10.2	7.0
Highest	4.2	7.8	5.5
Total	5.7	11.4	6.8

<sup>1</sup> Rate for women age 15-49 years

Fertility is also strongly correlated with education and wealth quintile. The higher a woman's educational attainment and the more economically advantaged her household, the lower her fertility. There is a monotonic decline in fertility with educational attainment. Eleven percent of the women interviewed reported that they were pregnant at the time of the interview. Variations in this proportion follow the same general patterns as the TFRs.

Table 4.2 also shows the mean number of live births for women age 40-49. This figure is an indicator of completed fertility or cumulative fertility of women approaching the end of their childbearing years. A comparison of the TFR (5.7) and cumulative fertility (6.8) gives an indication of fertility over time. The data indicate fertility decline among women in all groups, with the exception of women in the North West region.

**Figure 4.2 Total Fertility Rates by Region**



NDHS 2003

### 4.3 FERTILITY TRENDS

One method of understanding fertility trends is to examine the ASFRs over time. Because women age 50 and older were not interviewed in the survey, the rates are successively truncated as the number of years before the survey increases. The ASFR data shown in Table 4.3 indicate that over the last 20 years there has been a steady decline in fertility among women of all ages in Nigeria. As has been alluded to previously, the declining fertility observed here can be interpreted in light of rising age at marriage and increasing contraceptive use.

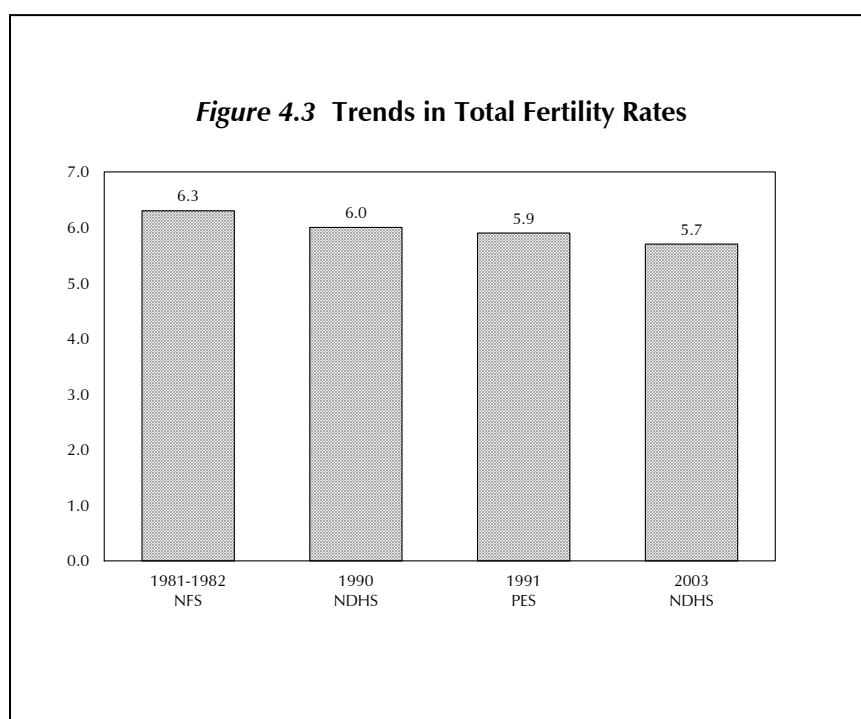
Table 4.3 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Nigeria 2003

Mother's age at birth	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
15-19	126	147	167	197
20-24	246	265	285	307
25-29	272	315	305	312
30-34	237	254	270	[282]
35-39	171	173	[200]	-
40-44	69	[89]	-	-
45-49	[25]	-	-	-

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated.

Figure 4.3 presents the trend in the TFR over the years from different Nigerian data sets. Overall, these data indicate a modest decline in fertility at the national level over the years, from a TFR of 6.3 in the 1981-82 National Fertility Survey (NFS) to 5.7 in the 2003 NDHS.



#### 4.4 CHILDREN EVER BORN AND LIVING

Table 4.4 shows all women and currently married women by number of children ever born. Data on the number of children ever born reflect the accumulation of births over the past 30 years and therefore have limited relevance to current fertility levels, particularly when the country has experienced a decline in fertility.

Approximately seven in ten women reported having given birth. As expected, currently married women have had more births than all women in all age groups; 90 percent of married women report that they have given birth. The reason is undoubtedly that currently married women are more consistently exposed to the risk of pregnancy.

The percentage of women in their forties who have never had children provides an indicator of the level of primary infertility—the proportion of women who are unable to bear children at all. Since voluntary childlessness is rare in Nigeria, it is likely that married women with no births are unable to bear children. The 2003 NDHS results suggest that primary infertility is low: less than 3 percent of married women age 45-49 report that they have had no children. It should be noted that this estimate of primary infertility does not include women who may have had one or more births but who are unable to have more (secondary infertility).

The mean number of children ever born (CEB) for all women is 3.1 and for currently married women is 4.1. As expected the mean CEB increases with age. Comparing the CEB column with that of the mean number of living children reveals substantial experience of child loss among Nigerian women.

Table 4.4 Children ever born and living

Percent distribution of all women and currently married women by number of children ever born, and mean number of children ever born and mean number of living children, according to age group, Nigeria 2003

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	79.0	16.7	3.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,716	0.26	0.22
20-24	41.6	24.0	17.6	10.6	4.9	1.1	0.2	0.0	0.0	0.0	0.0	100.0	1,494	1.18	0.97
25-29	16.8	13.5	16.0	17.6	17.0	10.7	5.2	2.1	0.5	0.2	0.2	100.0	1,382	2.74	2.23
30-34	8.0	6.6	9.8	11.5	14.9	15.7	12.8	11.2	5.8	2.4	1.2	100.0	941	4.35	3.41
35-39	2.5	4.1	5.6	8.8	12.2	10.2	12.4	12.4	12.2	9.8	9.8	100.0	816	5.93	4.54
40-44	5.5	3.3	3.7	4.2	6.7	10.9	11.8	12.0	11.1	11.9	18.9	100.0	688	6.62	4.91
45-49	3.3	3.4	4.3	2.6	8.8	9.9	10.4	9.2	11.1	10.9	26.1	100.0	583	7.03	5.05
Total	31.0	12.7	9.6	8.4	8.5	6.9	5.8	4.9	4.0	3.3	4.9	100.0	7,620	3.09	2.38
CURRENTLY MARRIED WOMEN															
15-19	44.8	41.9	10.0	3.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	545	0.72	0.61
20-24	13.5	32.3	27.4	16.6	8.0	1.8	0.4	0.0	0.0	0.0	0.0	100.0	911	1.80	1.48
25-29	7.1	12.9	17.8	20.2	19.4	12.8	6.1	2.6	0.6	0.2	0.3	100.0	1,146	3.15	2.56
30-34	3.9	6.3	9.2	11.9	15.5	16.8	13.8	12.2	6.4	2.7	1.4	100.0	848	4.63	3.63
35-39	1.5	3.3	5.7	8.6	12.7	10.5	12.1	12.2	12.6	10.4	10.3	100.0	763	6.07	4.63
40-44	5.1	2.8	3.5	3.7	6.9	11.1	12.0	11.3	10.8	12.6	20.2	100.0	619	6.76	5.00
45-49	2.5	2.7	4.2	2.6	8.6	10.3	9.9	9.2	11.4	11.3	27.1	100.0	504	7.17	5.13
Total	10.1	14.6	12.6	11.3	11.4	9.5	7.6	6.4	5.3	4.5	6.7	100.0	5,336	4.12	3.17

#### 4.5 BIRTH INTERVALS

A birth interval is defined as the length of time between two successive live births. Information on birth intervals provides insight into birth spacing patterns, which affect fertility as well as infant and childhood mortality. Research has shown that children born too soon after the previous birth are at increased risk of dying at an early age.

Table 4.5 presents the percent distribution of non-first births in the five years preceding the survey, by number of months since preceding birth. The median birth interval in Nigeria is 31 months. The median number of months since preceding birth increases significantly with age, from a low of 26 among mothers age 15-19 to a high of 39 among mothers age 40-49.

Studies have shown that the death of a preceding birth should lead to a shorter birth interval compared with when a child survives. Indeed, the table indicates that the death of a preceding birth shortens the birth interval by about six months.

According to the 2003 NDHS data, living in a rural or an urban area does not make any difference in birth intervals in Nigeria. There is a ten-month difference between women in the South West, who have the longest birth interval, and those in the South East, who have the shortest birth interval (37 months and 27 months, respectively).



**Table 4.5 Birth intervals**

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, according to background characteristics, Nigeria 2003

Background characteristic	Number of 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+			
<b>Age</b>								
15-19	21.1	22.8	44.1	9.5	2.6	100.0	91	26.1
20-29	10.4	17.8	43.9	18.1	9.8	100.0	2,302	29.1
30-39	7.9	12.7	37.2	20.8	21.4	100.0	1,979	33.3
40-49	8.0	9.0	28.8	19.1	35.0	100.0	564	38.7
<b>Birth order</b>								
2-3	9.5	15.6	42.0	18.0	14.9	100.0	1,904	30.5
4-6	8.4	14.7	40.5	19.4	17.0	100.0	1,837	31.3
7+	10.6	13.8	34.0	20.6	21.0	100.0	1,195	32.4
<b>Sex of preceding birth</b>								
Male	10.1	15.5	39.7	18.5	16.2	100.0	2,468	30.7
Female	8.6	14.2	39.2	19.8	18.2	100.0	2,468	31.9
<b>Survival of preceding birth</b>								
Living	5.8	13.9	41.5	20.0	18.8	100.0	3,900	32.3
Dead	22.7	18.5	31.7	16.0	11.1	100.0	1,036	26.4
<b>Residence</b>								
Urban	7.8	14.9	38.1	19.4	19.8	100.0	1,383	31.7
Rural	10.0	14.8	40.0	19.0	16.2	100.0	3,554	31.1
<b>Region</b>								
North Central	7.4	12.9	37.9	20.4	21.4	100.0	704	33.2
North East	11.0	17.1	42.2	19.1	10.6	100.0	1,220	29.4
North West	9.3	15.2	39.7	20.1	15.7	100.0	1,757	31.3
South East	11.5	23.2	35.5	14.5	15.2	100.0	282	27.2
South South	10.2	10.5	40.9	15.5	23.0	100.0	591	30.9
South West	5.2	9.8	33.8	21.4	29.9	100.0	383	36.5
<b>Education</b>								
No education	10.2	15.3	38.9	19.5	16.0	100.0	2,678	31.1
Primary	8.5	13.3	38.9	19.5	19.9	100.0	1,212	32.0
Secondary	8.8	14.7	42.6	18.0	15.9	100.0	888	30.6
Higher	5.9	19.4	36.0	15.8	22.9	100.0	158	32.2
<b>Wealth quintile</b>								
Lowest	9.8	16.2	38.9	19.4	15.7	100.0	1,163	30.8
Second	11.2	14.0	39.1	19.5	16.3	100.0	1,131	31.1
Middle	10.2	14.3	38.3	21.2	15.9	100.0	991	31.6
Fourth	6.8	13.8	42.7	18.3	18.4	100.0	902	31.2
Highest	7.9	15.8	38.7	16.6	21.0	100.0	749	31.4
Total	9.4	14.8	39.5	19.1	17.2	100.0	4,936	31.2

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.

## 4.6 AGE AT FIRST BIRTH

The age at which childbearing begins influences the number of children a woman bears throughout her reproductive period in the absence of any active control. Table 4.6 shows the percent distribution of women by age at first birth, according to age at the time of the survey. For women age 25 and older, the median age at first birth is presented in the last column of the table.

The data indicate that the age at first birth in Nigeria is increasing. For example, the median age at first birth is 20.3 years for women age 25-29, whereas it is less than 19 years among women 35 years and older. Also the percentage of women who gave birth before age 15 and 18 generally shows some postponement of first births by younger cohorts of mothers. For example, only 3 percent of women 15-19 had given birth by age 15 compared with at least 15 percent of those age 30 or older.

Table 4.6 Age at first birth

Percentage of women who gave birth by specific exact ages, and median age at first birth, by current age, Nigeria 2003

Current age	Percentage who gave birth by exact age:					Percentage who have never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
15-19	3.4	na	na	na	na	79.0	1,716	a
20-24	6.6	28.0	45.7	na	na	41.6	1,494	a
25-29	8.3	31.5	47.4	61.9	77.0	16.8	1,382	20.3
30-34	15.1	39.2	57.5	70.9	82.2	8.0	941	19.2
35-39	15.6	46.6	61.6	74.3	86.3	2.5	816	18.4
40-44	16.2	43.1	59.1	71.2	82.1	5.5	688	18.8
45-49	15.0	46.7	62.0	73.6	83.7	3.3	583	18.5

na = Not applicable

<sup>a</sup> Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

Table 4.7 shows the median age at first birth among women age 25-49 by background characteristics. Women in urban areas initiate childbearing almost 2 years later than their counterparts in rural areas. Among the six geopolitical regions, childbearing is started several years later in South East and South West than in the North East and North West. Median age at first birth increases steadily with educational attainment from 18 among women with no education to 25 among women with higher education—a five-year difference. There is also a positive correlation by wealth quintile.

**Table 4.7 Median age at first birth by background characteristics**

Median age at first birth among women age 20-49, by current age and background characteristics, Nigeria 2003

Background characteristic	Current age						Women age 20-49	Women age 25-49
	20-24	25-29	30-34	35-39	40-44	45-49		
<b>Residence</b>								
Urban	a	22.1	20.2	18.9	20.0	18.8	a	20.4
Rural	19.6	19.3	18.8	18.3	18.4	18.1	19.0	18.7
<b>Region</b>								
North Central	a	20.4	19.8	18.9	18.9	18.9	20.0	19.7
North East	18.3	18.1	17.3	18.0	17.2	18.2	18.0	17.8
North West	18.0	18.3	17.5	16.9	18.1	17.8	17.9	17.8
South East	a	a	22.5	22.0	20.8	19.5	a	22.7
South South	a	22.2	20.2	17.9	18.4	17.2	a	19.8
South West	a	23.7	22.4	21.4	21.0	20.5	a	22.1
<b>Education</b>								
No education	17.7	18.0	17.4	17.4	17.7	18.3	17.7	17.8
Primary	19.2	19.5	19.0	18.6	19.1	17.6	19.0	18.9
Secondary	a	22.9	21.7	21.2	21.3	23.4	a	22.3
Higher	a	a	26.1	22.7	23.3	20.4	a	24.9
<b>Wealth quintile</b>								
Lowest	18.4	17.7	18.5	17.6	17.1	18.8	18.0	17.9
Second	19.0	18.5	17.5	18.0	18.5	17.9	18.4	18.2
Middle	19.4	18.8	18.4	18.1	19.0	17.8	18.7	18.5
Fourth	a	21.2	19.7	17.3	19.2	18.6	19.9	19.5
Highest	a	24.4	22.1	21.9	20.5	19.6	a	22.5
Total	a	20.3	19.2	18.4	18.8	18.5	19.6	19.3

<sup>a</sup> Omitted because less than 50 percent of the women had a birth before the beginning of the age group

## 4.7 TEENAGE PREGNANCY AND MOTHERHOOD

Early childbearing, particularly among teenagers (those under 20 years of age) has negative demographic, socioeconomic, and sociocultural consequences. Teenage mothers are more likely to suffer from severe complications during delivery, which result in higher morbidity and mortality for both themselves and their children. In addition, the socioeconomic advancement of teenage mothers in the areas of educational attainment and accessibility to job opportunities may be curtailed.

Table 4.8 shows the percentage of women age 15-19 who are mothers or pregnant with their first child by background characteristics. One in five teenage women in Nigeria is a mother and another 4 percent are pregnant with their first child. Thus, 25 percent of teenage women have begun childbearing. As expected, the percentage who have begun childbearing increases with age from 8 percent of women age 15 to 40 percent of women age 19.

Clearly, early childbearing is more of a rural phenomenon, with 30 percent of rural women age 15-19 having begun childbearing compared with 17 percent of urban women. Adolescent fertility is lowest in the South West and South East, high in the South South and North Central, and highest in the North East and North West. This pattern follows the educational attainment gradient among the regions, with regions having the lowest levels of schooling among adolescents also having the highest levels of childbearing among them.

Table 4.8 shows that whereas more than half of women age 15-19 who have no formal education have begun childbearing (54 percent), 9 percent of those with secondary education have done so. Thus, initiation of childbearing is delayed among those who stay in school.

The wealth index shows that as the socioeconomic status of households increases, the likelihood of teenage childbearing decreases. That is, women living in less advantaged households are more likely to initiate childbearing before age 20 than those living in relatively more advantaged households.

Table 4.8 Teenage pregnancy and motherhood				
Percentage of women age 15-19 who are mothers or pregnant with their first child, by background characteristics, Nigeria 2003				
Background characteristic	Percentage who are:		Percentage who have begun child-bearing	Number of women
	Mothers	Pregnant with first child		
<b>Age</b>				
15	3.8	3.7	7.5	391
16	9.4	4.6	13.9	273
17	26.9	4.2	31.1	324
18	29.2	5.0	34.2	429
19	35.8	3.7	39.5	299
<b>Residence</b>				
Urban	13.6	3.1	16.7	580
Rural	24.8	4.8	29.6	1,136
<b>Region</b>				
North Central	13.8	2.6	16.4	242
North East	38.1	6.3	44.4	294
North West	36.9	8.3	45.2	420
South East	5.3	0.8	6.2	180
South South	11.3	3.0	14.3	362
South West	4.1	0.6	4.7	218
<b>Education</b>				
No education	44.5	9.5	53.9	501
Primary	20.5	3.0	23.5	360
Secondary	7.6	1.8	9.4	831
Higher	*	*	*	23
<b>Wealth quintile</b>				
Lowest	27.4	4.8	32.2	270
Second	30.2	5.4	35.6	299
Middle	22.8	5.6	28.4	375
Fourth	18.0	4.7	22.8	404
Highest	10.1	1.0	11.2	367
Total	21.0	4.3	25.2	1,716

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

## FAMILY PLANNING

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This chapter presents the 2003 NDHS results on contraceptive knowledge, use, sources, and attitudes. Although the focus is on women of reproductive age (15-49 years), some results from the men's survey will also be presented since men play an important role in the realization of reproductive goals.

### 5.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Knowledge of contraceptive methods is a key variable in any discussion of fertility regulation and in the evaluation of family planning programmes. Acquiring knowledge about fertility control is an important step toward gaining access to and then using a suitable contraceptive method in a timely and effective manner. Information on knowledge of contraception was collected by asking respondents a series of questions combining spontaneous recall and prompting. First, respondents were asked to name the ways or methods by which couples could delay or avoid pregnancy. If the respondent failed to mention a particular method spontaneously, the interviewer described the method and asked whether the respondent recognized it. Using this approach, information was collected for 12 modern family planning methods: female and male sterilization, the pill, the IUD, injectables, implants, male and female condoms, the diaphragm, foam or jelly, the lactational amenorrhoea method (LAM), and emergency contraception. Information was also collected on two traditional methods: periodic abstinence (safe period or rhythm method) and withdrawal. Other traditional or "folk" methods mentioned by the respondents, such as herbs or amulets, were also recorded.

Table 5.1.1 shows the level of knowledge of contraceptive methods among all women, currently married women, sexually active and inactive unmarried women, and for women who have never had any sexual experience, by specific method. The 2003 NDHS finds that 79 percent of all women age 15-49 know at least one method of family planning and 77 percent know a modern method. Knowledge of any modern method is higher among sexually active unmarried women (91 percent) than currently married women (76 percent) and unmarried women who never had sex (66 percent). Modern methods are more widely known than traditional methods (77 percent versus 43 percent). The most widely known modern contraceptive methods among all women are the pill (60 percent), the male condom (59 percent), injectables (57 percent), and female sterilization (37 percent). The diaphragm and foam/jelly are the least widely known (each reported by 9 percent of women), along with implants (10 percent) and male sterilization (11 percent).

The mean number of methods known is a rough indicator of the breadth of knowledge of family planning methods. On average all women and currently married women know four methods each, while sexually active unmarried women know six methods.

Knowledge of contraception among men is higher than among women. Knowledge of any method or any modern method for all men is almost universal, with 9 out of every 10 men knowing at least one method (Table 5.1.2). The most well known modern method is the male condom (87 percent), followed by the pill (57 percent). The mean number of methods known by all men is five, while currently married men and sexually active unmarried men know an average of close to six.

Table 5.1.1 Knowledge of contraceptive methods: women

Percentage of all women, currently married women, sexually active unmarried women, sexually inactive unmarried women, and women with no sexual experience who know any contraceptive method, by specific method, Nigeria 2003

Contraceptive method	All women	Currently married women	Unmarried women who ever had sex		Unmarried women who never had sex
			Sexually active <sup>1</sup>	Not sexually active <sup>2</sup>	
<b>Any method</b>	78.5	78.4	91.2	89.4	66.2
<b>Any modern method</b>	76.7	76.2	91.2	88.3	65.6
Female sterilization	37.2	39.6	44.0	42.5	19.2
Male sterilization	10.6	10.3	19.4	13.2	6.9
Pill	60.4	63.0	72.0	63.4	41.1
IUD	27.1	29.2	33.4	32.1	11.0
Injectables	57.1	61.0	69.1	59.7	32.2
Implants	10.4	10.4	18.6	13.7	5.4
Male condom	59.2	54.3	87.2	78.5	59.1
Female condom	12.7	11.5	23.6	20.4	9.0
Diaphragm	8.8	8.6	13.8	11.5	5.7
Foam/jelly	8.7	7.9	16.5	13.2	6.2
Lactational amenorrhoea method (LAM)	19.5	21.1	22.0	23.8	7.9
Emergency contraception	15.7	13.7	37.4	27.5	9.5
<b>Any traditional method</b>	42.8	43.1	67.3	57.2	22.2
Periodic abstinence	28.0	25.7	55.7	44.9	17.4
Withdrawal	25.6	23.6	58.7	40.0	13.8
Other method	16.2	18.9	19.0	13.5	4.2
Mean number of methods known	4.0	4.0	5.9	5.0	2.5
Number of women	7,620	5,336	362	833	1,090

<sup>1</sup> Had sexual intercourse in the month preceding the survey

<sup>2</sup> Did not have sexual intercourse in the month preceding the survey

Table 5.1.2 Knowledge of contraceptive methods: men

Percentage of all men, currently married men, sexually active unmarried men, sexually inactive unmarried men, and men with no sexual experience who know any contraceptive method, by specific method, Nigeria 2003

Contraceptive method	All men	Currently married men	Unmarried men who ever had sex		Unmarried men who never had sex
			Sexually active <sup>1</sup>	Not sexually active <sup>2</sup>	
<b>Any method</b>	90.2	90.0	99.9	95.0	83.8
<b>Any modern method</b>	89.5	88.9	99.6	94.6	83.8
Female sterilization	37.9	44.7	39.1	32.2	25.5
Male sterilization	20.7	24.7	17.9	18.0	14.6
Pill	57.3	63.2	69.8	54.6	40.5
IUD	25.0	32.3	14.0	14.1	19.3
Injectables	52.9	60.1	60.3	46.5	37.3
Implants	16.9	20.9	8.2	10.9	15.0
Male condom	86.8	85.4	99.1	93.6	81.1
Female condom	19.5	22.5	21.5	24.0	9.7
Diaphragm	10.3	11.9	12.4	12.2	5.1
Foam/jelly	14.5	18.3	17.1	12.6	6.0
Lactational amenorrhoea method (LAM)	18.5	25.9	14.8	10.5	7.9
Emergency contraception	27.9	30.1	44.0	29.9	15.0
<b>Any traditional method</b>	59.2	68.9	76.5	60.4	29.6
Periodic abstinence	43.8	53.6	51.6	43.9	18.6
Withdrawal	49.4	57.9	65.9	50.6	23.2
Other method	10.2	13.8	14.0	5.0	3.3
Mean number of methods known	4.9	5.7	5.5	4.6	3.2
Number of men	2,346	1,245	230	312	559

<sup>1</sup> Had sexual intercourse in the month preceding the survey

<sup>2</sup> Did not have sexual intercourse in the month preceding the survey

## Knowledge of Contraceptive Methods by Background Characteristics

Table 5.2 shows that knowledge of at least one contraceptive method and at least one modern method is almost universal in urban areas among currently married women and men. Knowledge is lower in rural areas. Knowledge of any family planning method among married women ranges from a low of 64 percent in the North East to a high of 97 percent in the South West. The same pattern is evident regarding knowledge of any modern method, from a low of 61 percent in the North East to a high of 97 percent in the South West. Men's knowledge varies similarly by region, although differentials are not as great. Women age 25-39 and women with secondary or higher education are more likely to know a method than the oldest and youngest women and those with no education.

**Table 5.2 Knowledge of contraceptive methods by background characteristics**

Percentage of currently married women and men who know at least one contraceptive method and who know at least one modern method, by background characteristics, Nigeria 2003

Background characteristic	Women			Men		
	Knows any method	Knows any modern method <sup>1</sup>	Number	Knows any method	Knows any modern method <sup>1</sup>	Number
<b>Age</b>						
15-19	64.9	61.6	545	*	*	5
20-24	76.8	74.2	911	84.8	82.8	60
25-29	85.9	83.4	1,146	93.2	92.6	142
30-34	80.6	78.1	848	93.7	93.7	243
35-39	83.2	82.3	763	96.5	96.5	204
40-44	75.7	72.8	619	89.3	88.2	197
45-49	71.6	70.6	504	86.1	83.8	155
50-54	na	na	na	81.9	80.7	124
55-59	na	na	na	85.0	81.4	116
<b>Residence</b>						
Urban	91.0	90.7	1,633	95.6	95.2	401
Rural	72.9	69.8	3,703	87.3	85.9	844
<b>Region</b>						
North Central	77.4	75.9	754	93.2	92.7	174
North East	63.5	60.8	1,122	73.2	72.2	283
North West	75.1	71.8	1,880	95.2	93.2	372
South East	87.1	84.5	368	97.2	97.0	99
South South	94.2	93.3	664	91.2	90.2	172
South West	97.0	96.5	548	99.1	98.7	145
<b>Education</b>						
No education	66.5	63.3	2,877	75.9	72.8	399
Primary	87.0	85.2	1,175	92.8	92.5	366
Secondary	96.8	95.9	1,046	99.3	99.3	325
Higher	99.8	99.8	238	100.0	100.0	155
<b>Total</b>	<b>78.4</b>	<b>76.2</b>	<b>5,336</b>	<b>90.0</b>	<b>88.9</b>	<b>1,245</b>

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.  
na = Not applicable  
<sup>1</sup>Female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, diaphragm, foam or jelly, lactational amenorrhoea method (LAM), and emergency contraception

## 5.2 EVER USE OF CONTRACEPTION

The 2003 NDHS collected data on the level of ever use of family planning methods, which is defined as the use of a contraceptive method at any time during a woman’s reproductive years. Respondents who said that they had heard of a contraceptive method were asked if they had ever used that method.

Table 5.3.1 shows the percent distribution of all women, currently married women, and sexually active unmarried women who have ever used any contraceptive method by specific method and age.

Twenty-nine percent of all women, 31 percent of currently married women, and 65 percent of sexually active unmarried women reported having used a method. The majority of women in each category used a modern method. The male condom is the most common modern method ever used among all women (10 percent) and sexually active married women (46 percent). The pill and the male condom are the most common modern methods ever used among currently married women (8 percent each).



Table 5.3.1 Ever use of contraception: women

Percentage of all women, currently married women, and sexually active unmarried women who have ever used any contraceptive method, by specific method and age, Nigeria 2003

Age	Modern method											Traditional method					Number of women	
	Any method	Any modern method	Female sterilization	Pill	IUD	In-jectables	Im-plants	Male condom	Female condom	Dia-phragm	Foam/jelly	LAM	Emergency contraception	Any traditional method	Periodic abstinence	With-drawal		Other method
ALL WOMEN																		
15-19	11.2	9.2	0.0	2.2	0.0	1.3	0.0	6.5	0.1	0.0	0.0	0.6	2.0	5.4	3.3	2.9	1.0	1,716
20-24	30.3	22.8	0.0	6.5	0.3	3.5	0.1	14.8	0.2	0.1	0.4	2.2	4.2	17.5	10.0	9.5	3.5	1,494
25-29	39.2	30.0	0.1	10.1	1.6	5.1	0.0	15.5	0.2	0.1	0.5	6.1	3.9	21.9	12.5	12.0	5.1	1,382
30-34	36.7	28.2	0.0	10.0	1.6	8.9	0.0	9.6	0.1	0.4	0.6	6.5	2.3	17.1	9.6	8.4	4.3	941
35-39	39.8	30.6	0.6	11.7	3.1	10.0	0.1	8.2	0.1	0.2	0.4	7.1	3.6	18.9	12.7	10.0	4.3	816
40-44	31.8	24.6	0.2	10.6	3.8	9.4	0.4	6.0	0.0	0.1	0.3	5.1	0.7	15.9	9.7	7.6	4.8	688
45-49	28.8	22.5	0.7	9.1	5.0	6.9	0.1	4.4	0.0	0.3	0.9	4.4	1.0	12.4	7.7	4.8	2.7	583
Total	29.4	22.7	0.2	7.7	1.6	5.5	0.1	10.1	0.1	0.1	0.4	4.0	2.8	15.1	9.0	7.8	3.5	7,620
CURRENTLY MARRIED WOMEN																		
15-19	9.2	7.9	0.0	2.9	0.0	1.5	0.0	3.1	0.0	0.0	0.0	1.5	1.0	2.8	1.6	1.8	0.3	545
20-24	24.3	16.8	0.0	5.4	0.5	3.6	0.0	7.8	0.1	0.0	0.3	3.0	1.3	13.1	6.8	5.2	3.2	911
25-29	37.4	27.6	0.1	9.2	1.9	5.2	0.0	12.9	0.3	0.2	0.6	6.6	2.3	20.0	11.7	9.7	4.8	1,146
30-34	35.9	26.8	0.0	9.2	1.6	8.9	0.0	7.9	0.1	0.5	0.6	7.2	1.9	17.1	9.6	7.9	4.5	848
35-39	39.8	30.4	0.7	11.9	3.1	10.1	0.1	7.5	0.1	0.2	0.4	7.5	3.8	18.4	12.1	9.6	4.5	763
40-44	31.5	24.3	0.3	10.0	3.8	9.6	0.4	5.4	0.0	0.1	0.3	5.3	0.5	14.9	8.7	8.0	4.8	619
45-49	27.1	21.4	0.6	9.2	4.0	6.9	0.1	4.6	0.0	0.3	1.1	3.9	0.9	11.3	6.6	4.7	2.3	504
Total	30.7	23.1	0.2	8.4	2.0	6.5	0.1	7.8	0.1	0.2	0.5	5.3	1.8	15.0	8.7	7.2	3.7	5,336
SEXUALLY ACTIVE UNMARRIED WOMEN <sup>1</sup>																		
Total	64.9	57.0	0.3	18.4	1.5	10.2	0.3	45.7	0.0	0.0	0.4	1.6	13.8	41.8	24.9	30.6	8.6	362

LAM = Lactational amenorrhoea method

<sup>1</sup> Women who had sexual intercourse in the month preceding the survey

Among currently married women, ever use of a method is highest among women age 35-39 (40 percent). Married women younger than 25 are the least likely to have ever used a method of contraception. Experience using LAM is reported by 5 percent of currently married women. LAM is one of the four most common modern methods of contraception used by currently married women in the prime reproductive years of 25-39. Periodic abstinence is the most commonly used traditional method across all age groups of married women.

Men were also asked about ever use of methods that require men's active participation to use, specifically male sterilization, male condom, periodic abstinence, and withdrawal. Approximately one-third of married men and three-fourths of sexually active unmarried men have ever used a method (Table 5.3.2). The male condom is the most common method, with 23 percent of currently married men and 69 percent of sexually active unmarried men reporting ever use. Use of periodic abstinence and withdrawal is also common. This is of particular concern regarding sexually active unmarried men because periodic abstinence and withdrawal do not prevent transmission of sexually transmitted infections.

**Table 5.3.2 Ever use of contraception: men**

Percentage of all men, currently married men, and sexually active unmarried men who have ever used any contraceptive method, by specific method and age, Nigeria 2003

Age	Modern method				Traditional method				Number of men
	Any method	Any modern method	Male sterilization	Male condom	Any traditional method	Periodic abstinence	Withdrawal	Other method	
ALL MEN									
15-19	12.1	9.8	0.0	9.8	4.7	1.8	3.8	0.0	453
20-24	34.5	30.2	0.4	30.0	13.5	7.5	8.9	0.6	426
25-29	48.2	42.0	0.2	42.0	33.5	23.1	24.9	1.6	328
30-34	50.7	35.2	0.3	34.9	38.6	25.0	25.9	2.7	299
35-39	36.7	24.7	0.0	24.7	24.6	17.1	18.1	2.1	220
40-44	34.8	27.0	0.0	27.0	28.3	19.0	17.8	0.9	208
45-49	37.5	21.0	1.2	21.0	32.9	21.1	21.3	1.7	159
50-54	29.2	13.2	0.0	13.2	24.6	18.9	12.5	4.3	133
55-59	25.4	10.9	0.0	10.9	20.3	14.5	12.8	0.7	120
Total	33.8	25.2	0.2	25.1	22.4	14.7	15.2	1.3	2,346
CURRENTLY MARRIED MEN									
15-19	*	*	*	*	*	*	*	*	5
20-24	21.2	14.9	0.0	14.9	11.2	5.0	7.8	2.5	60
25-29	33.8	27.4	0.0	27.4	27.2	20.0	18.0	0.7	142
30-34	48.2	31.6	0.4	31.2	36.8	25.0	22.6	3.0	243
35-39	36.1	24.0	0.0	24.0	23.4	16.7	16.7	2.2	204
40-44	34.5	27.6	0.0	27.6	27.6	18.6	17.1	0.9	197
45-49	37.1	20.8	1.3	20.8	32.3	20.2	21.1	1.7	155
50-54	29.4	12.6	0.0	12.6	26.1	20.0	13.3	4.6	124
55-59	24.9	11.3	0.0	11.3	19.6	13.5	13.3	0.8	116
Total	35.6	23.2	0.2	23.1	27.5	18.9	17.5	2.0	1,245
SEXUALLY ACTIVE UNMARRIED MEN <sup>1</sup>									
Total	76.1	69.4	0.3	69.4	40.8	22.6	34.3	2.7	230

Note: Male respondents were not asked about methods that are female controlled, such as the pill or the IUD. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

<sup>1</sup> Men who had sexual intercourse in the month preceding the survey

### 5.3 CURRENT USE OF CONTRACEPTION

The data on the current use of family planning are among the most important information collected in the 2003 NDHS, because they provide insight into one of the principal determinants of fertility among women, and they serve as a key measure for assessing the success of the national family planning programme. This section focuses on contraceptive use among currently married women since they are the most likely to be regularly exposed to the risk of pregnancy.

Table 5.4 shows the percent distribution of women by current use of specific family planning methods according to age. The 2003 NDHS results indicate that while 13 percent of currently married women are using a method of family planning, only 8 percent are using a modern method. These data indicate that there has been no significant change in levels of contraceptive use since 1999 (15 percent versus 16 percent).

Table 5.4 Current use of contraception

Percent distribution of all women, currently married women, and sexually active unmarried women by contraceptive method currently used, according to age, Nigeria 2003

Age	Modern method								Traditional method						Number of women	
	Any method	Any modern method	Female sterilization	Pill	IUD	In-jectables	Male condom	LAM	Emergency contraception	Any traditional method	Periodic abstinence	Withdrawal	Other method	Not currently using		
ALL WOMEN																
15-19	6.6	4.7	0.0	1.1	0.0	0.4	2.6	0.4	0.1	1.9	0.9	0.7	0.3	93.4	100.0	1,716
20-24	15.7	10.9	0.0	2.7	0.2	1.1	6.0	0.8	0.1	4.8	2.4	1.2	1.3	84.3	100.0	1,494
25-29	18.1	11.7	0.1	3.0	0.5	1.4	5.0	1.6	0.1	6.4	2.9	1.8	1.7	81.9	100.0	1,382
30-34	14.2	10.3	0.0	1.9	0.8	2.5	2.6	2.0	0.2	3.9	2.0	1.1	0.8	85.8	100.0	941
35-39	16.4	11.2	0.6	2.3	1.6	3.2	2.1	1.0	0.2	5.2	2.5	1.9	0.8	83.6	100.0	816
40-44	14.6	8.6	0.2	1.6	1.3	3.0	1.7	0.7	0.1	6.1	4.0	1.2	0.9	85.4	100.0	688
45-49	7.9	4.9	0.7	0.9	1.0	1.5	0.8	0.0	0.0	3.0	0.9	1.4	0.7	92.1	100.0	583
Total	13.3	8.9	0.2	2.0	0.6	1.6	3.4	1.0	0.1	4.4	2.1	1.3	0.9	86.7	100.0	7,620
CURRENTLY MARRIED WOMEN																
15-19	4.3	3.8	0.0	1.7	0.0	0.4	0.3	1.4	0.0	0.5	0.0	0.3	0.2	95.7	100.0	545
20-24	9.4	6.6	0.0	1.4	0.2	1.1	2.2	1.4	0.1	2.9	1.0	0.5	1.3	90.6	100.0	911
25-29	16.1	10.0	0.1	2.3	0.6	1.5	3.4	1.9	0.0	6.1	2.9	1.8	1.5	83.9	100.0	1,146
30-34	13.6	9.5	0.0	1.8	0.7	2.4	1.9	2.2	0.3	4.1	2.1	1.2	0.9	86.4	100.0	848
35-39	16.3	10.9	0.7	2.4	1.6	3.3	1.5	1.0	0.2	5.5	2.7	1.9	0.9	83.7	100.0	763
40-44	15.1	8.8	0.3	1.6	1.2	3.4	1.8	0.7	0.0	6.3	4.1	1.3	0.9	84.9	100.0	619
45-49	8.9	5.4	0.6	1.0	1.1	1.8	0.8	0.0	0.0	3.5	1.1	1.6	0.8	91.1	100.0	504
Total	12.6	8.2	0.2	1.8	0.7	2.0	1.9	1.4	0.1	4.3	2.1	1.3	1.0	87.4	100.0	5,336
SEXUALLY ACTIVE UNMARRIED WOMEN <sup>1</sup>																
Total	49.9	38.6	0.3	9.5	1.0	3.4	23.8	0.0	0.7	11.3	4.0	4.2	3.1	50.1	100.0	362

Note: If more than one method is used, only the most effective method is considered in this tabulation.

LAM = Lactational amenorrhoea method

<sup>1</sup> Women who had sexual intercourse in the month preceding the survey

The most commonly used methods among currently married women are injectables, male condoms, pill, and periodic abstinence, all in the range of 2 percent. The use of modern contraceptive methods varies by age. Current use of any modern method is 4 percent among currently married women age 15-19, rising to 11 percent among women age 35-39, and then dropping to 5 percent among the oldest women. Most of the women who are sterilized are age 35 or older. LAM is the most common method among the age group 25-34. The male condom is favoured among sexually active unmarried women (24 percent).

### Current Use of Contraception by Background Characteristics

Table 5.5 and Figure 5.1 show that there is substantial variation in the current use of contraceptive methods according to background characteristics. Contraceptive use varies with residence, region, level of education, number of living children, and economic status of the household. Married women in urban areas are twice as likely to use a family planning method as their rural counterparts (20 percent versus 9 percent). The same pattern is evident for current use of any modern method (14 percent urban and 6 percent rural). Contraceptive use varies significantly by region. For example, one-third of married women in the South West use contraception—the majority using a modern method—compared with just 4 percent of women in the North East.

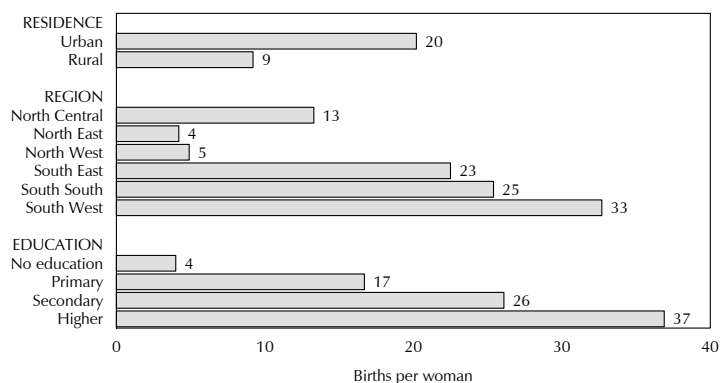
Table 5.5 Current use of contraception by background characteristics

Percent distribution of currently married women by contraceptive method currently used, according to background characteristics, Nigeria 2003

Background characteristic	Modern method								Traditional method					Total	Number of women	
	Any method	Any modern method	Female sterilization	Pill	IUD	In-jectables	Male condom	LAM	Emergency contraception	Any traditional method	Periodic abstinence	Withdrawal	Other method			Not currently using
<b>Residence</b>																
Urban	20.2	13.9	0.3	3.3	1.9	2.3	4.0	1.7	0.3	6.3	2.9	2.8	0.6	79.8	100.0	1,633
Rural	9.2	5.7	0.1	1.1	0.2	1.8	1.0	1.2	0.0	3.5	1.7	0.6	1.2	90.8	100.0	3,703
<b>Region</b>																
North Central	13.3	10.3	0.8	2.2	0.1	4.1	1.5	1.2	0.0	3.0	1.9	0.6	0.4	86.7	100.0	754
North East	4.2	3.0	0.0	0.7	0.2	0.9	0.2	0.9	0.0	1.2	0.6	0.2	0.4	95.8	100.0	1,122
North West	4.9	3.3	0.1	0.6	0.1	0.8	0.1	1.7	0.0	1.6	0.2	0.0	1.4	95.1	100.0	1,880
South East	22.5	13.0	0.1	1.5	0.7	0.6	8.9	0.8	0.0	9.5	3.3	5.0	1.2	77.5	100.0	368
South South	25.4	13.8	0.4	4.0	0.7	4.7	2.4	1.5	0.0	11.6	7.3	2.9	1.5	74.6	100.0	664
South West	32.7	23.1	0.0	5.2	4.9	2.9	7.4	1.7	1.0	9.7	4.4	4.1	1.1	67.3	100.0	548
<b>Education</b>																
No education	4.0	2.3	0.1	0.3	0.2	0.7	0.2	0.8	0.0	1.7	0.4	0.2	1.0	96.0	100.0	2,877
Primary	16.7	11.2	0.4	3.0	1.1	2.7	1.9	1.6	0.2	5.5	2.8	1.6	1.1	83.3	100.0	1,175
Secondary	26.1	18.3	0.3	4.0	1.3	4.0	5.8	2.5	0.3	7.8	4.4	2.5	0.9	73.9	100.0	1,046
Higher	36.9	21.7	0.5	4.2	2.8	4.8	6.7	2.0	0.0	15.2	7.8	7.0	0.5	63.1	100.0	238
<b>Number of living children</b>																
0	1.7	1.4	0.0	0.6	0.1	0.0	0.6	0.0	0.0	0.2	0.1	0.0	0.2	98.3	100.0	656
1-2	11.5	7.4	0.0	1.6	0.4	0.9	2.9	1.5	0.1	4.1	2.3	0.7	1.1	88.5	100.0	1,751
3-4	14.2	9.6	0.2	2.8	1.0	1.7	1.6	1.9	0.3	4.6	1.8	1.8	1.0	85.8	100.0	1,449
5+	17.1	11.0	0.5	1.6	1.2	4.4	1.7	1.4	0.0	6.2	2.9	1.9	1.3	82.9	100.0	1,480
<b>Wealth quintile</b>																
Lowest	6.9	3.6	0.1	0.9	0.1	1.5	0.7	0.4	0.0	3.3	1.3	0.1	1.9	93.1	100.0	1,150
Second	5.6	2.9	0.1	0.4	0.3	1.2	0.4	0.4	0.0	2.8	1.4	0.6	0.8	94.4	100.0	1,142
Middle	9.1	6.7	0.2	1.7	0.3	2.1	0.3	1.9	0.0	2.4	1.4	0.3	0.7	90.9	100.0	1,086
Fourth	13.5	9.2	0.3	2.8	1.0	1.0	1.7	2.3	0.1	4.3	2.7	1.3	0.3	86.5	100.0	957
Highest	30.0	20.5	0.5	3.7	2.3	4.1	7.3	2.1	0.4	9.4	4.0	4.2	1.2	70.0	100.0	1,002
Total	12.6	8.2	0.2	1.8	0.7	2.0	1.9	1.4	0.1	4.3	2.1	1.3	1.0	87.4	100.0	5,336

Note: If more than one method is used, only the most effective method is considered in this tabulation.  
LAM = Lactational amenorrhoea method

**Figure 5.1 Current Use of Any Contraceptive Method among Currently Married Women Age 15-49, by Background Characteristics**



NDHS 2003

Current use of family planning is positively correlated with educational attainment. Use of any modern method increases from 2 percent among currently married women with no education to 22 percent among women with higher education. Interestingly, use of any traditional method also increases with the level of education, from slightly less than 2 percent of currently married women with no education to 15 percent of women with higher education.

As expected, there is a direct relationship between the number of living children and use of family planning. The 2003 NDHS indicates that use of any contraceptive method increases with the number of living children. Only 2 percent of currently married women with no children use contraception, compared to 17 percent with five or more children.

The wealth index measures the economic status of the household (Chapter 2). Data from the 2003 NDHS show that currently married women in households in the highest (most economically advantaged) quintile of the wealth index are more than four times as likely to use a method of contraception as those in the lowest (least advantaged) quintile (30 percent versus 7 percent).

A woman's desire and ability to control her fertility and her choice of contraceptive method are in part affected by her empowerment status and self-image. A woman who feels that she is unable to control her life may be less likely to feel she can make and carry out decisions about her fertility. Table 5.6 shows the distribution of currently married women by contraceptive use, according to selected indicators of women's status (described in Chapter 2).

Table 5.6 Current use of contraception by women's status

Percent distribution of currently married women by contraceptive method currently used, according to indicators of women's status, Nigeria 2003

Women's status indicator	Modern method								Traditional method					Total	Number of women	
	Any method	Any modern method	Female sterilization	Pill	IUD	Injunctables	Male condom	LAM	Emergency contraception	Any traditional method	Periodic abstinence	Withdrawal	Other method			Not currently using
<b>Number of decisions in which woman has final say<sup>1</sup></b>																
0	6.1	4.3	0.1	0.8	0.6	1.2	0.9	0.6	0.0	1.8	0.9	0.3	0.7	93.9	100.0	2,136
1-2	12.4	8.5	0.3	1.8	0.3	2.0	1.4	2.5	0.2	3.9	1.9	0.9	1.1	87.6	100.0	1,799
3-4	23.4	14.1	0.7	2.4	1.4	3.0	4.8	1.8	0.0	9.3	3.4	4.6	1.3	76.6	100.0	709
5	22.0	13.8	0.0	4.2	1.8	3.3	3.6	0.5	0.3	8.2	4.9	1.8	1.5	78.0	100.0	692
<b>Number of reasons to refuse sex with husband</b>																
0	5.2	3.3	0.1	0.8	0.3	0.8	0.3	0.1	0.0	1.9	0.4	0.2	1.3	94.8	100.0	506
1-2	11.7	7.7	0.0	1.4	0.8	1.4	1.3	2.6	0.1	4.0	1.2	1.7	1.1	88.3	100.0	1,409
3-4	14.1	9.2	0.3	2.1	0.8	2.4	2.5	1.1	0.1	4.9	2.7	1.2	0.9	85.9	100.0	3,422
<b>Number of reasons wife beating is justified</b>																
0	19.4	12.2	0.2	2.3	1.0	2.9	3.9	1.4	0.2	7.2	3.2	2.4	1.6	80.6	100.0	1,632
1-2	15.1	10.2	0.1	1.6	1.0	2.6	1.8	3.1	0.1	4.8	2.8	1.2	0.8	84.9	100.0	1,135
3-4	10.2	6.8	0.2	2.0	0.9	1.8	1.1	0.8	0.0	3.4	1.3	0.7	1.3	89.8	100.0	878
5-6	5.6	3.8	0.3	1.3	0.3	0.8	0.6	0.5	0.1	1.8	0.9	0.4	0.5	94.4	100.0	1,691
Total	12.6	8.2	0.2	1.8	0.7	2.0	1.9	1.4	0.1	4.3	2.1	1.3	1.0	87.4	100.0	5,336

Note: If more than one method is used, only the most effective method is considered in this tabulation.

LAM = Lactational amenorrhoea method

<sup>1</sup> Either by herself or jointly with others

The data indicate that, in Nigeria, there is a correlation between women's status and their ability to use a contraceptive method, including their ability to negotiate the use of male condoms or to discuss periodic abstinence with their partners. The strong positive relationship between empowerment and contraceptive use is observed for all three indicators of women's status.

#### 5.4 NUMBER OF CHILDREN AT FIRST USE OF CONTRACEPTION

Family planning may be used by couples to either space births or limit family size. Contraception is used to space births when there is an intention to delay a possible pregnancy. When couples have already had the number of children they want, family planning is used as a means to limit family size (i.e., to stop having children).

The 2003 NDHS asked women how many children they had at the time they first used a method of family planning. Table 5.7 shows the percent distribution of women who have ever used a contraceptive method by the number of living children at the time of first use of contraception, according to current age. Overall, 40 percent of women began using contraception before they gave birth and an additional 25 percent began after having one child. Early use of family planning increases among younger women. For example, the data show that 80 percent of the youngest women started contraceptive use before they began having children, compared with 10 percent of the oldest women. The pattern suggests that younger women are increasingly adopting family planning to delay or space births, while older women are adopting family planning to limit births.

**Table 5.7** Number of children at first use of contraception

Percent distribution of women who have ever used contraception by number of living children at the time of first use of contraception, according to current age, Nigeria 2003

Current age	Number of living children at time of first use of contraception					Missing	Total	Number of women
	0	1	2	3	4+			
15-19	79.8	14.0	0.4	0.7	0.0	5.1	100.0	192
20-24	67.1	25.1	5.9	1.3	0.0	0.6	100.0	452
25-29	42.2	32.1	13.5	6.5	5.0	0.6	100.0	542
30-34	25.4	26.6	17.4	12.8	17.7	0.2	100.0	346
35-39	19.9	19.4	15.4	8.7	35.8	0.8	100.0	324
40-44	16.3	21.0	13.0	9.2	39.3	1.2	100.0	219
45-49	10.1	23.4	9.1	9.2	48.1	0.0	100.0	168
Total	39.7	24.7	11.4	6.7	16.6	1.0	100.0	2,243

#### 5.5 KNOWLEDGE OF FERTILE PERIOD

The successful use of natural family planning methods depends largely on an understanding of when during the menstrual cycle a woman is most likely to conceive. An elementary knowledge of reproductive physiology thus provides background for the successful practice of coitus-associated methods such as withdrawal. Such knowledge is especially critical for the practice of periodic abstinence.

The 2003 NDHS asked respondents about their knowledge of a woman's fertile period. Table 5.8 provides the results for all women users and nonusers of periodic abstinence. Only one-fifth (20 percent) of all respondents reported the correct timing of the fertile period, that is halfway through her menstrual cycle. Even among users of periodic abstinence, less than one in three knows the correct timing of the fertile period. It is clear that knowledge of the fertile period is minimal among women, which has major implications regarding use of periodic abstinence as an effective means of pregnancy prevention.

Table 5.8 Knowledge of fertile period

Percent distribution of women by knowledge of the fertile period during the ovulatory cycle, according to current use/nonuse of periodic abstinence, Nigeria 2003

Perceived fertile period	Users of periodic abstinence	Nonusers of periodic abstinence	All women
Just before her period begins	3.1	3.2	3.2
During her period	1.4	1.2	1.2
Right after her period has ended	50.2	33.0	33.4
Halfway between two periods	28.8	19.8	20.0
Other	0.0	0.2	0.1
No specific time	5.4	10.8	10.7
Don't know	9.6	31.3	30.9
Missing	1.5	0.4	0.4
Total	100.0	100.0	100.0
Number of women	163	7,457	7,620

## 5.6 SOURCE OF CONTRACEPTION

In the 2003 NDHS, information was collected from current users of family planning methods on where they most recently obtained their method of contraception. Such information is important to family planning programme managers for strategic planning purposes. Table 5.9 shows the percent distribution of current users by source.

Table 5.9 Source of contraception

Percent distribution of current users of modern contraceptive methods by most recent source of method, according to specific method, Nigeria 2003

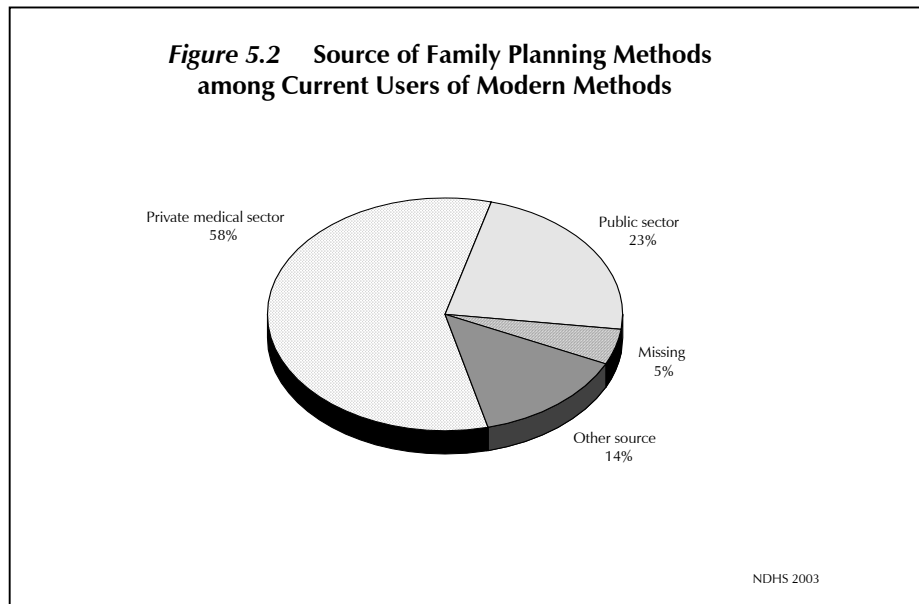
Source	Pill	IUD	Injectables	Male condoms	Total <sup>1</sup>
<b>Public sector</b>	18.6	(65.5)	48.4	4.1	22.8
Government hospital	10.9	(47.0)	22.9	3.1	13.1
Government health center	4.9	(12.9)	19.0	0.4	6.5
Family planning clinic	1.3	(5.6)	6.0	0.5	2.4
Community health worker	1.5	(0.0)	0.5	0.0	0.8
Other public	0.0	(0.0)	0.0	0.1	0.1
<b>Private medical sector</b>	74.0	(32.5)	48.0	59.2	57.7
Private hospital or clinic	2.3	(30.3)	17.9	0.6	7.5
Pharmacy	71.6	(0.0)	25.1	58.3	48.8
Private doctor	0.0	(0.0)	4.3	0.3	1.0
Private community health worker	0.0	(0.0)	0.6	0.0	0.1
Other private medical	0.0	(2.1)	0.0	0.0	0.2
<b>Other source</b>	5.5	(0.0)	1.0	29.1	14.3
Shop	1.9	(0.0)	0.0	4.7	2.5
Friends/relatives	3.6	(0.0)	1.0	24.5	11.8
Other	0.2	(0.0)	0.6	0.3	0.3
Missing	1.7	(2.1)	1.9	7.2	4.9
Total	100.0	(100.0)	100.0	100.0	100.0
Number of women	152	45	121	260	597

Note: Table excludes lactational amenorrhoea method (LAM) and emergency contraception. Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> Total includes 12 sterilized women, 1 implant user, 2 diaphragm users, 1 foam/jelly user, and 4 users of female condoms.

According to the findings of the 2003 NDHS, the private sector was the most frequently reported source of contraceptive supply (Figure 5.2), providing contraception to two and a half times as many women as the public sector (58 percent versus 23 percent). A private hospital or clinic was the most frequently reported private sector source (49 percent), while a government hospital was the most frequently reported in the public sector (13 percent). This pattern is different from that observed in the 1999 NDHS, which indicated that women accessed family planning methods from both sectors equally.

Access to specific methods varies greatly by source. The public sector is the most common source of IUDs (66 percent), and the private sector is the most common source for the pill (74 percent) and male condom (59 percent). Provision of injectables for current users is equally shared by the public sector and the private sector (48 percent each).



## 5.7 INFORMED CHOICE

Informed choice is an important aspect of the delivery of family planning services. It is required that all family planning providers inform method users of the potential side effects and what they should do if they encounter such side effects. This information is to assist the user in coping with side effects and thus decrease discontinuations of temporary methods. Contraceptive users should also be informed of the choices they have with respect to other methods.

Table 5.10 shows that less than half of users were given information about each of the three issues considered to be essential parts of informed choice. Forty-two percent were informed about potential side effects of their method, 39 percent were told what to do if they experience any of the side effects, and 42 percent were given information about other family planning method options. There are significant differentials by background characteristics. Family planning providers in the public sector are twice as likely to inform contraceptive users about method side effects or problems, what to do if they experience side effects, and other contraceptive options as their counterparts in the private sector. Women in urban areas have significantly more access to information than their rural counterparts.



Table 5.10 Informed choice

Among current users of modern contraceptive methods who adopted the current method in the five years preceding the survey, percentage who were informed about the side effects of the method used, percentage who were informed what to do if side effects were experienced, and percentage who were informed of other methods that could be used for contraception, by method, initial source of method, and background characteristics, Nigeria 2003

Method, source, and background characteristic	Informed about side effects or problems of method used <sup>1</sup>	Informed what to do if experienced side effects <sup>1</sup>	Informed of other methods that could be used <sup>2</sup>
<b>Method</b>			
Pill	36.5	32.0	41.7
IUD	(53.6)	(50.4)	(58.9)
Injectables	45.5	44.7	56.8
<b>Initial source of method<sup>3</sup></b>			
Public sector	64.5	60.3	69.5
Private medical sector	36.1	34.8	46.6
<b>Residence</b>			
Urban	49.6	47.2	47.1
Rural	35.7	31.6	37.0
<b>Region</b>			
North Central	38.1	33.8	43.0
North East	(41.8)	(37.0)	(35.4)
North West	(61.7)	(59.1)	28.0
South East	(25.9)	(22.0)	(21.2)
South South	35.4	31.2	44.2
South West	(51.5)	(50.5)	53.5
<b>Education</b>			
No education	(36.5)	(30.3)	25.2
Primary	45.7	40.6	45.0
Secondary	41.5	39.1	43.6
Higher	45.4	46.2	51.7
<b>Wealth quintile</b>			
Lowest	(36.1)	(37.9)	(45.7)
Second	(33.8)	(26.7)	(36.6)
Middle	37.2	32.2	39.0
Fourth	34.0	28.6	33.0
Highest	53.3	51.7	48.9
Total	42.4	39.1	41.7

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

<sup>1</sup> Among users of female sterilization, pill, IUD, injectables, and implants

<sup>2</sup> Among users of female sterilization, pill, IUD, injectables, implants, female condom, diaphragm, foam or jelly, and lactational amenorrhoea method (LAM)

<sup>3</sup> Source at start of current episode of use

## 5.8 FUTURE USE OF CONTRACEPTION

Intention to use contraception is an important indicator of the changing demand for family planning, that is, the extent to which nonusers of contraception plan to use family planning in the future. Currently married women who were not using contraceptives at the time of the survey were asked about their intention to use family planning in the future. The results of this inquiry are shown in Table 5.11.

Table 5.11 Future use of contraception

Percent distribution of currently married women who are not using a contraceptive method by intention to use in the future, according to number of living children, Nigeria 2003

Intention	Number of living children <sup>1</sup>					Total
	0	1	2	3	4+	
Intends to use	21.3	26.2	28.4	27.2	29.1	27.4
Unsure	9.9	11.1	9.1	7.4	6.9	8.4
Does not intend to use	68.7	62.4	62.1	65.3	63.3	63.8
Missing	0.1	0.3	0.4	0.1	0.7	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	480	815	757	680	1,932	4,664

<sup>1</sup> Includes current pregnancy

A little more than one-quarter (27 percent) of currently married women intend to use family planning in the future, compared with two-thirds (64 percent) who do not intend to use a method. Intention to use increases with the number of living children; for example, 29 percent of women with four or more children intend to use a contraceptive method in the future compared with 21 percent of women with no children.

### Reasons for Not Intending to Use Contraception

The reasons given by respondents who do not intend to use a contraceptive method in the future are important to the family planning programme since they identify areas for potential interventions.

Table 5.12 presents the distribution of currently married nonusers who do not intend to use family planning in the future by the main reason for not intending to use. Half of nonusers gave a fertility-related reason for not planning to use contraception. In particular, 36 percent cited desire for as many children as possible as the main reason. This reason is more prominent among younger women (45 percent) than older women (28 percent). One-quarter of all nonusers cited opposition to use as the reason for not intending to use. Opposition to use includes respondent's own opposition (14 percent), the opposition of her husband or partner (4 percent), and religious prohibition (9 percent). Method-related reasons, which include health concerns and fear of side effects, are cited by only 10 percent of nonusers. Nine percent cited lack of knowledge as their reason for not intending to use in the future.

Table 5.12 Reasons for not intending to use contraception

Percent distribution of currently married women who are not using a contraceptive method and who do not intend to use in the future by main reason for not intending to use, according to age, Nigeria 2003

Reason	Age		Total
	15-29	30-49	
<b>Fertility-related reasons</b>	47.1	54.8	51.3
Infrequent sex/no sex	1.0	6.0	3.7
Menopausal/had hysterectomy	0.2	6.3	3.5
Subfecund/infecund	0.5	14.2	8.0
Wants as many children as possible	45.4	28.3	36.1
<b>Opposition to use</b>	29.0	23.8	26.2
Respondent opposed	16.0	11.8	13.7
Husband/partner opposed	4.0	3.8	3.9
Others opposed	0.0	0.1	0.1
Religious prohibition	8.9	8.0	8.5
<b>Lack of knowledge</b>	9.5	7.7	8.5
Knows no method	8.0	6.6	7.3
Knows no source	1.5	1.0	1.2
<b>Method-related reasons</b>	9.1	10.2	9.7
Health concerns	2.9	3.2	3.1
Fear of side effects	5.4	5.6	5.5
Lack of access/too far	0.0	0.2	0.2
Costs too much	0.2	0.1	0.1
Inconvenient to use	0.3	0.2	0.2
Interferes with body's normal processes	0.3	0.8	0.6
Other	1.0	1.0	1.0
Don't know	4.1	2.5	3.2
Missing	0.2	0.0	0.1
Total	100.0	100.0	100.0
Number of women	1,357	1,619	2,976

## Preferred Method of Contraception for Future Use

Future demand for specific methods of family planning was assessed by asking current nonusers which method they intend to use in the future. Table 5.13 shows that among currently married nonusers who intend to use in the future, the preferred method is injectables (28 percent), followed by the pill (23 percent), and periodic abstinence (6 percent). One-fifth of women are unsure which method they would prefer to use. There is little difference by age.

Table 5.13 Preferred method of contraception for future use

Percent distribution of currently married women who are not using a contraceptive method but who intend to use in the future by preferred method, according to age, Nigeria 2003

Method	Age		Total
	15-29	30-49	
Female sterilization	0.3	2.9	1.4
Pill	22.5	22.8	22.6
IUD	2.1	3.1	2.6
Injectables	27.6	27.9	27.7
Implants	0.6	2.0	1.2
Male condom	6.1	3.5	5.0
Female condom	0.0	0.1	0.0
Diaphragm	0.0	0.8	0.3
Foam/jelly	0.0	0.7	0.3
Lactational amenorrhoea method (LAM)	1.9	2.8	2.3
Periodic abstinence	6.4	6.3	6.3
Withdrawal	1.6	1.5	1.5
Other	10.3	7.1	8.9
Unsure	20.6	18.5	19.7
Total	100.0	100.0	100.0
Number of women	718	559	1,278

## 5.9 Exposure to Family Planning Messages

Electronic media (radio and television), print media (newspaper, magazines, posters, and leaflets), and traditional folk media (town criers and mobile public announcements) are the major potential sources of information about family planning in Nigeria. Information about public exposure to messages on a particular type of media 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 electronic, print, and traditional folk media on the dissemination of family planning information, respondents in the 2003 NDHS were asked if they had heard or seen family planning messages on the radio or television, read a family planning message in a newspaper, magazine, poster, or leaflet, or heard a family planning message through traditional folk media during the months preceding the survey. The results are shown in Tables 5.14.1 and 5.14.2.

Table 5.14.1 Exposure to family planning messages: women

Percentage of women who heard or saw a family planning message on the radio, television, newspaper/magazine, posters/leaflets/brochures, town crier/mobile public announcement, in the months preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Exposed to family planning messages on:						Number of women
	Radio	Television	Newspaper/magazine	Posters/leaflets/brochures	Town crier/mobile public announcement	None of the specified media sources	
<b>Age</b>							
15-19	30.4	16.2	9.2	11.4	7.1	65.5	1,716
20-24	41.7	24.0	15.1	17.3	8.0	53.7	1,494
25-29	47.4	25.4	14.4	17.0	9.7	49.4	1,382
30-34	44.0	22.8	13.0	15.8	8.4	53.6	941
35-39	43.7	24.5	13.7	17.5	9.1	51.9	816
40-44	38.6	18.0	9.0	10.5	7.1	59.9	688
45-49	39.8	18.3	8.6	11.6	8.7	58.4	583
<b>Residence</b>							
Urban	54.7	39.6	20.3	23.3	10.9	40.2	2,629
Rural	32.6	11.8	7.9	10.2	6.9	64.8	4,991
<b>Region</b>							
North Central	26.3	14.4	9.7	14.4	7.7	69.7	1,121
North East	20.8	7.6	5.7	9.7	3.9	76.6	1,368
North West	39.3	10.8	4.6	5.4	2.7	60.4	2,095
South East	53.6	27.5	18.4	14.9	10.2	41.4	737
South South	49.1	36.2	23.1	28.1	20.9	44.7	1,342
South West	63.8	47.1	20.9	23.8	8.0	30.1	958
<b>Education</b>							
No education	27.1	6.0	2.3	4.3	2.7	72.1	3,171
Primary	38.3	18.2	8.2	12.2	9.6	58.6	1,628
Secondary	53.0	36.1	21.6	24.1	11.9	40.9	2,370
Higher	72.6	64.6	46.5	48.0	23.0	17.4	451
<b>Wealth quintile</b>							
Lowest	21.5	4.0	3.2	4.2	3.7	77.6	1,414
Second	26.5	6.4	3.9	6.1	4.2	71.6	1,439
Middle	36.4	11.7	8.1	11.0	7.8	61.2	1,513
Fourth	48.1	26.1	12.6	16.7	9.0	48.0	1,526
Highest	63.4	52.7	29.6	32.0	15.2	29.1	1,728
Total	40.2	21.4	12.2	14.7	8.3	56.3	7,620

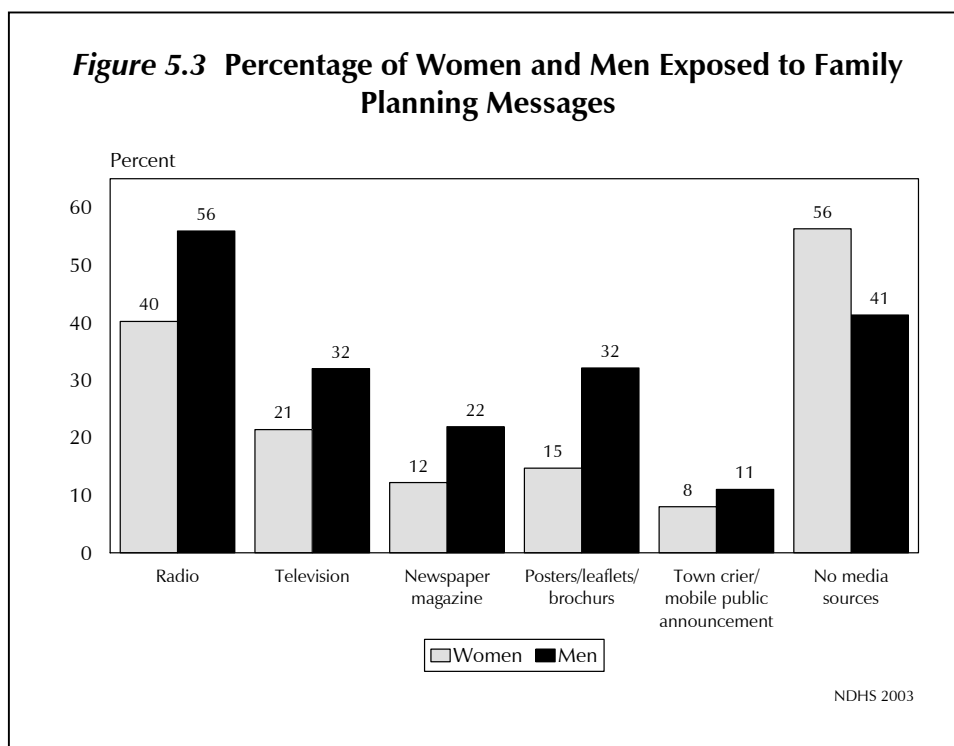
Radio is the most common source of family planning messages for both women and men (40 and 56 percent, respectively). This is true regardless of age, residence, region, education, or economic status. Television is the next most common source among all respondents, with 21 percent of women and 32 percent of men having seen a message. Men are more likely than women to have read a family planning message in a newspaper or magazine (22 percent versus 12 percent) or on a poster or in a brochure (32 percent versus 15 percent). In part, this reflects higher levels of literacy among men. Additionally, approximately one in ten respondents has heard a message from a town crier or a mobile public announcement (Figure 5.3).

Table 5.14.2 Exposure to family planning messages: men

Percentage of men who heard or saw a family planning message on the radio, television, newspaper/magazine, posters/leaflets/brochures, town crier/mobile public announcement, in the months preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Exposed to family planning messages on:						Number of men
	Radio	Television	Newspaper/magazine	Posters/leaflets/brochures	Town crier/mobile public announcement	None of the specified media sources	
<b>Age</b>							
15-19	45.2	26.9	12.6	23.8	7.9	51.5	453
20-24	55.8	36.8	24.0	34.9	13.4	40.6	426
25-29	63.3	38.6	28.4	40.6	14.8	32.6	328
30-34	64.2	37.1	28.2	35.7	12.1	33.8	299
35-39	53.6	28.7	23.1	29.1	10.4	43.2	220
40-44	55.5	28.5	21.8	30.1	14.3	43.7	208
45-49	61.0	33.0	22.7	38.1	11.5	38.8	159
50-54	53.8	27.9	21.4	35.3	7.4	42.8	133
55-59	57.3	18.0	14.4	19.5	4.6	41.9	120
<b>Residence</b>							
Urban	66.2	47.3	29.1	40.8	15.2	30.1	872
Rural	49.9	22.9	17.7	27.0	8.9	47.9	1,474
<b>Region</b>							
North Central	54.2	32.2	24.7	39.2	21.6	40.5	348
North East	49.3	24.1	14.6	33.9	6.7	48.4	421
North West	49.3	16.9	8.9	18.8	4.4	48.8	602
South East	43.1	28.2	22.1	22.7	14.5	55.5	207
South South	61.3	40.3	35.8	44.2	7.1	35.1	445
South West	80.0	61.1	33.7	36.5	22.3	18.4	322
<b>Education</b>							
No education	37.8	7.2	2.4	11.6	3.0	61.3	507
Primary	52.3	22.4	10.7	24.8	6.6	46.4	603
Secondary	63.2	42.6	28.0	38.7	13.5	33.4	960
Higher	71.9	61.4	61.4	63.2	28.4	20.9	276
<b>Wealth quintile</b>							
Lowest	36.4	11.0	8.5	16.6	5.0	61.3	423
Second	49.0	15.4	11.2	23.3	6.6	50.7	418
Middle	55.7	22.8	16.1	26.1	8.1	41.5	436
Fourth	64.7	43.8	27.2	43.7	12.9	31.8	507
Highest	68.1	56.5	39.7	44.6	20.3	27.8	563
Total	55.9	32.0	21.9	32.1	11.2	41.3	2,346

More than half of women and 41 percent of men were not exposed to family planning messages from any source during the months preceding the survey. There are significant differences in exposure by background characteristics: those respondents residing in rural areas, in the north, in households lower on the wealth index, and those with less education are the least likely to have been exposed to family planning messages.



## 5.10 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

Information on contacts of nonusers with family planning providers is important for determining whether family planning initiatives are effective or not. Contact could be through a home visit by a health worker or a visit to a health facility. The 2003 NDHS asked women who are not using contraception whether in the 12 months preceding the survey 1) they were visited by a community health worker who discussed family planning, and 2) whether they visited a health facility, and if so, whether anyone discussed family planning.

Table 5.15 shows that few women who are nonusers had contacts with health workers who discussed family planning. Only 4 percent of nonusers reported that they were visited by a family planning service provider at home, and 6 percent of nonusers visited a health facility and discussed family planning with a provider. Across all age groups, residence, region, education, and economic status, the percentage of nonusers who visited a health facility but did not discuss family planning is significantly higher than the percentage of nonusers who visited a health facility and discussed family planning. This is an indication of missed opportunities for increasing family planning acceptance and use.

Educational attainment and a higher score on the wealth index are correlated with greater exposure to family planning providers. Three percent of women with no education versus 14 percent of women with higher education discussed family planning on a visit to a health facility. Similarly, 3 percent of women in households in the two lowest quintiles of the wealth index versus 10 percent of those in households in the two highest quintiles discussed family planning at a health facility. The proportion of nonusers who did not discuss family planning with a fieldworker or health facility staff is very high across all background characteristics. The high proportion of nonusers of family planning represents a large pool of potential users that could be targeted for family planning counselling.

Table 5.15 Contact of nonusers with family planning providers

Percentage of women who are not using contraception who were visited by a community health extension worker (CHEW) who discussed family planning, percentage who visited a health facility and discussed family planning, and percentage who visited a health facility but did not discuss family planning, in the 12 months preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Women who were visited by a CHEW who discussed family planning	Women who visited health facility and discussed family planning	Women who visited health facility didn't discuss family planning	Did not discuss family planning with CHEW or at a health facility	Number of women
<b>Age</b>					
15-19	1.4	1.6	15.4	97.4	1,603
20-24	3.7	5.3	27.3	92.5	1,260
25-29	4.0	9.7	31.2	88.7	1,132
30-34	4.7	10.8	29.4	87.1	808
35-39	4.9	6.4	28.3	90.3	682
40-44	5.1	6.3	23.2	90.9	587
45-49	3.1	4.6	18.7	94.3	537
<b>Residence</b>					
Urban	4.4	8.9	29.6	89.0	2,121
Rural	3.1	4.6	21.9	93.7	4,488
<b>Region</b>					
North Central	2.9	5.9	24.2	92.4	984
North East	3.0	4.5	22.9	94.4	1,314
North West	1.5	2.3	28.0	96.9	1,994
South East	4.4	2.4	30.0	94.3	590
South South	7.1	10.8	17.0	85.4	1,020
South West	5.0	15.4	23.0	82.2	707
<b>Education</b>					
No education	1.5	2.6	21.8	96.4	3,042
Primary	4.2	8.6	25.9	89.5	1,403
Secondary	5.3	8.4	25.5	88.9	1,872
Higher	9.4	13.6	36.2	82.0	290
<b>Wealth quintile</b>					
Lowest	1.6	2.8	18.4	96.2	1,313
Second	2.3	2.8	19.9	95.7	1,343
Middle	3.5	4.7	24.0	93.5	1,379
Fourth	5.2	10.2	28.0	87.5	1,310
Highest	5.0	9.8	32.0	87.5	1,263
Total	3.5	6.0	24.4	92.2	6,608

CHEW =Community health extension worker

## 5.11 DISCUSSION OF FAMILY PLANNING WITH HUSBAND

Although discussion between a husband and wife about contraceptive use is not a precondition for adoption of contraception, its absence may be an impediment to use. Interspousal communication is thus an important intermediate step along the path to eventual adoption, and especially continuation, of contraceptive use. Lack of discussion may reflect a lack of personal interest, hostility to the subject, or customary reticence in talking about sex-related matters. To gain insight about interspousal communication on family planning, currently married women in the 2003 NDHS were asked the number of times family planning was discussed with their husbands in the 12 months preceding the survey.

Table 5.16 presents information on currently married women who know a contraceptive method by the number of times they discussed family planning with their husbands in the past year, according to age. Almost two-thirds of women reported that they never discussed family planning with their husbands.

**Table 5.16 Discussion of family planning with husband**

Percent distribution of currently married women who know a contraceptive method by the number of times they discussed family planning with their husband in the past year, according to current age, Nigeria 2003

Age	Number of times family planning was discussed with husband				Total	Number of women
	Never	Once or twice	Three or more	Missing		
15-19	80.0	16.1	3.8	0.1	100.0	353
20-24	67.8	22.6	9.7	0.0	100.0	700
25-29	58.8	27.5	13.5	0.3	100.0	985
30-34	62.4	23.0	14.5	0.0	100.0	684
35-39	63.0	24.5	12.2	0.3	100.0	634
40-44	62.3	20.6	16.7	0.4	100.0	469
45-49	68.8	21.5	8.4	1.3	100.0	361
Total	64.6	23.2	11.9	0.3	100.0	4,186

Women age 15-19 were the least likely to have had a discussion about family planning. It is notable, however, that 12 percent of women discussed family planning at least three times. In particular, women in their prime childbearing years were the most likely to have had multiple discussions about family planning with their husbands.

## 5.12 ATTITUDES TOWARD FAMILY PLANNING

When couples have a positive attitude toward family planning, they are more likely to adopt a family planning method. In the 2003 NDHS, married women were asked whether they approved of family planning and what they perceived as their husband’s attitude toward family planning. This information is useful in the development of family planning policies because it indicates the extent to which further education and publicity are needed to gain general acceptance of family planning. If there is widespread disapproval of contraception, this can be a major barrier to adoption of contraceptive methods.

Table 5.17 shows that more than half (55 percent) of married women who know a family planning method approve of family planning. Almost two-thirds of those who approve, which is 33 percent of all respondents, reported that their husband also approves of family planning. However, one-third of women who approve say that their husband disapproves. Among the 39 percent of those interviewed who disapprove of family planning, almost all reported that their husband also disapproves of family planning.

Education plays a significant role in approval of family planning. Sixty-one percent of women with higher education reported that both they and their husband approve of family planning. This compares with just 16 percent of women with no education. Approval of family planning is also higher among urban than rural residents.

There is significant regional variation in approval of family planning. In particular, approval in the south tends to be higher than in the north. For example, 61 percent of women in the South West say that both they and their husbands approve of family planning, as do 51 percent of women in the South East. More than half of women in the North West, however, say that both they and their husbands disapprove.



Table 5.17 Attitudes of couples toward family planning

Percent distribution of currently married women who know of a method of family planning, by approval of family planning and perception of their husband's attitude toward family planning, according to background characteristics, Nigeria 2003

Background characteristic	Woman approves of family planning			Woman disapproves of family planning			Woman is unsure <sup>1</sup>	Total	Number of women
	Husband approves	Husband disapproves	Husband's attitude unknown	Husband approves	Husband disapproves	Husband's attitude unknown			
<b>Age</b>									
15-19	14.9	6.2	13.3	1.6	46.1	7.1	10.8	100.0	353
20-24	29.9	12.3	10.2	2.9	31.4	6.4	6.9	100.0	700
25-29	42.1	10.6	9.0	2.0	26.5	4.3	5.7	100.0	985
30-34	33.4	11.5	12.2	1.9	29.4	4.8	6.9	100.0	684
35-39	35.9	11.7	9.5	0.5	30.6	5.8	5.8	100.0	634
40-44	33.6	10.6	9.5	3.1	30.7	6.0	6.4	100.0	469
45-49	28.2	10.7	11.7	1.6	33.2	8.8	5.9	100.0	361
<b>Residence</b>									
Urban	40.6	10.4	9.3	1.8	28.1	4.1	5.7	100.0	1,487
Rural	29.2	11.0	11.1	2.0	32.8	6.7	7.1	100.0	2,699
<b>Region</b>									
North Central	40.6	11.0	15.8	1.8	16.6	6.3	8.1	100.0	584
North East	18.0	11.4	11.9	2.8	38.7	9.3	7.9	100.0	713
North West	17.4	7.5	8.1	1.8	51.6	6.6	7.0	100.0	1,412
South East	50.7	9.1	6.2	2.9	22.4	3.5	5.2	100.0	321
South South	47.4	17.8	9.5	2.1	13.8	3.8	5.5	100.0	625
South West	60.6	11.5	12.8	0.7	8.2	1.8	4.5	100.0	531
<b>Education</b>									
No education	15.6	9.8	11.5	1.9	44.7	8.2	8.3	100.0	1,914
Primary	38.6	12.2	11.8	1.7	24.2	5.5	6.0	100.0	1,022
Secondary	54.8	10.9	8.0	2.6	17.1	2.3	4.4	100.0	1,012
Higher	61.2	13.2	6.5	0.9	11.5	1.5	5.1	100.0	237
Total	33.3	10.8	10.5	1.9	31.1	5.8	6.6	100.0	4,186

<sup>1</sup> Includes missing

## OTHER PROXIMATE DETERMINANTS OF FERTILITY

This chapter addresses the principal factors, other than contraception, that affect a woman's risk of becoming pregnant: nuptiality and sexual intercourse, postpartum amenorrhoea, abstinence from sexual relations, and menopause. Generally, marriage is a primary indication of the exposure of women to the risk of pregnancy and, therefore, is important for the understanding of fertility. Populations in which age at first marriage is low tend to have early childbearing and high fertility. For this reason, it is important to examine trends in age at marriage. Data on age at first sexual intercourse, which is a more direct measure of the beginning of exposure to pregnancy and the level of exposure, are also presented in this chapter. Durations of postpartum amenorrhoea, postpartum abstinence, and menopause are additional measures of other proximate determinants of fertility that, like marriage and sexual intercourse, influence exposure to the risk of pregnancy.

### 6.1 CURRENT MARITAL STATUS

Table 6.1 presents the percent distribution of women and men by marital status at the time of the survey. In this table, the term "married," refers to legal or formal unions, while "living together" refers to informal unions. Widowed, divorced, and separated make up the remainder of the "ever-married" or "ever-in-union" category. In other tables and text, the term "currently married" refers to both formal and informal unions.

Age	Marital status						Total	Number
	Never married	Married	Living together	Divorced	Separated	Widowed		
WOMEN								
15-19	66.7	30.9	0.8	1.1	0.3	0.1	100.0	1,716
20-24	36.1	59.2	1.8	1.4	1.1	0.4	100.0	1,494
25-29	12.2	80.3	2.6	2.3	1.9	0.6	100.0	1,382
30-34	5.1	86.7	3.4	1.6	1.6	1.6	100.0	941
35-39	1.7	91.3	2.2	1.4	0.6	2.8	100.0	816
40-44	0.7	87.6	2.4	2.2	1.5	5.6	100.0	688
45-49	0.9	84.7	1.7	3.1	1.6	8.1	100.0	583
Total	25.3	68.0	2.0	1.7	1.2	1.8	100.0	7,620
MEN								
15-19	98.9	1.1	0.0	0.0	0.0	0.0	100.0	453
20-24	84.7	13.3	0.6	0.3	1.1	0.0	100.0	426
25-29	54.0	41.9	1.5	1.8	0.8	0.0	100.0	328
30-34	14.5	75.4	5.8	1.5	2.0	0.9	100.0	299
35-39	4.9	89.6	3.3	1.6	0.5	0.2	100.0	220
40-44	3.6	89.1	5.6	1.1	0.6	0.0	100.0	208
45-49	0.2	93.5	4.0	0.4	0.1	1.8	100.0	159
50-54	0.2	92.2	1.2	3.2	2.0	1.2	100.0	133
55-59	0.0	94.5	1.7	0.9	0.0	2.8	100.0	120
Total	44.7	50.8	2.3	1.0	0.8	0.5	100.0	2,346

In general, marriage and cohabitation are considered to be primary factors of exposure to the risk of pregnancy. Table 6.1 indicates that in Nigeria 25 percent of women age 15-49 have never married, while 68 percent are married, 2 percent are living together, and 5 percent are separated, divorced, or widowed. It is of interest to note that among adolescents age 15-19, more than 30 percent are married or living together. As expected, the percentage married increases with age. Widowhood also increases with age, from less than 1 percent below age 30 to 8 percent among women age 45-49.

The proportion of men who have never married is considerably higher (45 percent) than that of women (25 percent). About half of men are formally married, 2 percent are living together, and 2 percent are either divorced, separated, or widowed. A significant proportion of men marry when they are age 25 or older, unlike women who tend to marry at younger ages. In addition, the proportion of widowers does not increase significantly with age among men, possibly because of higher rates of remarriage among men.

## **6.2 POLYGYNY**

Polygyny (having more than one spouse) has implications for the frequency of exposure to sexual activity and fertility. Measurement of polygyny is derived from responses of currently married women to the following questions, “Does your husband (partner) have any other wives apart from yourself,” and if so, “How many other wives does he have?” Similarly, currently married men were asked, “How many wives do you have?”

Table 6.2 presents the proportion of currently married women who are in polygynous unions by background characteristics. The data show that 36 percent of married women in Nigeria are in polygynous unions. Twenty-seven percent report that they have only one cowife, while 9 percent say they have two or more cowives. The percentage of women in polygynous unions tends to increase with age, from 27 percent of women age 15-19 to 45 percent of those age 40-44. Further, polygyny is more prevalent in rural than in urban areas, and more common among women with lower levels of education. There is marked regional variation in polygyny. Polygyny is more prevalent in the northern parts of Nigeria and ranges from a low of 10 percent in the South East to a high of 44 percent in the North East. Approximately one-fifth of men are in polygynous unions, which is less than the proportion of women (36 percent) (Figure 6.1).

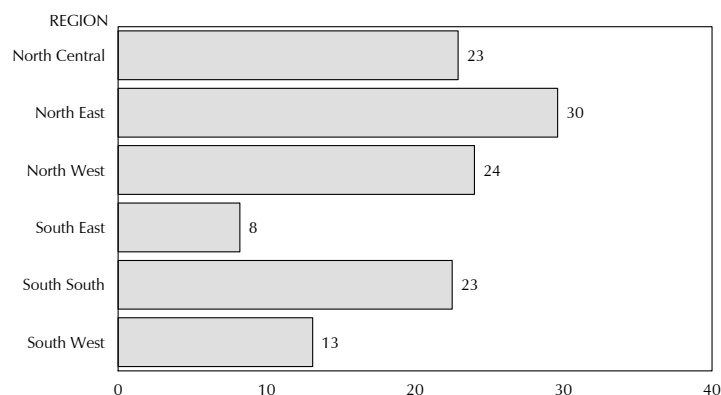
**Table 6.2 Polygyny**

Percent distribution of currently married women age 15-49 by number of cowives and percent distribution of currently married men age 15-59 by number of wives, according to background characteristics, Nigeria 2003

Background characteristic	Women						Men					
	Number of cowives					Number	Number of wives				Number	
	0	1	2+	Missing	Total		1	2+	Missing	Total		
<b>Age</b>												
15-19	72.3	22.9	4.0	0.8	100.0	545	*	*	*	*	5	
20-24	72.7	22.2	3.9	1.2	100.0	911	98.0	2.0	0.0	100.0	60	
25-29	67.1	25.5	7.1	0.3	100.0	1,146	93.3	6.7	0.0	100.0	142	
30-34	58.2	31.5	10.1	0.2	100.0	848	84.5	15.5	0.0	100.0	243	
35-39	58.2	28.7	11.8	1.3	100.0	763	74.2	24.7	1.2	100.0	204	
40-44	54.2	30.6	14.3	0.8	100.0	619	71.6	28.2	0.3	100.0	197	
45-49	57.9	24.0	17.8	0.3	100.0	504	69.0	31.0	0.0	100.0	155	
50-54	na	na	na	na	na	na	68.6	30.9	0.5	100.0	124	
55-59	na	na	na	na	na	na	67.1	32.5	0.4	100.0	116	
<b>Residence</b>												
Urban	69.6	21.8	8.1	0.4	100.0	1,633	81.9	17.8	0.3	100.0	401	
Rural	60.9	28.6	9.7	0.8	100.0	3,703	75.1	24.6	0.3	100.0	844	
<b>Region</b>												
North Central	60.9	24.8	13.9	0.3	100.0	754	77.1	22.9	0.0	100.0	174	
North East	55.8	34.3	9.8	0.0	100.0	1,122	70.4	29.6	0.0	100.0	283	
North West	58.7	32.5	7.7	1.1	100.0	1,880	75.2	24.0	0.8	100.0	372	
South East	88.1	4.4	6.0	1.6	100.0	368	91.8	8.2	0.0	100.0	99	
South South	73.8	17.4	7.6	1.2	100.0	664	77.5	22.5	0.0	100.0	172	
South West	70.7	18.4	11.0	0.0	100.0	548	86.2	13.1	0.7	100.0	145	
<b>Education</b>												
No education	55.2	33.8	10.4	0.6	100.0	2,877	69.9	29.9	0.2	100.0	399	
Primary	62.9	25.2	11.1	0.7	100.0	1,175	77.5	22.4	0.1	100.0	366	
Secondary	82.7	11.2	5.1	1.0	100.0	1,046	85.2	14.1	0.7	100.0	325	
Higher	82.9	13.1	4.0	0.0	100.0	238	79.3	20.4	0.3	100.0	155	
<b>Total</b>	63.5	26.5	9.2	0.7	100.0	5,336	77.3	22.4	0.3	100.0	1,245	

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

**Figure 6.1 Percentage of Married Men with Two or More Wives, by Region**



NDHS 2003

### 6.3 AGE AT FIRST MARRIAGE

Marriage is universal in Nigeria, as revealed by the results of the 1991 Census (NPC, 1998). The age at which a woman first gets married influences the length of time she is exposed to the risk of pregnancy during her childbearing years.

The proportion of women who are married by specific exact ages and median age at first marriage are shown in Table 6.3. Three-fifths of women age 30-49 at the time of the survey were married by age 18, while eight in ten were married by age 22. The median age at first marriage is 16.6 years for women 25-49, and has increased from 15.5 years among women 45-49 to 19.1 among women age 20-24. This implies that younger women are marrying at later ages than women did in the past.

Table 6.3 Age at first marriage								
Percentage of women and men who were first married by specific exact ages and median age at first marriage, according to current age, Nigeria 2003								
Current age	Percentage first married by exact age:					Percentage never married	Number	Median age at first marriage
	15	18	20	22	25			
WOMEN								
15-19	16.1	na	na	na	na	66.7	1,716	a
20-24	18.8	43.3	55.5	na	na	36.1	1,494	19.1
25-29	25.5	47.0	58.4	70.2	82.1	12.2	1,382	18.5
30-34	34.4	61.3	71.3	79.0	85.5	5.1	941	16.5
35-39	38.0	63.7	74.8	82.6	90.4	1.7	816	16.0
40-44	41.8	65.1	77.6	85.2	90.6	0.7	688	15.7
45-49	43.5	70.6	79.2	85.3	90.8	0.9	583	15.5
20-49	30.6	55.1	66.3	na	na	13.2	5,904	17.2
25-49	34.6	59.1	69.9	78.7	86.8	5.5	4,410	16.6
MEN								
15-19	0.7	na	na	na	na	98.9	453	a
20-24	0.4	4.1	8.2	na	na	84.7	426	a
25-29	1.4	4.8	13.1	23.3	36.7	54.0	328	a
30-34	1.7	7.6	14.0	22.0	43.5	14.5	299	26.4
35-39	3.4	13.7	22.8	30.9	44.6	4.9	220	26.1
40-44	1.6	7.1	19.1	32.0	50.5	3.6	208	24.9
45-49	1.1	7.9	17.1	30.7	53.1	0.2	159	24.2
50-54	6.1	15.0	27.7	40.7	58.4	0.2	133	23.6
55-59	1.1	9.7	16.3	22.8	37.9	0.0	120	26.5
20-59	1.7	7.7	15.5	na	na	31.7	1,983	a
25-59	2.1	8.7	17.6	27.8	45.1	16.3	1,466	a

na = Not applicable  
 a Omitted because less than 50 percent of the respondents were married for the first time before reaching the beginning of the age group

Table 6.3 also shows that men marry at significantly older ages than women. The median age at first marriage for men is over 23 years in all age groups. Less than half of men age 25-29 have married, compared with almost 90 percent of women. Unlike women, there are no significant differentials in men's median age at first marriage between the younger and the older cohorts.

Table 6.4 shows the median age at first marriage among women age 20-49 and men age 25-59 by current age and background characteristics. Among women, the median age at first marriage is consistently lower in rural areas than in urban areas. However, in both rural and urban areas, younger women are marrying at later ages. For example, the median age at first marriage for urban women age 45-49 is 16.5 as opposed to 21.1 years among women age 25-29. Similarly, in rural areas, the median age at first marriage among the oldest women is 15.2 versus 17.8 years among women in their early twenties.

Across regions, there is evidence of increasing median age at first marriage between the oldest and youngest cohorts. The region with the lowest median age at first marriage, the North West, shows an increase from 14.1 years among women age 45-49 to 15.5 years among women age 20-24. There are substantial differentials in age at first marriage by wealth quintile: women from more advantaged households tend to marry later than those from less advantaged households.

Background characteristic	Current age: women						Women age 20-49	Women age 25-49	Men age 25-59
	20-24	25-29	30-34	35-39	40-44	45-49			
<b>Residence</b>									
Urban	a	21.1	18.6	17.5	17.5	16.5	19.6	18.9	a
Rural	17.8	17.0	15.8	15.5	15.3	15.2	16.3	15.9	24.9
<b>Region</b>									
North Central	19.6	18.9	17.8	16.5	16.5	16.5	18.2	17.7	a
North East	16.3	15.9	14.7	15.0	14.7	14.7	15.3	15.0	23.1
North West	15.5	15.1	14.8	14.5	14.0	14.1	14.8	14.6	24.0
South East	a	23.8	22.5	20.7	19.6	17.3	a	21.8	a
South South	a	21.4	20.2	16.8	17.5	16.2	a	19.2	a
South West	a	22.7	21.5	21.3	20.1	19.7	a	21.3	a
<b>Education</b>									
No education	15.4	15.1	14.7	14.7	14.5	15.0	14.9	14.8	22.5
Primary	18.1	17.9	17.3	16.8	17.7	16.4	17.5	17.3	a
Secondary	a	22.1	20.4	20.2	20.4	(22.7)	a	21.2	a
Higher	a	a	26.7	24.3	21.8	(20.8)	a	24.8	a
<b>Wealth quintile</b>									
Lowest	16.3	15.4	15.2	14.5	14.7	15.2	15.3	15.0	23.4
Second	16.7	15.9	14.8	15.3	14.9	14.5	15.4	15.1	23.3
Middle	17.9	16.5	15.8	15.8	15.4	15.6	16.4	15.9	24.9
Fourth	19.6	19.8	17.7	15.4	16.3	15.6	17.9	17.4	a
Highest	a	23.2	22.0	20.8	20.1	19.8	a	21.8	a
All women	19.1	18.5	16.5	16.0	15.7	15.5	17.2	16.6	na
All men	na	a	26.4	26.1	24.9	24.2	na	na	a

Note: Figures in parentheses are based on 25-49 unweighted cases.  
na = Not applicable  
<sup>a</sup>Omitted because less than 50 percent were married for the first time before the beginning of the age group

## 6.4 AGE AT FIRST SEXUAL INTERCOURSE

Age at first marriage is used as a proxy for the onset of a woman's exposure to the risk of pregnancy. However, some women start sexual activity before marriage, therefore the age at which they begin sexual intercourse signifies the beginning of their exposure to the risk of pregnancy, instead of their age at first marriage. Table 6.5 presents the percentage of women and men who had first sexual intercourse by specific ages and the median age at first sexual intercourse.

**Table 6.5 Age at first sexual intercourse**

Percentage of women and men who had first sexual intercourse by specified exact ages and median age at first intercourse, according to current age, Nigeria 2003

Current age	Percentage who had first sexual intercourse by exact age:					Percentage who never had intercourse	Number	Median age at first intercourse
	15	18	20	22	25			
<b>WOMEN</b>								
15-19	20.3	na	na	na	na	48.9	1,716	a
20-24	21.2	54.1	73.9	na	na	13.6	1,494	17.6
25-29	26.7	55.1	72.2	84.6	91.3	2.7	1,382	17.3
30-34	34.2	63.5	77.7	84.9	89.0	0.7	941	16.1
35-39	36.6	65.4	77.1	84.4	88.3	0.3	816	15.9
40-44	42.0	66.5	77.7	83.2	86.8	0.3	688	15.6
45-49	42.7	70.7	79.5	85.7	89.1	0.0	583	15.5
20-49	31.2	60.5	75.5	na	na	4.3	5,904	16.7
25-49	34.6	62.7	76.1	84.6	89.3	1.1	4,410	16.2
<b>MEN</b>								
15-19	7.9	na	na	na	na	75.2	453	a
20-24	5.1	22.3	47.4	na	na	37.9	426	a
25-29	7.5	22.7	44.4	66.9	81.3	14.3	328	20.4
30-34	7.2	25.0	47.2	62.1	81.6	2.6	299	20.3
35-39	6.2	25.1	38.1	56.9	73.7	0.6	220	20.8
40-44	4.4	22.7	38.8	57.2	70.5	0.4	208	20.8
45-49	2.4	16.6	31.7	50.9	69.8	0.0	159	21.8
50-54	5.6	16.4	35.7	53.1	76.7	0.2	133	21.3
55-59	1.7	14.8	22.7	39.7	48.4	0.0	120	25.2
20-59	5.5	21.8	41.1	na	na	11.5	1,893	a
25-59	5.6	21.6	39.3	57.8	74.3	3.9	1,466	20.8

na = Not applicable

<sup>a</sup>Omitted because less than 50 percent had intercourse for the first time before reaching the beginning of the age group

One-third of women age 25-49 report that they had sexual intercourse by age 15. By age 20, more than three-quarters of women, and by age 25, almost all women (nine in ten), have had sexual intercourse. The median age at first sexual intercourse is lower among the older women than among the younger women. For the oldest women (age 45-49), the median age at first intercourse is 15.5 years and for younger women (age 20-24), the median age at first intercourse is 17.6 years.

As with marriage, the age at which the majority of men have had sexual intercourse is higher than for women. For example, at age 20, two-fifths of men have had sexual intercourse, compared with three-quarters of women. However, whereas median age at first intercourse has increased among women, it has decreased among men. Median age at first intercourse has declined from 25.2 years among men age 55-59 to 20.4 years among men age 25-29.

Table 6.6 presents the median age at first sexual intercourse for different cohorts by background characteristics. Rural women have their first sexual intercourse at younger ages than their urban counterparts. Among the regions, age at first sex is lowest in the North East and North West (15 years or less), and highest in the South West and South East (approximately 19 years). For women, the median age at first sexual intercourse increases with level of educational attainment. Women with no education start

sexual activity as early as 15 years of age, while women with secondary or higher education have their first sexual intercourse after age 18. Among the younger cohorts, median age at first intercourse increases with level of education.

Table 6.6 presents the same information for men. Rural and urban men have their first sexual experience at almost the same ages. Educational differentials are also small. Median age at first intercourse among men does vary by region, ranging from a low of 18.9 years in North Central to 23.5 years in the North West.

**Table 6.6 Median age at first intercourse**

Median age at first sexual intercourse among women age 20-49 and among men age 25-59, by current age and background characteristics, Nigeria 2003

Background characteristic	Current age: women						Women age 20-49	Women age 25-49	Men age 25-59
	20-24	25-29	30-34	35-39	40-44	45-49			
<b>Residence</b>									
Urban	18.7	18.7	17.9	16.7	17.3	16.0	18.2	17.8	21.5
Rural	16.9	16.4	15.6	15.6	15.2	15.2	15.9	15.7	20.6
<b>Region</b>									
North Central	18.0	18.3	17.0	16.9	16.7	16.1	17.6	17.3	18.9
North East	16.1	15.9	14.9	14.8	14.8	14.7	15.3	15.0	21.1
North West	15.8	15.2	14.9	14.7	14.3	14.3	14.9	14.7	23.5
South East	a	18.9	18.9	19.0	19.8	16.9	19.1	18.8	20.7
South South	18.0	18.1	16.9	16.8	16.2	15.8	17.4	17.0	20.5
South West	19.1	19.9	19.1	18.8	19.6	19.2	19.3	19.4	20.4
<b>Education</b>									
No education	15.5	15.2	14.8	14.8	14.6	15.1	15.0	14.9	21.5
Primary	16.9	16.9	16.3	16.8	17.1	16.1	16.7	16.7	20.8
Secondary	18.8	18.7	18.8	18.5	19.8	20.4	18.8	18.8	20.4
Higher	a	20.6	19.8	18.6	20.3	19.2	a	20.1	20.9
All women	17.6	17.3	16.1	15.9	15.6	15.5	16.7	16.2	na
All men	na	20.4	20.3	20.8	20.8	21.8	na	na	20.8

na = Not applicable  
<sup>a</sup>Omitted because less than 50 percent were married for the first time before the beginning of the age group

## 6.5 RECENT SEXUAL ACTIVITY

In the absence of contraception, the probability of pregnancy is related to the regularity of sexual intercourse. The information on recent intercourse is important for the refinement of the measurement of exposure to pregnancy.

Table 6.7.1 presents the distribution of women by timing of the last sexual intercourse, according to background characteristics. In the four weeks preceding the survey, 56 percent of women age 15-49 were sexually active, while 19 percent were sexually active in the last 12 months, and 7 percent had not had sex for more than one year. Among all women, 14 percent have never had sexual intercourse. The proportion of women who were sexually active in the four weeks preceding the survey increases with age up to a maximum of 70 percent of women age 35-39; at older ages the percentage declines.

Not surprisingly, there is great variation in the percentage of women who were sexually active in the last four weeks by marital status. It is notable that among currently married women, the proportion of women who had recent intercourse remains relatively stable at all marital durations.



Table 6.7.1 Recent sexual activity: women

Percent distribution of women by timing of last sexual intercourse, according to background characteristics, Nigeria 2003

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of women
	Within the last 4 weeks	Within 1 year <sup>1</sup>	One or more years ago	Missing			
<b>Current age</b>							
15-19	33.5	13.9	2.4	1.3	48.9	100.0	1,716
20-24	55.3	20.9	6.2	4.0	13.6	100.0	1,494
25-29	63.7	22.8	5.2	5.6	2.7	100.0	1,382
30-34	67.4	19.6	6.0	6.2	0.7	100.0	941
35-39	70.1	18.1	7.2	4.4	0.3	100.0	816
40-44	66.9	18.9	11.4	2.5	0.3	100.0	688
45-49	59.5	17.1	21.1	2.2	0.0	100.0	583
<b>Marital status</b>							
Never married	15.1	19.5	7.5	1.4	56.5	100.0	1,926
Married or living together	73.7	17.7	4.3	4.3	0.0	100.0	5,336
Divorced/separated/widowed	19.7	30.0	41.5	8.4	0.4	100.0	358
<b>Marital duration<sup>2</sup></b>							
Married only once							
0-4 years	77.5	15.7	2.2	4.6	0.1	100.0	1,149
5-9 years	72.3	20.8	2.0	4.9	0.0	100.0	880
10-14 years	71.0	17.8	5.4	5.7	0.0	100.0	704
15-19 years	74.7	16.3	4.6	4.5	0.0	100.0	552
20-24 years	73.9	19.1	5.1	2.0	0.0	100.0	538
25+ years	70.9	17.6	9.0	2.4	0.0	100.0	580
Married more than once	73.6	17.4	4.6	4.4	0.0	100.0	933
<b>Residence</b>							
Urban	51.8	20.1	7.6	3.1	17.4	100.0	2,629
Rural	58.8	18.0	6.5	4.1	12.7	100.0	4,991
<b>Region</b>							
North Central	41.6	25.0	11.1	4.5	17.8	100.0	1,121
North East	63.4	16.0	5.0	5.8	9.8	100.0	1,368
North West	77.8	11.2	2.5	2.5	6.0	100.0	2,095
South East	42.2	22.2	8.7	3.3	23.7	100.0	737
South South	50.8	20.9	7.7	3.4	17.2	100.0	1,342
South West	35.4	26.2	11.5	3.3	23.5	100.0	958
<b>Education</b>							
No education	71.0	15.0	6.3	4.5	3.2	100.0	3,171
Primary	51.3	21.1	8.7	4.3	14.6	100.0	1,628
Secondary	41.6	20.7	5.9	2.7	29.0	100.0	2,370
Higher	49.5	26.0	8.7	2.1	13.8	100.0	451
<b>Current contraceptive method</b>							
Pill	79.1	13.8	4.1	3.1	0.0	100.0	152
IUD	(78.4)	(21.6)	(0.0)	(0.0)	(0.0)	(100.0)	45
Condom	62.4	34.7	2.0	0.9	0.0	100.0	260
Periodic abstinence	58.2	35.4	3.4	2.9	0.0	100.0	163
Other method	72.6	22.9	2.9	1.5	0.0	100.0	392
No method	54.5	17.5	7.5	4.0	16.5	100.0	6,608
Total	56.4	18.7	6.8	3.7	14.3	100.0	7,620

Note: Figures in parentheses are based on 25-29 unweighted cases.

<sup>1</sup> Excludes women who had sexual intercourse within the last 4 weeks

<sup>2</sup> Excludes women who are not currently married

Rural women are more likely to be sexually active (59 percent) than urban women (52 percent). Among the six regions, the North West has the highest proportion of sexually active women (78 percent), followed by the North East (63 percent). The South West has the lowest proportion of sexually active women (35 percent), followed by the South East and North Central (42 percent each). Women with no education are more likely to be sexually active than women with some education, as are women who are using a contraceptive method.

Table 6.7.2 shows that almost half the men interviewed were sexually active in the four weeks preceding the survey. Another one-fifth had sexual intercourse in the past year, while 7 percent had not had sex in more than a year. Twenty-four percent of men had never had sex. The percentage sexually

**Table 6.7.2 Recent sexual activity: men**  
Percent distribution of men by timing of last sexual intercourse, according to background characteristics, Nigeria 2003

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of men
	Within the last 4 weeks	Within 1 year <sup>1</sup>	One or more years ago	Missing			
<b>Current age</b>							
15-19	11.1	7.1	6.5	0.0	75.2	100.0	453
20-24	29.3	21.7	11.1	0.0	37.9	100.0	426
25-29	53.0	24.6	7.9	0.2	14.3	100.0	328
30-34	62.8	26.9	7.4	0.3	2.6	100.0	299
35-39	69.3	25.4	3.8	0.9	0.6	100.0	220
40-44	75.6	16.2	4.0	3.9	0.4	100.0	208
45-49	72.8	22.0	4.6	0.6	0.0	100.0	159
50-54	72.6	22.0	4.6	0.6	0.2	100.0	133
55-59	67.0	22.0	8.6	2.5	0.0	100.0	120
<b>Marital status</b>							
Never married	20.5	15.2	11.0	0.0	53.3	100.0	1,048
Married or living together	73.0	23.0	2.7	1.3	0.0	100.0	1,245
Divorced/separated/widowed	27.8	39.3	32.9	0.0	0.0	100.0	53
<b>Marital duration<sup>2</sup></b>							
Married only once							
0-4 years	72.0	23.8	3.9	0.3	0.0	100.0	268
5-9 years	67.3	29.6	3.1	0.0	0.0	100.0	178
10-14 years	71.2	20.6	3.4	4.9	0.0	100.0	145
15-19 years	79.9	18.7	0.5	0.9	0.0	100.0	142
20-24 years	79.4	18.1	1.7	0.8	0.0	100.0	131
25+ years	68.5	25.0	4.3	2.3	0.0	100.0	163
Married more than once	75.4	22.2	1.2	1.2	0.0	100.0	218
<b>Residence</b>							
Urban	43.0	20.1	7.8	1.0	28.0	100.0	872
Rural	51.8	19.7	6.6	0.5	21.3	100.0	1,474
<b>Region</b>							
North Central	42.4	28.5	8.4	0.0	20.7	100.0	348
North East	60.1	17.4	4.0	1.6	16.9	100.0	421
North West	55.2	9.1	2.9	0.5	32.3	100.0	602
South East	30.1	26.6	16.8	3.2	23.2	100.0	207
South South	47.8	20.9	7.2	0.0	24.1	100.0	445
South West	40.5	27.9	11.1	0.0	20.4	100.0	322
<b>Education</b>							
No education	66.8	13.2	4.1	1.1	14.8	100.0	507
Primary	46.3	25.1	7.0	0.4	21.2	100.0	603
Secondary	39.2	18.4	9.0	0.2	33.2	100.0	960
Higher	52.5	25.7	5.8	2.3	13.7	100.0	276
<b>Total</b>	<b>48.6</b>	<b>19.9</b>	<b>7.1</b>	<b>0.7</b>	<b>23.8</b>	<b>100.0</b>	<b>2,346</b>

<sup>1</sup> Excludes men who had sexual intercourse within the last 4 weeks  
<sup>2</sup> Excludes men who are not currently married

active increases with age from 11 percent of men age 15-19 to 76 percent of men age 40-44; thereafter, the percentage decrease slightly. The table shows that men in union are the most likely to be sexually active (73 percent).

Men's patterns of sexual activity by residence and region are similar to those of women. As with women, recent sexual activity varies with educational attainment. Approximately 67 percent of men with no education were sexually active in the four weeks preceding the survey, compared with 39 percent of men with some secondary education.

## 6.6 POSTPARTUM AMENORRHOEA, ABSTINENCE, AND INSUSEPTIBILITY

Postpartum amenorrhoea refers to the interval between childbirth and the return of menstruation. This is the period during which a woman becomes temporarily infecund following childbirth. A number of studies have established a direct relationship between the length and intensity of breastfeeding and the duration of postpartum amenorrhoea. Postpartum abstinence refers to the period of voluntary sexual inactivity after childbirth. Women are considered insusceptible if they are not exposed to the risk of pregnancy, either because they are amenorrhoeic or are abstaining from sexual intercourse following a birth. Women who gave birth during the three years preceding the survey were asked about the duration of amenorrhoea and the duration of sexual abstinence following childbirth.

Table 6.8 shows the percentage of births in the three years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible by number of months since birth. Mean and median durations are also shown. In Nigeria, women are amenorrhoeic for approximately 13 months after giving birth. The median duration of postpartum abstinence is lower—just 3 months. Eighty-five percent of women abstain from sex during the first two months following childbirth. The proportion abstaining decreases with increasing months after delivery, particularly during the first year after birth. A comparison of the data with those from the 1999 NDHS indicates that there has been no change in the duration of postpartum insusceptibility.

Table 6.9 shows the median duration of postpartum amenorrhoea, abstinence, and insusceptibility by background characteristics. The median duration of postpartum amenorrhoea, abstinence, and insusceptibility are 13 months, 3 months, and 15 months, respectively. Urban women in Nigeria have a shorter duration of amenorrhoea and postpartum insusceptibility than rural women, but have longer postpartum abstinence. There are also substantial differentials by region and mother's education.

**Table 6.8** Postpartum amenorrhoea, abstinence, and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Nigeria 2003

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrhoeic	Abstaining	Insusceptible	
< 2	91.7	85.1	97.2	189
2-3	81.6	52.5	88.0	241
4-5	69.4	33.0	77.4	272
6-7	63.5	33.4	70.4	249
8-9	65.2	29.2	72.5	244
10-11	52.4	23.7	60.7	216
12-13	52.9	13.9	56.5	238
14-15	51.2	19.3	59.0	204
16-17	33.4	14.7	41.3	216
18-19	24.9	11.4	31.1	143
20-21	18.6	5.5	21.0	153
22-23	16.1	18.3	29.9	143
24-25	6.2	4.3	10.0	273
26-27	4.6	2.7	6.8	230
28-29	3.2	3.4	6.7	167
30-31	2.1	3.9	6.0	198
32-33	1.0	3.2	4.2	175
34-35	2.2	4.3	5.4	184
Total	38.1	21.0	43.8	3,734
Median	13.2	3.0	15.1	na
Mean	13.1	7.6	15.1	na

Note: Estimates are based on status at the time of the survey.  
na = Not applicable

**Table 6.9 Median duration of postpartum insusceptibility by background characteristics**

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 2003

Background characteristic	Postpartum:			Number of births
	Amenorrhoea	Abstinence	Insusceptibility	
<b>Mother's age</b>				
15-29	13.0	2.8	14.6	2,307
30-49	13.6	3.4	15.9	1,427
<b>Residence</b>				
Urban	10.6	3.5	12.6	1,110
Rural	14.1	2.7	16.3	2,624
<b>Region</b>				
North Central	13.0	16.5	19.2	540
North East	15.8	2.3	16.3	857
North West	15.4	1.9	15.5	1,282
South East	10.8	4.3	13.2	244
South South	7.2	3.9	9.5	491
South West	10.6	5.5	12.1	320
<b>Mother's education</b>				
No education	15.8	2.3	17.0	1,855
Primary	12.7	5.7	14.1	883
Secondary	7.3	3.5	8.7	866
Higher	5.6	4.7	6.2	129
Total	13.2	3.0	15.1	3,734

Note: Medians are based on status at the time of the survey.

## 6.7 MENOPAUSE

The lack of a menstrual period in the preceding six months among women who are neither pregnant nor postpartum amenorrhoeic is taken as evidence of menopause. Table 6.10 shows the proportion of women who are menopausal. The proportion of women who are menopausal increases steadily after age 30. More than half of women age 48-49 report that they are menopausal.

**Table 6.10 Menopause**

Percentage of women age 30-49 who are menopausal by age, Nigeria 2003

Age	Percentage menopausal <sup>1</sup>	Number of women
30-34	0.6	941
35-39	1.5	816
40-41	5.9	381
42-43	12.7	247
44-45	28.9	280
46-47	36.3	142
48-49	52.4	221
Total	10.6	3,028

<sup>1</sup> Percentage of all women who are not pregnant and not postpartum amenorrhoeic whose last menstrual period occurred six or more months preceding the survey

## FERTILITY PREFERENCES

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This chapter addresses three questions that allow an assessment of the need for contraception. Does the respondent want more children? If so, how long would she prefer to wait before the next child? If she could start afresh, how many children in all would she want? This chapter also examines the occurrence of unwanted or mistimed pregnancies and analyzes the effect that prevention of such pregnancies would have on the fertility rates. Because the underlying rationale of most family planning programmes is to give couples the freedom and ability to bear the number of children they want and to achieve the spacing of births they prefer, these are key issues for programme planners.

Interpretation of data on fertility preferences has always been the subject of controversy. Survey questions have been criticized on the grounds that answers are misleading because 1) they reflect unformed, ephemeral views, which are held with weak intensity and little conviction; and 2) they do not take into account the effect of social pressures or the attitudes of other family members, particularly the husband, who may exert a major influence on reproductive decisions. The first objection has greater force in noncontracepting societies where the idea of conscious reproductive choice may still be alien; preference data from these settings should be interpreted with caution. In societies with moderate to high levels of use, greater interpretive weight can be attached to the findings. The second objection is correct in principle. In practice, however, its importance is doubtful; for instance, the evidence from surveys in which both husbands and wives are interviewed suggests that there is no radical difference between the views of the two sexes.

The inclusion of women who are currently pregnant complicates the measurement of views on future childbearing. For these women, the question on desire for more children is rephrased to refer to desire for another child after the one that they are expecting. To take into account the way in which the preference variable is defined for pregnant women, the results are classified by number of living children, including the current pregnancy as equivalent to a living child.

### 7.1 DESIRE FOR MORE CHILDREN

Information on fertility preferences among currently married women is presented in Table 7.1. The table shows the potential need for contraceptive services for spacing as well as for limiting births. Until recently, concern for providing appropriate contraceptive methods to couples who wish to have no more children has overshadowed contraception for child spacing purposes. The interest in spacing has been reinforced by recent evidence that 1) short birth intervals are harmful to the welfare of children and mothers; 2) large numbers of couples wish to postpone childbearing by using contraception; and 3) there is a potential demand for contraception for spacing births in some countries where demand for limiting family size has not yet emerged.

Table 7.1 shows that the desire for more children is related to the number of living children women already have. Virtually all currently married women with no children want to have a child, eight in ten express the desire to have a child soon. As the number of living children increases, the desire to have children decreases. The percentage of women who want to space the birth of their next child (have another later) first rises with parity, up to parity two, then declines steadily with the rise in the number of living children. This pattern was also observed in the 1999 NDHS (NPC, 2000:88). However, it is striking that almost three-quarters of women with four living children (73 percent) want to have another child.

It is equally significant that 18 percent of all women want no more children. The desire to stop childbearing begins to appear when couples have had at least three living children. While only 2 percent

of childless women want no children, half of women who have had six or more children say they want to stop childbearing.

Irrespective of the number of living children, more than half of women (52 percent) either want to delay having another child or stop childbearing altogether. These women are potential contraceptive users for spacing or for limitation of fertility.

**Table 7.1 Fertility preferences by number of living children**

Percent distribution of currently married women by desire for children, according to number of living children, Nigeria 2003

Desire for children	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
Have another soon <sup>2</sup>	79.2	47.1	42.1	36.8	32.4	23.2	14.8	37.1
Have another later <sup>3</sup>	10.5	43.8	46.2	42.6	36.7	29.5	19.1	33.8
Have another, undecided when	2.3	5.1	4.4	6.3	3.5	3.8	3.6	4.3
Undecided	0.9	0.5	0.7	2.7	3.5	3.7	3.9	2.3
Want no more	1.8	0.6	4.4	8.2	20.5	34.4	50.3	18.1
Sterilized <sup>4</sup>	0.0	0.0	0.0	0.1	0.3	0.0	0.8	0.2
Declared infecund	5.1	2.4	2.2	3.2	3.0	4.4	7.1	3.9
Missing	0.3	0.5	0.0	0.1	0.0	1.0	0.4	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	491	902	871	776	701	608	986	5,336

<sup>1</sup> Includes current pregnancy

<sup>2</sup> Wants next birth within 2 years

<sup>3</sup> Wants to delay next birth for 2 or more years

<sup>4</sup> Includes both female and male sterilization

## 7.2 DESIRE TO LIMIT CHILDBEARING

Table 7.2 presents the percentage of currently married women who want no more children by number of living children and background characteristics. This table provides information about variations in the potential demand for fertility control.

The data show that the desire to limit childbearing is higher in urban than rural areas (22 and 17 percent, respectively) and varies with the number of living children. In urban areas, for example, one-third of women with four living children desire no more children. This compares with just 15 percent of women living in rural areas. There are no significant urban-rural differences in the desire to limit childbearing once women have had six or more children. At that parity, about half of women in both urban and rural areas want no more children.

There are large regional variations in the desire to limit childbearing. In general, the desire to limit childbearing is lowest in the North West (7 percent) and highest in the South East and South South regions (32 percent each). In the South West, even at parity four, half of all currently married women want no more children. In all the southern regions, the majority desire no more children once they have had five children. At parity six and above, eight in every ten women in the southern regions do not want any more children. In contrast, in the North West and North East, the majority of women do not wish to limit childbearing, irrespective of the number of living children they already have. This is especially true of women in the North West; in that region, just two out of every ten women with six or more children say that they want no more children.

Table 7.2 Desire to limit childbearing by background characteristics

Percentage of currently married women who want no more children, by number of living children and background characteristics, Nigeria 2003

Background characteristic	Number of living children <sup>1</sup>							All women
	0	1	2	3	4	5	6+	
<b>Residence</b>								
Urban	0.0	0.0	5.1	12.5	34.1	46.0	49.4	21.8
Rural	2.5	0.9	4.1	6.5	15.2	29.2	51.8	16.7
<b>Region</b>								
North Central	0.0	0.0	7.2	7.3	31.8	46.6	61.9	24.1
North East	3.5	0.2	4.5	8.1	16.0	23.3	44.8	16.3
North West	2.2	0.9	1.3	3.0	8.2	10.4	20.7	6.5
South East	(0.0)	0.0	4.6	10.0	27.7	55.6	83.5	31.6
South South	(0.0)	0.0	3.7	12.3	16.7	53.8	80.6	31.6
South West	(0.0)	1.6	11.0	21.4	52.0	62.3	80.9	29.9
<b>Education</b>								
No education	2.8	0.8	4.1	7.7	15.4	22.8	40.5	15.0
Primary	0.0	0.0	4.8	8.9	19.1	44.1	65.4	25.8
Secondary	0.0	0.8	3.7	7.7	23.5	53.0	68.2	16.4
Higher	(0.0)	(0.0)	(9.1)	(14.3)	(76.2)	(49.9)	(81.0)	29.3
<b>Wealth quintile</b>								
Lowest	2.8	1.5	2.7	6.7	13.5	17.7	48.3	15.5
Second	1.2	0.2	5.9	7.0	12.5	27.8	49.6	16.1
Middle	3.7	0.3	3.2	5.1	15.6	38.8	46.3	17.3
Fourth	0.0	0.0	4.9	10.0	25.1	35.3	45.2	18.4
Highest	0.0	0.9	5.1	13.4	39.5	56.1	76.7	24.8
Total	1.8	0.6	4.4	8.3	20.8	34.4	51.0	18.3

Note: Women who have been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> Includes current pregnancy

In addition to regional differences, the desire to limit childbearing varies by education. Almost twice as many women with higher education as women with no education want to limit childbearing (29 percent versus 15 percent). The desire to limit childbearing increases with household economic status. For example, one in six women in households in the lowest wealth quintile wants to limit childbearing, compared with one in four women in households in the highest quintile.

Among women residing in urban areas and in the south and in the North Central region, among those with some education, and among those in the highest wealth quintile, parity five appears to be the threshold value at which a significant proportion begin to want no more children.

### 7.3 NEED FOR FAMILY PLANNING

This section discusses the extent of need and potential demand for family planning services in Nigeria. Unmet need for family planning refers to fecund women who either wish to postpone the next birth (spacers) or who wish to stop childbearing altogether (limiters), but are not using a contraceptive method. Pregnant women are considered to have unmet need for spacing or limiting if their pregnancy was mistimed or unwanted, respectively. Similarly, amenorrhoeic women are classified as having unmet need if their last birth was mistimed or unwanted. Women who are currently using a family planning method are said to have a met need for family planning method. The total demand for family planning comprises those who fall in the met need and the unmet need categories.

Table 7.3 presents estimates for unmet need, met need, and total demand for family planning among currently married Nigerian women by background characteristics. The total demand for family planning among currently married women is 30 percent, and 43 percent of that demand is satisfied. The demand for spacing purposes is twice as high as the demand for limiting purposes (20 and 10 percent, respectively). Overall, less than one-fifth of currently married women have an unmet need for family planning (17 percent). Twelve percent have unmet need for spacing and 5 percent for limiting.

Unmet need does not vary much by age except for women age 45-49, who have the lowest unmet need. It is notable that up to age 34, virtually all unmet need for family planning is for spacing purposes. After age 35, most unmet need is for limiting childbearing. Total unmet need for family planning is highest in the South South region, where one-fourth of currently married women have unmet need for family planning, and lowest in the North West (11 percent). There are no rural-urban differentials nor does unmet need vary substantially by wealth quintile. However, it should be noted that among women in households in the lowest wealth quintile, only 32 percent of demand for family planning is satisfied, compared with 62 percent among women in households in the highest wealth quintile. No doubt, women in more economically advantaged households have the means to satisfy their family planning needs, unlike women in poorer households.

Table 7.4 shows the need for family planning among all women and women who are not currently married. As expected, unmet need for family planning is higher among currently married women (17 percent) and lower among all women (14 percent) and women who are not currently married (6 percent).



Table 7.3 Need for family planning among currently married women

Percentage of currently married women with unmet need for family planning, and with met need for family planning, and the total demand for family planning, by background characteristics, Nigeria 2003

Background characteristic	Unmet need for family planning <sup>1</sup>			Met need for family planning (currently using) <sup>2</sup>			Total demand for family planning <sup>3</sup>			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
<b>Age</b>											
15-19	13.9	0.6	14.6	4.1	0.2	4.3	18.0	0.9	18.9	22.9	545
20-24	16.1	0.3	16.4	9.3	0.2	9.4	25.4	0.4	25.8	36.5	911
25-29	16.0	1.1	17.1	15.3	0.8	16.1	31.2	1.9	33.2	48.5	1,146
30-34	13.9	5.3	19.1	8.8	4.8	13.6	22.7	10.0	32.7	41.5	848
35-39	8.1	10.1	18.1	5.2	11.1	16.3	13.3	21.2	34.5	47.4	763
40-44	5.3	14.1	19.3	2.5	12.7	15.1	7.7	26.7	34.4	43.9	619
45-49	2.4	9.0	11.4	1.2	7.6	8.9	3.6	16.7	20.3	43.7	504
<b>Residence</b>											
Urban	11.7	5.5	17.3	12.1	8.2	20.2	23.8	13.7	37.5	54.0	1,633
Rural	11.8	4.9	16.7	6.0	3.3	9.2	17.8	8.2	26.0	35.5	3,703
<b>Region</b>											
North Central	15.2	6.6	21.8	7.0	6.4	13.3	22.2	12.9	35.1	37.9	754
North East	13.1	5.0	18.1	2.8	1.4	4.2	15.9	6.4	22.3	19.0	1,122
North West	9.9	1.2	11.1	4.6	0.4	4.9	14.5	1.5	16.1	30.8	1,880
South East	9.0	10.0	18.9	12.3	10.2	22.5	21.2	20.2	41.4	54.3	368
South South	13.0	11.5	24.5	14.7	10.7	25.4	27.7	22.3	49.9	50.9	664
South West	11.3	5.9	17.2	19.1	13.6	32.7	30.4	19.5	49.9	65.6	548
<b>Education</b>											
No education	10.1	3.9	14.1	2.5	1.4	4.0	12.7	5.4	18.0	22.1	2,877
Primary	13.4	7.6	21.0	8.3	8.4	16.7	21.7	16.0	37.7	44.4	1,175
Secondary	15.8	4.9	20.7	18.1	8.0	26.1	33.9	12.9	46.8	55.8	1,046
Higher	6.6	8.1	14.7	24.1	12.8	36.9	30.7	20.9	51.7	71.5	238
<b>Wealth quintile</b>											
Lowest	11.3	3.6	14.9	3.8	3.1	6.9	15.1	6.8	21.8	31.8	1,150
Second	10.6	5.0	15.6	4.1	1.6	5.6	14.7	6.5	21.2	26.6	1,142
Middle	12.5	4.2	16.7	5.4	3.7	9.1	17.9	7.9	25.8	35.2	1,086
Fourth	13.0	6.9	19.9	8.8	4.7	13.5	21.8	11.6	33.4	40.3	957
Highest	11.9	6.2	18.0	18.4	11.6	30.0	30.3	17.8	48.0	62.4	1,002
Total	11.8	5.1	16.9	7.8	4.8	12.6	19.6	9.9	29.5	42.7	5,336

<sup>1</sup> *Unmet need for spacing* includes pregnant women whose pregnancy was mistimed, amenorrhoeic women who are not using family planning and whose last birth was mistimed, and fecund women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning and say they want to wait two or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth unless they say it would not be a problem if they discovered they were pregnant in the next few weeks. *Unmet need for limiting* refers to pregnant women whose pregnancy was unwanted, amenorrhoeic women whose last child was unwanted, and fecund women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning and who want no more children. Excluded from the unmet need category are pregnant and amenorrhoeic women who became pregnant while using a method (these women are in need of better contraception).

<sup>2</sup> *Using for spacing* is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. *Using for limiting* is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here.

<sup>3</sup> Nonusers who are pregnant or amenorrhoeic and women whose pregnancy was the result of a contraceptive failure are *not* included in the category of unmet need, but are included in the total demand for contraception (since they would have been using had their method not failed).

Table 7.4 Need for family planning among all women and among women who are not currently married

Percentage of all women and women who are not currently married with unmet need for family planning, and with met need for family planning, and the total demand for family planning, by background characteristics, Nigeria 2003

Background characteristic	Unmet need for family planning <sup>1</sup>			Met need for family planning (currently using) <sup>2</sup>			Total demand for family planning <sup>3</sup>			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
<b>ALL WOMEN</b>											
<b>Age</b>											
15-19	7.7	0.2	7.9	6.3	0.3	6.6	14.0	0.5	14.5	45.4	1,716
20-24	12.7	0.3	13.0	15.4	0.3	15.7	28.0	0.6	28.6	54.8	1,494
25-29	14.4	1.0	15.4	17.0	1.1	18.1	31.4	2.1	33.5	54.1	1,382
30-34	13.9	4.9	18.8	9.4	4.8	14.2	23.3	9.7	33.0	43.0	941
35-39	7.6	9.5	17.1	5.8	10.6	16.4	13.4	20.1	33.5	48.9	816
40-44	4.7	12.8	17.5	2.5	12.1	14.6	7.3	24.9	32.1	45.6	688
45-49	2.4	8.0	10.3	1.1	6.8	7.9	3.5	14.8	18.3	43.4	583
<b>Residence</b>											
Urban	8.9	3.5	12.5	13.7	5.6	19.3	22.7	9.1	31.8	60.8	2,629
Rural	10.5	3.7	14.2	7.4	2.6	10.1	18.0	6.4	24.3	41.4	4,991
<b>Region</b>											
North Central	12.3	4.6	16.8	7.2	5.0	12.2	19.5	9.6	29.0	42.0	1,121
North East	12.0	4.1	16.1	2.8	1.2	4.0	14.7	5.3	20.0	19.7	1,368
North West	9.0	1.1	10.0	4.2	0.6	4.8	13.2	1.6	14.9	32.5	2,095
South East	7.7	5.0	12.7	14.8	5.2	20.0	22.5	10.2	32.7	61.1	737
South South	10.7	6.0	16.8	18.0	6.0	24.0	28.8	12.0	40.7	58.8	1,342
South West	7.2	3.4	10.5	18.3	8.0	26.2	25.4	11.3	36.8	71.4	958
<b>Education</b>											
No education	9.8	3.6	13.4	2.5	1.6	4.0	12.2	5.2	17.4	23.2	3,171
Primary	11.2	5.6	16.8	7.5	6.3	13.8	18.8	11.8	30.6	45.2	1,628
Secondary	10.3	2.4	12.6	17.0	4.0	21.0	27.3	6.4	33.6	62.4	2,370
Higher	5.1	4.3	9.4	28.6	7.1	35.7	33.7	11.4	45.1	79.1	451
Total	10.0	3.7	13.6	9.6	3.7	13.3	19.6	7.3	26.9	49.3	7,620
<b>WOMEN WHO ARE NOT CURRENTLY MARRIED</b>											
<b>Age</b>											
15-19	4.8	0.0	4.8	7.4	0.3	7.6	12.2	0.3	12.4	61.3	1,171
20-24	7.3	0.4	7.6	24.9	0.6	25.5	32.2	0.9	33.1	77.0	583
25-29	6.6	0.3	6.8	25.6	2.3	28.0	32.2	2.6	34.8	80.4	236
30-34	14.2	1.4	15.7	14.4	5.3	19.7	28.6	6.7	35.3	55.7	93
35-39	0.9	1.8	2.7	13.8	3.3	17.1	14.7	5.1	19.8	86.4	53
40-44	0.0	1.1	1.1	3.1	7.1	10.2	3.1	8.2	11.3	90.2	69
45-49	2.3	1.3	3.6	0.5	1.5	2.1	2.8	2.9	5.7	36.5	79
<b>Residence</b>											
Urban	4.3	0.2	4.6	16.5	1.4	17.9	20.8	1.6	22.4	79.6	996
Rural	6.7	0.3	7.1	11.7	0.9	12.6	18.4	1.2	19.6	64.0	1,288
<b>Region</b>											
North Central	6.3	0.4	6.7	7.7	2.2	9.9	13.9	2.7	16.6	59.6	366
North East	6.8	0.3	7.1	2.6	0.0	2.6	9.4	0.3	9.7	27.0	245
North West	0.5	0.0	0.5	1.1	2.6	3.7	1.6	2.6	4.2	88.0	215
South East	6.5	0.0	6.5	17.3	0.2	17.5	23.8	0.2	24.0	72.8	369
South South	8.6	0.7	9.2	21.3	1.3	22.6	29.8	1.9	31.8	71.0	678
South West	1.7	0.0	1.7	17.1	0.4	17.5	18.8	0.4	19.2	91.2	411
<b>Education</b>											
No education	6.2	0.2	6.4	1.5	3.2	4.7	7.7	3.4	11.1	42.3	293
Primary	5.6	0.3	5.9	5.6	0.7	6.3	11.2	1.0	12.2	51.6	454
Secondary	6.0	0.4	6.3	16.2	0.8	17.0	22.1	1.2	23.3	72.9	1,324
Higher	3.4	0.0	3.4	33.5	0.7	34.2	37.0	0.7	37.7	90.8	213
Total	5.7	0.3	6.0	13.8	1.1	14.9	19.5	1.4	20.9	71.3	2,284

<sup>1</sup> *Unmet need for spacing* includes pregnant women whose pregnancy was mistimed, amenorrhoeic women who are not using family planning and whose last birth was mistimed, and fecund women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning and say they want to wait two or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth unless they say it would not be a problem if they discovered they were pregnant in the next few weeks. *Unmet need for limiting* refers to pregnant women whose pregnancy was unwanted, amenorrhoeic women whose last child was unwanted, and fecund women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning and who want no more children. Excluded from the unmet need category are pregnant and amenorrhoeic women who became pregnant while using a method (these women are in need of better contraception).

<sup>2</sup> *Using for spacing* is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. *Using for limiting* is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here.

<sup>3</sup> Nonusers who are pregnant or amenorrhoeic and women whose pregnancy was the result of a contraceptive failure are *not* included in the category of unmet need, but are included in the total demand for contraception (since they would have been using had their method not failed).

## 7.4 IDEAL NUMBER OF CHILDREN

This section discusses responses of women to inquiries about what they consider to be the ideal number of children. Respondents who had no children were asked how many children they would like to have if they could choose the number of children to have in their whole life. Those who had living children were asked about the number of children they would choose if they could start their childbearing again. Responses provide an indicator of future fertility, while the information supplied by the latter group also provides a measure of unwanted fertility.

Table 7.5 shows the distribution of respondents by ideal number of children and mean ideal number of children according to actual number of living children for all women and for all men. One in every nine women gave a non-numeric response<sup>1</sup> to the question on ideal number of children. In general, Nigerian women, irrespective of their number of living children, consider a large number of children ideal.

The ideal number of children is 6.7 for all women and 7.3 for currently married women. Almost two-thirds of all women consider five or more children to be ideal. Only 6 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 5.4 for those without any children to 8.6 among those with six or more children. Clearly, Nigerian women consider a large family to be desirable.

Nigerian men, on average, want even more children than Nigerian women. Indeed, men's mean ideal number of children is about two children more than that of women (8.6 versus 6.7). Currently married men report a mean ideal number of children that is three children more than the ideal of currently married women (10.6 versus 7.3). These findings are similar to those from the 1999 NDHS (NPC, 2000:95).

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<sup>1</sup> Non-numeric responses include "it is up to God," "any number," and "don't know."

Table 7.5 Ideal number of children

Percent distribution of all women and all men by ideal number of children and mean ideal number of children for all women and for all men and for currently married women and for currently married men, according to number of living children, Nigeria 2003

Ideal number of children	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
<b>WOMEN</b>								
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	0.2	0.1	0.0	0.2	0.2	0.1	0.1	0.1
2	2.5	2.2	1.6	0.5	0.6	1.7	0.4	1.6
3	7.6	6.2	3.9	2.1	0.7	2.0	1.4	4.4
4	30.2	21.2	16.6	12.7	11.8	5.7	6.3	18.2
5	18.1	15.6	17.4	14.7	9.6	11.5	5.9	14.2
6+	34.5	44.9	51.2	57.7	65.6	63.6	68.2	50.7
Non-numeric responses	6.8	9.7	9.4	12.2	11.4	15.5	17.7	10.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,319	1,109	936	818	737	646	1,055	7,620
<b>Mean ideal number of children for:<sup>2</sup></b>								
All women	5.4	6.3	6.6	7.0	7.5	7.6	8.6	6.7
Number	2,161	1,001	849	718	653	546	868	6,795
Currently married women	6.9	6.6	6.7	7.0	7.5	7.7	8.6	7.3
Number	431	805	786	678	621	510	806	4,638
<b>MEN</b>								
0	1.5	0.0	0.0	0.0	0.0	0.0	0.2	0.8
1	0.0	0.1	0.7	0.0	0.0	0.0	0.0	0.1
2	2.0	0.3	1.3	0.0	0.0	0.0	0.4	1.2
3	5.7	11.2	5.1	7.1	1.6	2.7	1.1	4.8
4	21.0	18.3	14.3	15.6	30.8	17.3	7.2	17.3
5	20.9	14.2	16.1	19.5	9.0	7.2	6.9	15.8
6+	39.4	37.6	39.9	45.0	41.9	56.7	58.1	44.6
Non-numeric responses	9.5	18.3	22.6	12.9	16.7	16.1	26.1	15.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	1,139	168	161	145	117	102	513	2,346
<b>Mean ideal number of children for:<sup>2</sup></b>								
All men	6.7	7.3	8.3	9.6	9.3	10.2	13.4	8.6
Number	1,031	138	124	126	98	85	379	1,982
Currently married men	6.7	8.0	8.5	9.7	9.4	10.3	13.5	10.6
Number	80	105	116	122	95	83	371	972

<sup>1</sup> Includes current pregnancy

<sup>2</sup> Means are calculated excluding respondents giving non-numeric responses.

## 7.5 IDEAL NUMBER OF CHILDREN BY BACKGROUND CHARACTERISTICS

Among both women and men, there are significant variations in mean ideal number of children by background characteristics (Table 7.6). The older the respondent, the more children they consider ideal; this is true across most background characteristics. However, even the youngest women (age 15-19), think the ideal family size is about six children (5.8). Rural women want one more child than urban women (7.0 versus 6.0). Women in the North West have the largest ideal number of children (8.6), followed by those in the North East (7.8). Women in the south, on the other hand, want fewer children than women in the north. The number is lowest in the South West (4.8).

**Table 7.6 Mean ideal number of children by background characteristics**

Mean ideal number of children for all women by current age and mean ideal number of children for all men, according to background characteristics, Nigeria 2003

Background characteristic	Current age: women							All women	All men
	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
<b>Residence</b>									
Urban	5.5	5.6	5.7	6.4	6.6	7.0	7.1	6.0	6.6
Rural	6.0	6.6	7.0	7.4	8.1	8.0	8.1	7.0	9.8
<b>Region</b>									
North Central	5.2	6.0	6.1	6.4	7.1	6.9	7.6	6.2	8.0
North East	7.0	6.9	7.9	8.0	8.9	9.1	8.8	7.8	12.5
North West	7.4	8.2	8.5	9.3	9.6	9.1	9.4	8.6	12.8
South East	5.2	5.0	5.0	5.3	5.6	5.8	6.3	5.3	5.3
South South	5.0	5.1	5.3	5.7	5.9	7.0	6.9	5.5	6.7
South West	4.4	4.4	4.4	4.8	5.2	5.4	6.3	4.8	4.8
<b>Education</b>									
No education	7.5	7.8	8.4	8.7	9.1	8.7	8.6	8.3	14.4
Primary	5.9	6.5	6.5	6.6	7.2	7.1	6.8	6.6	9.0
Secondary	5.0	5.1	5.1	5.5	5.5	5.8	5.0	5.2	6.8
Higher	(5.0)	5.1	4.6	4.8	4.8	(5.6)	(5.3)	4.9	6.5
<b>Wealth quintile</b>									
Lowest	6.4	6.7	8.0	8.1	8.6	8.4	8.8	7.6	11.4
Second	6.3	7.0	7.4	7.8	8.5	8.3	8.4	7.4	11.6
Middle	6.3	6.9	7.0	7.4	8.0	8.6	7.7	7.1	9.6
Fourth	5.8	6.0	6.3	7.2	7.9	7.3	7.8	6.5	7.4
Highest	4.7	5.1	5.0	5.3	5.6	5.6	5.8	5.1	5.0
All women	5.8	6.2	6.5	7.1	7.5	7.7	7.8	6.7	na

Note: Figures in parentheses are based on 25-49 unweighted cases.  
na = Not applicable

The ideal number of children declines as level of education and wealth quintile increase. For example, the mean ideal number of children is 4.9 among women with higher education, compared with 8.3 for women with no education. Similarly, women in households in the lowest wealth quintile want 7.6 children, compared with the 5.1 children for women living in households in the highest wealth quintile, a difference of 2.5 children. These findings are similar to those of the 1999 NDHS (NPC, 2000:97), which showed that ideal family size has a strong negative correlation with level of education.

Table 7.6 also presents the findings for men. As observed earlier, men, irrespective of background characteristics, want more children than women. Similar to women, the ideal family size among urban men is lower than among rural men (6.6 and 9.8, respectively). However, the differential for men between urban and rural ideal number of children (3.2 children) is larger than the differential for women (1 child). The magnitude of regional differences is also more pronounced for men than for women. Men in the North West want almost three times as many children as men in the South West (12.8 versus 4.8). Similar to women, the mean ideal number of children is lowest in the South West and South East and highest in the North West and North East.

Men's ideal number of children decreases as level of education and wealth quintile increase. For example, men without education want twice as many children as men with higher education (14.4 versus 6.5). In fact, men without education have the largest ideal family size among all the subgroups in the sample.

## 7.6 WANTED AND UNWANTED FERTILITY

In the 2003 NDHS, women were asked a series of questions for each child born in the preceding five years (and for any current pregnancy) to determine whether the particular pregnancy was planned, unplanned but wanted at a later time, or unwanted. These questions form a potentially powerful indicator of the degree to which couples successfully control childbearing. In addition, the data can be used to gauge the effect of the prevention of unwanted births on fertility.

The questions are demanding. The respondent is required to recall accurately her wishes at one or more points in the past five years and to report them honestly. The danger of rationalization is present and a previously unwanted pregnancy may well become a cherished child. Despite these potential problems, results from previous surveys have proved plausible. Respondents are clearly willing to report unwanted conceptions, although some after-the-fact rationalization probably occurs; the result is probably an underestimate of unwanted fertility.

In DHS surveys, these retrospective questions are asked independently of the questions on the desire for more children and total desired family size and have not been cross-edited at the data processing stage.

Table 7.7 shows the percent distribution of births in the five years preceding the survey by planning status of birth, according to birth order and mother's age at birth. Although more than eight in ten births were wanted at the time, one out of every six births was either not wanted at all or was wanted later (mistimed). There is no clear pattern in the percentage of births not wanted by birth order.

Birth order and mother's age at birth	Planning status of birth				Total	Number of births
	Wanted then	Wanted later	Wanted no more	Missing		
<b>Birth order</b>						
1	83.0	8.4	7.8	0.9	100.0	1,430
2	88.3	8.0	2.7	1.0	100.0	1,169
3	88.8	8.9	1.5	0.7	100.0	1,005
4+	83.0	10.6	5.6	0.7	100.0	3,483
<b>Mother's age at birth</b>						
<20	82.4	9.4	7.1	1.1	100.0	1,235
20-24	85.4	10.9	3.1	0.5	100.0	1,916
25-29	88.4	8.8	1.8	1.0	100.0	1,776
30-34	84.1	9.8	5.6	0.6	100.0	1,100
35-39	81.7	7.5	10.1	0.7	100.0	770
40-44	76.0	9.8	12.3	1.8	100.0	246
45-49	81.9	7.5	10.6	0.0	100.0	43
Total	84.7	9.5	5.0	0.8	100.0	7,087

## 7.7 WANTED FERTILITY RATES

Table 7.8 presents total wanted fertility rates and total fertility rates for the three years preceding the survey by background characteristics. Wanted fertility rates are calculated in the same manner as the conventional age-specific fertility rates presented in Chapter 4, except that births classified as unwanted are omitted from the numerator. The remainder is cumulated to form a total wanted fertility rate, which is analogous to the conventional TFR. A comparison of the two rates suggests the potential effect of the elimination of unwanted births.

The total wanted fertility rate is 5.3, which is 0.4 births less than the total fertility rate of 5.7. This difference implies a low level of unwanted births in Nigeria. However, there are some differences between wanted TFRs and actual TFRs across subgroups. For example, the difference between the two rates is lowest in the North West (0.1 child) and largest in the South South region (0.7 child).

## 7.8 IDEAL NUMBER OF CHILDREN AND UNMET NEED BY WOMEN'S STATUS

Table 7.9 shows women's ideal family size and their unmet need for family planning by the three indicators of women empowerment—number of decisions in which the respondent participates, number of reasons for which a woman can refuse to have sexual relations with her husband, and number of reasons for which the respondent feels a husband is justified in beating his wife (see Chapter 3).

The data indicate that the higher the status of women, the lower the ideal number of children. This is true regardless of indicator of women's status. However, the relationship between women's status indicators and unmet need for family planning is unclear.

Table 7.8 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Total wanted fertility rate	Total fertility rate
<b>Residence</b>		
Urban	4.6	4.9
Rural	5.7	6.1
<b>Region</b>		
North Central	5.2	5.7
North East	6.7	7.0
North West	6.6	6.7
South East	3.5	4.1
South South	3.9	4.6
South West	3.9	4.1
<b>Education</b>		
No education	6.5	6.7
Primary	5.7	6.3
Secondary	4.3	4.7
Higher	2.6	2.8
<b>Wealth quintile</b>		
Lowest	6.1	6.5
Second	5.9	6.3
Middle	5.4	5.7
Fourth	5.6	5.9
Highest	3.8	4.2
Total	5.3	5.7

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 4.2.

Table 7.9 Ideal number of children and unmet need for family planning by women's status

Mean ideal number of children and unmet need for family planning, by women's status indicators, Nigeria 2003

Women's status indicator	Mean ideal number of children <sup>1</sup>	Number	Unmet need for family planning <sup>2</sup>			Number of women
			For spacing	For limiting	Total	
<b>Number of decisions in which woman has final say<sup>3</sup></b>						
0	8.1	1,791	11.8	2.6	14.4	2,136
1-2	7.3	1,564	12.6	5.0	17.6	1,799
3-4	6.1	643	13.3	8.6	21.9	709
5	6.3	640	8.1	9.7	17.8	692
<b>Number of reasons to refuse sex with husband</b>						
0	8.0	420	12.6	4.0	16.6	506
1-2	7.9	1,171	10.4	4.4	14.8	1,409
3-4	7.0	3,046	12.2	5.6	17.8	3,422
<b>Number of reasons wife beating is justified</b>						
0	6.4	1,493	11.5	5.5	16.9	1,632
1-2	7.5	998	9.6	5.2	14.8	1,135
3-4	7.3	761	16.1	4.4	20.5	878
5-6	8.1	1,386	11.4	5.1	16.4	1,691
Total	7.3	4,638	11.8	5.1	16.9	5,336

<sup>1</sup> Totals are calculated excluding the women giving non-numeric responses.

<sup>2</sup> See Table 7.3 for definition of unmet need for family planning.

<sup>3</sup> Either by herself or jointly with others



## INFANT AND CHILD MORTALITY

One important objective of the 2003 Nigeria Demographic and Health Survey (2003 NDHS) was to measure levels and trends of mortality among children, because infant and child mortality rates are basic indicators of a country's socioeconomic situation and quality of life. Estimates of childhood mortality are based on information from the birth history section of the questionnaire administered to women. The section began with questions about the aggregate childbearing experience of respondents (i.e., the number of sons and daughters who live with the mother, the number who live elsewhere, and the number who have died). For each of these births, information was collected on sex, month and year of birth, survivorship status, and current age or, if the child had died, age at death. This information is used to directly estimate the following five mortality rates:

Neonatal mortality:	the probability of dying within the first month of life
Postneonatal mortality:	the difference between infant and neonatal mortality
Infant mortality:	the probability of dying before the first birthday
Child mortality:	the probability of dying between the first and fifth birthdays
Under-five mortality:	the probability of dying between birth and the fifth birthday.

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

### 8.1 DATA QUALITY ASSESSMENT

The reliability of mortality estimates depends on the sampling variability of the estimates and on nonsampling errors. Sampling variability and sampling errors are discussed in Appendix B. Nonsampling errors depend on the completeness with which child deaths are reported and the accuracy of the reported date of birth and age at death. Omission of births and deaths affects mortality estimates, displacement of dates impacts mortality trends, and misreporting of age at death may distort the age pattern of mortality.

Typically, the most serious source of nonsampling errors in a survey that collects retrospective information on births and deaths arises from an underreporting of births and deaths of children who are not alive at the time of the survey. Mothers may be reluctant to talk about their dead children because of feelings associated with any death or because the culture in which they live may discourage discussing the dead. Even if a respondent is willing to discuss a dead child, she may be likely to forget events that happened in the more distant past, particularly if a child was alive only for a short time.

When selective omission of childhood deaths occurs, it is usually most severe for deaths in early infancy. However, the proportion of neonatal deaths occurring in the first week of life is high: 74 percent for the period 0-4 years preceding the survey. Furthermore, it appears that early infant deaths for births that occurred longer before the survey have not been severely underreported; 72 percent of all neonatal deaths in the 20 years preceding the survey were early neonatal deaths (Appendix Table C.5).

Another issue affecting childhood mortality estimates is the quality of reporting of age at death. If age at death is misreported, estimates may be biased, especially if the net effect of age misreporting results in transference of deaths from one age bracket to another. To minimize the error in reporting of age at death, interviewers were instructed to record the age at death in days for deaths under one month and in months for deaths under two years. They also were asked to probe for deaths reported at one year 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 C.6 shows that the num-

ber of reported deaths at age 12 months or one year of age is several times that reported for ages 11 and 13 months. It is likely, then, that some of these deaths actually occurred before one year of age but are not included in the infant mortality rate. Of course, the excess deaths reported at 12 months and one year of age have no effect on estimates of overall under-five mortality rates.

Despite evidence of heaping at age of death, it should be noted that the age at death data collected in the 2003 NDHS are far superior to those collected in the 1999 NDHS and are substantially better than those in the 1990 NDHS, both in terms of heaping of age at death and completeness of reporting of age at death. Furthermore, the majority of deaths recorded at one year of age occurred in the North East and North West (data not shown), where lack of recordkeeping and uncertainty regarding dates of events makes this type of data collection extremely difficult.

## 8.2 LEVELS

Table 8.1 shows early childhood mortality rates based on data from the 2003 NDHS. For the five years immediately preceding the survey (1999-2003), the infant mortality rate was 100 deaths per 1,000 live births. The estimates of neonatal mortality and postneonatal mortality were 48 and 52 deaths per 1,000 births, respectively. The estimate of child mortality (age 1 to age 4) was higher: 112 deaths per 1,000 children surviving to 12 months of age. The overall under-five mortality rate for the period was 201 deaths per 1,000 births.

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, Nigeria 2003

Years preceding the survey	Approximate calendar period	Neonatal mortality (NN)	Postneonatal mortality <sup>1</sup> (PNN)	Infant mortality ( <sub>1</sub> q <sub>0</sub> )	Child mortality ( <sub>4</sub> q <sub>1</sub> )	Under-five mortality ( <sub>5</sub> q <sub>0</sub> )
0-4	1999-2003	48	52	100	112	201
5-9	1994-1998	59	61	120	132	236
10-14	1989-1993	55	58	113	136	234

<sup>1</sup> Computed as the difference between the infant and the neonatal mortality rates

## 8.3 COMPARISON OF INFANT MORTALITY RATES WITH PREVIOUS DEMOGRAPHIC AND HEALTH SURVEYS

### The 2003 NDHS Compared with the 1999 NDHS

The infant mortality estimate from the 2003 NDHS (100 per 1,000) is significantly higher than those from the 1990 NDHS (87 per 1,000) and the 1999 NDHS (75 per 1,000). In the case of the latter survey, there is evidence of omission of births and deaths from the period preceding the survey (National Population Commission, 2000). The conclusion of the data quality assessment in the 1999 NDHS report is that the reported rates significantly underestimated the true mortality levels in the country. The very substantial difference between the 1999 and 2003 surveys confirms the underreporting of events in the 1999 NDHS. Thus, this chapter will include no further discussion of the 1999 results.

## The 2003 NDHS Compared with the 1990 NDHS

The 1990 NDHS infant mortality rate of 87 per 1,000 is significantly lower than the 2003 NDHS rate of 100 per 1,000, which would indicate a worsening of health conditions in the country during the 1990s. In comparing the results of the two surveys, however, it is necessary to consider that the difference between the rates may not indicate an increase in infant mortality, but rather reflect an underestimate during the previous survey.

The 2003 NDHS results for the period 10-14 years preceding the survey, which would correspond to approximately the 1989-1993 calendar years, produce an infant mortality rate of 113 per 1,000, while the 1990 NDHS estimate for approximately the same time period (1986-1990) was 87 per 1,000. The 26-point difference is substantial, and it is unlikely that sampling variability is responsible for the much higher rate of the 2003 survey.

Table 8.2 shows a comparison between the infant mortality rates from the 2003 NDHS and the 1990 NDHS, according to the four regions of analysis used in the 1990 survey.<sup>1</sup> The rates are shown for approximately the same time period, which is the 10-14 years preceding the 2003 NDHS (1989-1993) and the 0-4 years preceding the 1990 NDHS (1986-1990). For clarity, this section examines only infant mortality rates for comparable time periods. A more detailed analysis would include neonatal, postneonatal, and child mortality.

The comparison of infant mortality rates suggests that the 1990 survey underestimated mortality in certain regions. Table 8.2 shows that while the estimates for infant mortality in the Southeast and Southwest are statistically identical, there are discrepancies between the Northeast and Northwest rates. In the case of the Northwest, the rate calculated from the 2003 data is 136 per 1,000 compared with the 1990 estimate of 110 per 1,000, a 26-point difference. The difference between rates in the Northeast region is even greater: the rate from the 2003 survey is 129 per 1,000, compared with the 1990 survey rate of 83 per 1,000, a 46-point difference.

Mortality estimates from the two surveys for the Northeast and Northwest are substantially different. Greater credibility should be placed in the 2003 estimates for two reasons. First, studies have shown that respondents typically underreport infant and child deaths. Thus, it is likely that the interviewers working in the Northeast during the 2003 NDHS were better able to obtain complete information regarding respondents' dead children. Second, in the case of the Northeast, the infant mortality rates in the 1990 survey were as low as rates in the southern regions, even though women in the Northeast were comparatively disadvantaged in terms of various maternal care indicators such as antenatal and delivery care.

Although a thorough investigation of the discrepancies between the two sets of estimates is beyond the scope of this report, evidence points to a serious underestimate of mortality in the Northeast and Northwest regions during the 1990 NDHS. This, in turn, would have biased

Table 8.2 Comparison of infant mortality rates from the 2003 NDHS and the 1990 NDHS

Infant mortality rates (per 1,000 live births) for the period 10-14 years preceding the 2003 NDHS and the period 0-4 years preceding the 1990 NDHS, by region

Region/ survey	Infant mortality rate
<b>Northeast</b>	
2003 NDHS	129
1990 NDHS	83
<b>Northwest</b>	
2003 NDHS	136
1990 NDHS	110
<b>Southeast</b>	
2003 NDHS	74
1990 NDHS	78
<b>Southwest</b>	
2003 NDHS	81
1990 NDHS	75
<b>Total</b>	
2003 NDHS	113
1990 NDHS	87

Note: For this comparison, the regions of analysis are the four regions used in the 1990 NDHS.

<sup>1</sup> There are slight differences in the definitions of the regions because of changes in state boundaries that occurred after the 1990 survey. For example, the creation of Kwara and Kogi states affects the dividing line between the Northeast and Northwest regions. However, any impact this has on the results of the comparative analysis should be negligible.

downward the infant mortality rate for the entire country, because the high-fertility respondents of the north contributed more than half of the births in Nigeria in the sample. The greater contribution to the underestimate is attributable to respondents in the Northeast. In conclusion, this preliminary analysis indicates that the 1990 survey estimate of 87 per 1,000 for the 1986-1990 period was an underestimate. Thus, it is not possible to conclude that the difference between the 1990 rate (87 per 1,000) and the 2003 rate (100 per 1,000) is due to an increase in mortality risks during the intervening years. Clearly, poor data quality in the previous survey contributes to the difference.

#### 8.4 SOCIOECONOMIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 8.3 shows the 2003 NDHS infant and child mortality rates by socioeconomic variables. The estimated mortality rates are for the 10-year period preceding the survey. A 10-year period is used to calculate the rates for population subgroups to reduce sampling variability.

Table 8.3 Early childhood mortality rates by background characteristics

Neonatal, postneonatal, infant, child, and under-five mortality rates for the ten-year period preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality <sup>1</sup> (PNN)	Infant mortality ( <sub>1</sub> q <sub>0</sub> )	Child mortality ( <sub>4</sub> q <sub>1</sub> )	Under-five mortality ( <sub>5</sub> q <sub>0</sub> )
<b>Residence</b>					
Urban	37	44	81	78	153
Rural	60	61	121	139	243
<b>Region</b>					
North Central	53	49	103	70	165
North East	61	65	125	154	260
North West	55	59	114	176	269
South East	34	32	66	40	103
South South	53	68	120	63	176
South West	39	30	69	47	113
<b>Mother's education</b>					
No education	60	64	124	166	269
Primary	53	58	111	85	186
Secondary	37	35	71	45	113
Higher	(39)	(22)	(61)	(20)	(80)
<b>Wealth quintile</b>					
Lowest	59	74	133	143	257
Second	70	70	140	178	293
Middle	56	54	110	118	215
Fourth	48	39	87	101	179
Highest	23	30	52	29	79
Total	53	56	109	121	217

Note: Figures in parentheses are based on 250 to 499 exposed persons.  
<sup>1</sup> Computed as the difference between the infant and the neonatal mortality rates

As is the case in most countries, mortality rates in infancy and early childhood are higher in rural than in urban areas. In terms of infant mortality, rural rates (121 per 1,000) exceed urban rates (81 per 1,000) by a factor of about 1.5. Much of this difference arises from the neonatal rates. In the case of child mortality, rural rates (139 per 1,000) exceed urban rates (78 per 1,000) by a factor of about 1.8. Infant and child mortality rates also vary according to region. For example, the North East, North West, and South South have the highest infant mortality rates, followed by North Central. In these regions, infant mortality is estimated as exceeding 100 per 1,000. Infant mortality in the South East and South West,

however, is estimated at less than 70 per 1,000. Regional differentials in infant mortality are consistent with regional differentials in basic indicators of maternal care, such as antenatal care visits and content, as well as delivery assistance (see Chapter 9).

As expected, mortality levels decline as mother's education increases. Between education categories, the differentials are greater for postneonatal mortality and, especially, child mortality than for neonatal mortality. The mortality risk of children is also associated with the economic status of the household. The under-five mortality rate in households in the lowest and second quintiles of the wealth index is more than three times that in households in the highest quintile.

## 8.5 DEMOGRAPHIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 8.4 shows the relationship between early childhood mortality and demographic variables. As was the case with the socioeconomic differentials, the rates are shown for the 10-year period preceding the survey.

Table 8.4 Early childhood mortality rates by demographic characteristics					
Neonatal, postneonatal, infant, child, and under-five mortality rates for the ten-year period preceding the survey, by demographic characteristics, Nigeria 2003					
Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality <sup>1</sup> (PNN)	Infant mortality ( <sub>1</sub> q <sub>0</sub> )	Child mortality ( <sub>4</sub> q <sub>1</sub> )	Under-five mortality ( <sub>5</sub> q <sub>0</sub> )
<b>Sex of child</b>					
Male	60	56	116	120	222
Female	46	56	102	122	212
<b>Mother's age at birth</b>					
<20	58	65	123	143	248
20-29	48	52	100	114	203
30-39	55	57	113	112	212
40-49	(95)	(50)	(145)	(188)	(306)
<b>Birth order</b>					
1	59	47	106	105	200
2-3	40	54	94	105	189
4-6	51	58	109	128	223
7+	73	65	137	152	269
<b>Previous birth interval<sup>2</sup></b>					
<2	79	81	160	174	307
2 years	49	62	111	134	230
3 years	32	31	63	75	134
4+ years	30	31	61	59	116
<b>Birth size<sup>3</sup></b>					
Small/very small	67	72	139	na	na
Average or larger	42	43	86	na	na
<b>Medical maternity care<sup>3</sup></b>					
No antenatal or delivery care	63	67	130	na	na
Either antenatal or delivery care	37	37	74	na	na
Both antenatal and delivery care	31	34	65	na	na

Note: Figures in parentheses are based on 250 to 499 exposed persons.  
na =Not applicable  
<sup>1</sup> Computed as the difference between the infant and the neonatal mortality rates  
<sup>2</sup> Excludes first-order births  
<sup>3</sup> Rates for the five-year period preceding the survey

As expected, mortality rates are generally higher for boys than for girls. There are significant differences in mortality risks associated with mother's age and birth order. The largest differentials are in the neonatal period. Shorter birth intervals are associated with higher childhood mortality, both during and after infancy. In terms of the length of the preceding birth interval, mortality rates are markedly lower for intervals of at least two years than for shorter birth intervals. There is a further decrease in the risk of death after a three-year birth interval. In terms of under-five mortality, births following an interval of at least three years are at less than half the risk of death as births occurring within two years of a preceding birth.

Studies have shown that a child's weight at birth is an important indicator of his or her survival chances. Since relatively few mothers had information on their child's exact weight at birth, they were asked instead whether their child was very large, larger than average, average, smaller than average, or small at birth. This has been found to be a good proxy for children's weight. Children reported to be small or very small have substantially higher mortality rates. Children whose mothers did not receive antenatal or delivery care also have higher mortality rates.

## 8.6 MORTALITY DIFFERENTIALS BY WOMEN'S STATUS

The ability to access information, make decisions, and act effectively in their own interest, or in the interest of those who depend on them, are essential aspects of the empowerment of women. It follows that if women, the primary caretakers of children, are empowered, the health and survival of their infants will be enhanced. Table 8.5 presents mortality rates by three indicators of women's status: participation in household decisionmaking, attitude toward refusing to have sex with their husband, and attitude toward wife-beating. For all three indicators, there is an association between increasing women's status and decreasing levels of mortality.

Indicator of women's status	Neonatal mortality (NN)	Postneonatal mortality <sup>1</sup> (PNN)	Infant mortality ( <sub>1</sub> q <sub>0</sub> )	Child mortality ( <sub>4</sub> q <sub>1</sub> )	Under-five mortality ( <sub>5</sub> q <sub>0</sub> )
<b>Number of decisions in which woman has final say<sup>2</sup></b>					
0	57	55	112	154	249
1-2	56	61	116	123	225
3-4	40	53	94	59	147
5	48	50	97	92	181
<b>Number of reasons to refuse sex with husband</b>					
0	54	51	105	150	239
1-2	62	56	118	123	227
3-4	49	57	106	116	210
<b>Number of reasons wife beating is justified</b>					
0	47	42	89	78	160
1-2	56	52	108	112	208
3-4	46	70	115	120	221
5-6	62	63	125	167	271

<sup>1</sup> Computed as the difference between the infant and the neonatal mortality rates  
<sup>2</sup> Either by herself or jointly with others

## 8.7 HIGH-RISK FERTILITY BEHAVIOUR

Previous research has shown a strong relationship between the fertility patterns of women and the mortality risks of their children. Typically, mortality risks are greater for children who are born to mothers who are too young or too old, who are born after a short birth interval, or who have a high birth order. In this analysis, a mother is classified as “too young” if she is less than 18 years of age and “too old” if she is older than 34 years of age. A “short birth interval” is defined as a birth occurring within 24 months of the previous birth, and a child is of “high birth order” if the mother has already given birth to three or more children.

Table 8.6 shows the distribution of children born in the five years preceding the survey by risk category. While first births to women age 18-34 are considered an unavoidable risk, they are included in the analysis and are shown as a separate risk category. Column 1 shows that in the five-year period before the survey, 41 percent of births were in a single high-risk category and 24 percent were in a multiple high-risk category. Only one-fifth of births were not in any high-risk category.

Column 2 shows risk ratios for births in various high-risk categories relative to births not having any high-risk characteristics. The risk ratio for children in any avoidable high-risk category (1.4) was about 40 percent higher than for children not in any high-risk category.

The last column in Table 8.6 looks to the future and addresses the question of how many currently married women have the potential for having a high-risk birth. The results were obtained by simulating the risk category into which a birth to a currently married woman would fall if she were to become pregnant at the time of the survey. For example, a woman who was 37 years old at the time of the survey and had three previous births, the last of which occurred three years earlier, would be classified in the multiple high-risk category for being too old (35 or older) and at risk of having a high-order birth (more than three previous births). Twenty-seven percent of currently married women would fall in this category. Overall, eight in ten married women have the potential to give birth to a child with an elevated risk of mortality. Almost half of all married women (48 percent) have the potential to give birth to children in the multiple high-risk categories.

Table 8.6 High-risk fertility behaviour

Percent distribution of children born in the five years preceding the survey by category of elevated risk of dying and the risk ratio, and the percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Nigeria 2003

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women <sup>1</sup>
	Percentage of births	Risk ratio	
<b>Not in any high-risk category</b>	21.2	1.00	13.3 <sup>a</sup>
<b>Unavoidable risk category</b>			
First order births between ages 18 and 34 years	13.7	1.22	6.4
<b>Single high-risk category</b>			
Mother's age <18	7.9	1.76	2.9
Mother's age >34	0.7	1.18	3.8
Birth interval <24 months	6.7	1.10	10.0
Birth order >3	25.8	1.16	15.3
Subtotal	41.2	1.26	32.0
<b>Multiple high-risk category</b>			
Age <18 & birth interval <24 months <sup>2</sup>	1.0	1.30	1.1
Age >34 & birth interval <24 months	0.0	1.61	0.1
Age >34 & birth order >3	11.4	1.25	27.0
Age >34 & birth interval <24 months & birth order >3	2.1	2.60	5.6
Birth interval <24 months & birth order >3	9.3	2.13	14.6
Subtotal	23.9	1.72	48.3
<b>In any avoidable high-risk category</b>	65.1	1.43	80.3
Total	100.0	na	100.0
Number of births	6,219	na	5,336

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead of births *not in any high-risk category*.

na =Not applicable

<sup>1</sup> 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.

<sup>2</sup> Includes the combined categories age<18 and birth order>3

<sup>a</sup> Includes sterilized women



## MATERNAL AND CHILD HEALTH

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The state of maternal and child health is one indicator of a society's level of development, as well as an indicator of the performance of the health care delivery system. This chapter presents findings on several important aspects of reproductive and child health such as antenatal and delivery care, postnatal care, characteristics of the neonate, vaccinations, and common childhood illnesses and their treatment.

### 9.1 ANTENATAL CARE

This section provides information on issues relating to antenatal care (ANC) services. ANC from a trained provider is important in monitoring pregnancy and helping to reduce the risks for the mother and child during this period. Table 9.1 shows the percent distribution of women who had a live birth in the five years preceding the survey by antenatal care provider for the most recent birth, according to background characteristics. The data show that six in ten mothers received antenatal care from a trained medical professional. The most common antenatal care providers are nurses or midwives (37 percent). More than one-third of mothers (37 percent) did not receive any antenatal care.

Almost half of teenage mothers did not receive antenatal care, compared with approximately one-third of mothers age 20 and older. The type of antenatal care provider also varies by the age at which women give birth. Teenage mothers are also less likely to receive ANC from a doctor. The receipt of ANC also varies by birth order, with births at higher parities less likely to receive ANC, particularly from a trained provider.

There are clear differences in ANC by residence; women residing in urban areas and in the south are much more likely to receive ANC than their rural and northern-dwelling counterparts. This difference is likely to be due to the concentration of hospitals and health care facilities in urban and southern areas. It is striking that rural women are three times less likely to receive antenatal care than urban women. Forty-seven percent of mothers in the North East and 59 percent of mothers in the North West did not receive ANC, whereas in other regions the proportion of women not receiving ANC ranges from 1 to 25 percent.

There is a positive relationship between ANC and educational attainment. For example, three-fifths of mothers with no education did not receive any ANC from a trained provider. In contrast, doctors provide ANC to 70 percent of mothers with higher education.

There is also a positive relationship between the household wealth index and type of ANC provider. Whereas six in ten women in households in the two lowest quintiles did not receive ANC from a health professional, only 2 in 100 women in the most advantaged households were without care.

#### 9.1.1 Number and Timing of ANC Visits

Antenatal care can be more effective in preventing adverse pregnancy outcomes when it is sought early in the pregnancy and continues through to delivery. Table 9.2 shows number of antenatal care visits and timing of the first visit by residence. At least four antenatal visits are recommended during pregnancy to ensure proper care. Less than half of mothers made four or more ANC visits (Figure 9.1). There is a relationship between residence and number of visits. Seventy-one percent of urban women make four or more visits to an antenatal care provider compared with only 38 percent of rural women.

Table 9.1 Antenatal care

Percent distribution of women who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth, according to background characteristics, Nigeria 2003

Background characteristic	Antenatal care provider							Total	Number of women
	Doctor	Nurse/ midwife/ auxiliary midwife	Community health extension worker	Traditional birth attendant	Other	No one	Missing		
<b>Age at birth</b>									
<20	12.4	34.0	3.5	2.2	0.2	47.7	0.0	100.0	719
20-34	24.0	36.7	1.9	2.4	0.3	34.7	0.1	100.0	2,514
35-49	20.8	39.9	1.4	3.2	0.4	33.9	0.4	100.0	678
<b>Birth order</b>									
1	24.9	36.6	2.5	2.9	0.2	32.9	0.1	100.0	803
2-3	26.4	34.2	2.0	2.6	0.3	34.3	0.1	100.0	1,102
4-5	21.1	39.2	1.4	2.2	0.3	35.8	0.1	100.0	874
6+	13.9	37.4	2.5	2.3	0.5	43.2	0.2	100.0	1,132
<b>Residence</b>									
Urban	38.5	44.2	0.3	1.5	0.1	15.0	0.2	100.0	1,144
Rural	14.2	33.6	2.8	2.9	0.4	46.0	0.1	100.0	2,766
<b>Region</b>									
North Central	23.8	50.0	0.5	0.0	0.1	25.3	0.2	100.0	575
North East	10.9	36.4	5.3	0.2	0.1	47.1	0.0	100.0	862
North West	5.4	31.5	1.9	1.6	0.6	59.0	0.0	100.0	1,341
South East	50.8	45.4	0.2	0.9	0.8	0.8	1.2	100.0	222
South South	38.8	33.3	0.7	10.0	0.3	16.8	0.0	100.0	544
South West	56.0	35.9	0.8	5.0	0.0	2.3	0.1	100.0	367
<b>Education</b>									
No education	8.2	27.7	2.8	1.2	0.4	59.6	0.0	100.0	1,989
Primary	22.3	49.7	1.9	5.4	0.2	20.3	0.2	100.0	918
Secondary	42.3	45.2	1.1	2.9	0.2	8.1	0.2	100.0	862
Higher	70.2	27.9	0.0	0.0	0.0	1.7	0.2	100.0	143
<b>Wealth quintile</b>									
Lowest	7.6	26.4	3.2	2.9	0.2	59.7	0.1	100.0	852
Second	9.2	28.1	2.1	2.2	0.3	58.1	0.1	100.0	846
Middle	15.4	41.1	3.3	2.0	1.0	37.2	0.1	100.0	808
Fourth	25.5	51.6	1.1	3.6	0.1	18.0	0.2	100.0	735
Highest	56.5	39.3	0.4	1.8	0.1	1.8	0.1	100.0	670
Total	21.3	36.7	2.1	2.5	0.3	36.9	0.1	100.0	3,911

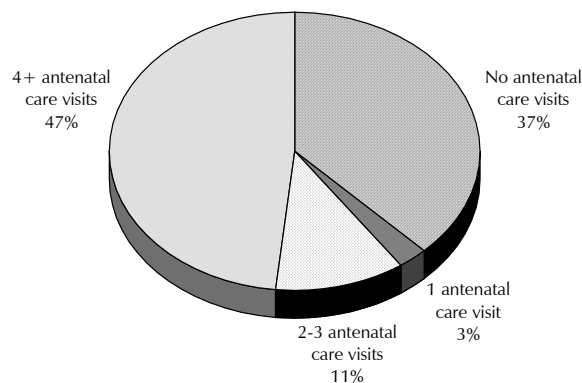
Note: If more than one source of ANC was mentioned, only the provider with the highest qualification is considered in this tabulation.

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

Percent distribution of women who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent birth, and by the timing of the first visit, according to residence, Nigeria 2003

Number and timing of ANC visits	Residence		Total
	Urban	Rural	
<b>Number of ANC visits</b>			
None	15.0	46.0	36.9
1	2.8	2.5	2.6
2-3	8.4	12.1	11.0
4+	71.1	37.6	47.4
Don't know/missing	2.7	1.8	2.1
Total	100.0	100.0	100.0
<b>Number of months pregnant at time of first ANC visit</b>			
No antenatal care	15.0	46.0	36.9
<4	23.4	13.9	16.7
4-5	38.1	22.0	26.7
6-7	20.4	15.0	16.6
8+	2.3	2.1	2.1
Don't know/missing	0.8	1.0	1.0
Total	100.0	100.0	100.0
Median months pregnant at first visit (for those with ANC)	4.9	5.1	5.0
Number of women	1,144	2,766	3,911

**Figure 9.1** Number of Antenatal Care Visits



Note: Total does not add to 100 due to missing cases.

NDHS 2003

Among women who receive antenatal care, 17 percent make their first ANC visit during the first three months of pregnancy. Although the proportions of urban and rural mothers who received antenatal care for the most recent births in the last five years differ substantially, among those who received antenatal care the proportion of women who benefit from ANC during the first trimester differs only slightly by residence. Slightly more than one-quarter of both urban and rural women who received antenatal care made their first visit during the first trimester. This result is also confirmed by the median number of months pregnant at first visit: 4.9 for urban mothers and 5.1 for rural mothers.

### 9.1.2 Components of ANC

The content of antenatal care is important in judging its quality. Certain items of care have been selected and included in the questionnaire to indicate the level of the care received. Pregnancy complications are an important source of maternal and child mortality and morbidity, and thus information on the signs of complications and tests for complications should be routinely included in all antenatal care. Moreover, in Nigeria, neonatal tetanus, malaria, and maternal anemia are major causes of neonatal mortality. In the 2003 Nigeria Demographic and Health Survey (2003 NDHS), respondents were asked whether they had received each of the following services at least once during antenatal care: weight measured, height measured, blood pressure measured, and urine and blood samples taken. Information on iron supplements and antimalarial drugs was collected and reported for the most recent birth in the five years preceding the survey, whether or not the mother saw anyone for antenatal care.

Table 9.3 shows the percent distribution of women who received antenatal care by the content of care and receipt of iron tablets or syrup and antimalarial drugs, according to background characteristics. More than half of all women were informed of signs of pregnancy complications, and about the same proportion had their height measured. More than eight in ten women had their weight measured and blood pressure taken, and almost two-thirds had urine and blood samples taken. For each component of ANC, older women were more likely than younger women to report that they had received services.

Urban-rural residence is an important determinant of the likelihood of receiving all of the specified components of ANC, with urban women receiving more components of care than rural woman. Once again, northern mothers appear to receive lower quality ANC than mothers in the south.

There is a positive correlation between both level of education and wealth quintile and the content of antenatal care women receive. Mothers with higher education and women in households higher on the wealth index receive more services than those with less education and those living in households lower on the wealth index.

Iron is a vital component of hemoglobin, which carries oxygen to the body tissues. To sustain life, mothers need iron. Almost six in ten mothers received iron supplements, while less than one in four mothers received antimalarial drugs during pregnancy. The likelihood of a mother receiving iron supplementation or an antimalarial varies by background characteristics in a pattern similar to that of antenatal care services.

Table 9.3 Antenatal care content

Percentage of women with a live birth in the five years preceding the survey who received antenatal care for the most recent birth, by content of antenatal care, and percentage of women with a live birth in the five years preceding the survey who received iron tablets or syrup or antimalarial drugs for the most recent birth, according to background characteristics, Nigeria 2003

Background characteristic	Among women who received antenatal care						Number of women	Received iron tablets or syrup	Receive anti-malarial drugs	Number of women
	Informed of signs of pregnancy complications	Weight measured	Height measured	Blood pressure measured	Urine sample taken	Blood sample taken				
<b>Age at birth</b>										
<20	45.8	78.1	48.0	71.4	53.5	50.2	376	49.2	30.4	719
20-34	56.2	83.7	57.2	81.8	65.7	66.6	1,640	60.0	40.7	2,514
35-49	58.7	83.8	61.0	83.9	68.6	72.4	446	59.2	39.5	678
<b>Birth order</b>										
1	53.9	82.1	54.7	79.4	66.3	63.3	538	60.4	43.0	803
2-3	55.1	83.9	58.8	82.4	67.0	68.9	723	60.5	37.6	1,102
4-5	58.5	85.1	58.8	81.2	63.8	66.3	561	60.5	40.3	874
6+	52.9	80.3	53.4	79.1	60.4	61.5	641	51.6	35.0	1,132
<b>Residence</b>										
Urban	66.2	91.6	64.3	90.6	81.4	81.3	970	78.4	55.3	1,144
Rural	47.8	77.2	51.4	74.1	53.4	54.6	1,492	49.4	31.6	2,766
<b>Region</b>										
North Central	47.3	90.8	63.0	92.6	74.7	75.3	429	58.7	39.4	575
North East	44.3	84.4	63.4	77.8	50.1	52.0	456	54.4	31.5	862
North West	48.1	80.2	46.8	64.1	54.1	42.2	549	40.6	25.3	1,341
South East	66.0	83.4	56.3	89.4	76.1	85.9	218	93.7	63.1	222
South South	60.0	68.8	49.0	76.6	63.4	69.9	452	69.4	56.7	544
South West	75.6	92.8	64.4	94.9	80.2	86.1	358	89.2	60.2	367
<b>Education</b>										
No education	42.0	77.7	52.0	72.2	50.5	48.2	802	39.0	23.9	1,989
Primary	52.8	79.8	52.2	78.5	60.3	65.5	730	68.7	44.6	918
Secondary	65.9	88.3	61.1	88.2	77.5	77.3	790	84.4	59.7	862
Higher	80.4	97.4	78.4	96.8	91.4	91.8	140	91.2	76.7	143
<b>Wealth quintile</b>										
Lowest	39.0	70.3	46.4	68.5	36.9	45.5	343	36.4	24.9	852
Second	41.3	72.2	52.3	69.5	49.7	47.2	354	37.0	28.0	846
Middle	48.2	78.0	52.7	74.3	56.4	54.2	507	57.8	32.1	808
Fourth	59.5	86.9	58.8	87.0	72.5	74.4	602	75.0	48.1	735
Highest	72.0	95.1	64.9	92.0	85.4	85.0	657	92.9	66.6	670
Total	55.0	82.8	56.5	80.6	64.4	65.1	2,462	57.9	38.6	3,911

### 9.1.3 Tetanus Toxoid

Tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus, a major cause of infant deaths. A pregnant woman is expected to receive two doses of the toxoid for full protection. On the other hand, if a woman has been fully vaccinated during a previous pregnancy, she may only require one dose for the current pregnancy.

Table 9.4 shows the distribution of women who received tetanus toxoid injections during pregnancy according to background characteristics.

Eleven percent of mothers received one dose and 40 percent received two or more doses of tetanus toxoid. However, almost half of respondents did not receive any tetanus toxoid injection during their pregnancy. This nonreceipt was more prevalent among teenage mothers, rural residents, mothers in the North West, those with no education, and those living in households in the lowest wealth quintile, with at least six in ten of these mothers not receiving tetanus toxoid injections.

The proportion of mothers who received two or more tetanus toxoid injections increases with age at birth, level of education, and wealth quintile. The percentage of urban women who received full tetanus coverage is almost twice that of rural women. At the regional level, there is a great disparity between mothers in the north and those in the south. In the north, only 20 to 45 percent of mothers received two or more injections, compared with 62 to 77 percent in the southern regions.

Table 9.4 Tetanus toxoid injections						
Percent distribution of women who had a live birth in the five years preceding the survey by number of tetanus toxoid injections received during pregnancy for the most recent birth, according to background characteristics, Nigeria 2003						
Background characteristic	No injections	One injection	Two or more injections	Don't know/missing	Total	Number of women
<b>Age at birth</b>						
<20	61.6	9.4	27.1	1.9	100.0	719
20-34	44.2	10.7	43.0	2.1	100.0	2,514
35-49	43.5	10.9	43.8	1.8	100.0	678
<b>Birth order</b>						
1	46.2	12.1	39.9	1.8	100.0	803
2-3	44.8	9.9	42.1	3.2	100.0	1,102
4-5	45.5	9.0	44.3	1.2	100.0	874
6+	51.8	11.2	35.5	1.5	100.0	1,132
<b>Residence</b>						
Urban	24.7	12.7	60.7	2.0	100.0	1,144
Rural	56.6	9.6	31.8	2.0	100.0	2,766
<b>Region</b>						
North Central	33.4	17.2	45.4	3.9	100.0	575
North East	56.2	12.3	30.8	0.7	100.0	862
North West	72.6	6.1	20.1	1.2	100.0	1,341
South East	7.3	12.3	77.4	2.9	100.0	222
South South	27.0	9.5	61.5	2.0	100.0	544
South West	9.3	12.5	74.0	4.3	100.0	367
<b>Education</b>						
No education	70.4	8.3	20.4	1.0	100.0	1,989
Primary	32.8	10.8	52.6	3.8	100.0	918
Secondary	16.3	15.5	66.0	2.1	100.0	862
Higher	4.6	10.2	82.1	3.1	100.0	143
<b>Wealth quintile</b>						
Lowest	69.9	9.5	19.1	1.4	100.0	852
Second	68.6	7.2	22.7	1.6	100.0	846
Middle	49.9	11.2	36.9	2.0	100.0	808
Fourth	27.4	13.8	55.7	3.1	100.0	735
Highest	10.1	11.7	76.4	1.9	100.0	670
Total	47.3	10.5	40.2	2.0	100.0	3,911

## 9.2 PLACE OF DELIVERY

Proper medical attention and hygienic conditions during delivery can reduce the risk of complication and infections that can cause serious illness or the death of the mother, her baby, or both. The 2003 NDHS collected information on the place of delivery and the type of assistance received, for all births during the five years preceding the survey. Table 9.5 shows the percent distribution of live births by place of delivery, according to background characteristics.

Table 9.5 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Nigeria 2003

Background characteristic	Place of delivery						Total	Number of births
	Any facility <sup>1</sup>	Public sector	Private sector	Home	Other	Missing		
<b>Mother's age at birth</b>								
<20	21.6	15.4	6.2	76.5	0.7	1.2	100.0	1,121
20-34	35.8	18.9	16.9	63.4	0.3	0.5	100.0	4,206
35-49	31.3	18.5	12.8	67.6	0.2	1.0	100.0	892
<b>Birth order</b>								
1	43.4	24.4	19.0	55.3	0.6	0.7	100.0	1,278
2-3	34.7	17.9	16.8	64.1	0.6	0.6	100.0	1,908
4-5	32.4	18.6	13.8	66.7	0.2	0.6	100.0	1,365
6+	22.0	13.4	8.6	77.2	0.1	0.8	100.0	1,667
<b>Residence</b>								
Urban	54.2	28.5	25.6	44.8	0.5	0.5	100.0	1,795
Rural	23.8	14.0	9.8	75.1	0.3	0.7	100.0	4,424
<b>Region</b>								
North Central	45.4	27.0	18.4	54.6	0.0	0.0	100.0	897
North East	17.1	14.5	2.6	82.2	0.0	0.6	100.0	1,472
North West	10.4	8.8	1.6	88.6	0.0	1.0	100.0	2,161
South East	84.1	19.9	64.1	13.2	0.3	2.5	100.0	371
South South	53.2	29.5	23.7	45.0	1.6	0.3	100.0	789
South West	77.6	33.7	43.9	20.8	1.5	0.1	100.0	529
<b>Mother's education</b>								
No education	10.3	7.1	3.2	88.8	0.2	0.6	100.0	3,224
Primary	40.5	22.7	17.9	58.0	0.4	1.1	100.0	1,465
Secondary	69.2	35.4	33.7	30.0	0.5	0.4	100.0	1,316
Higher	88.1	48.6	39.5	10.5	1.2	0.2	100.0	215
<b>Antenatal care visits<sup>2</sup></b>								
None	3.7	2.7	1.0	95.6	0.6	0.1	100.0	1,444
1-3	27.8	16.1	11.7	72.2	0.0	0.0	100.0	532
4+	59.2	33.0	26.2	40.2	0.5	0.1	100.0	1,855
Don't know/missing	57.7	20.3	37.4	35.2	0.0	7.1	100.0	81
<b>Wealth quintile</b>								
Lowest	11.5	7.5	4.0	87.1	0.5	0.9	100.0	1,394
Second	16.1	10.5	5.6	82.8	0.0	1.1	100.0	1,379
Middle	24.9	15.6	9.3	74.5	0.4	0.2	100.0	1,255
Fourth	43.8	28.1	15.7	55.2	0.1	0.9	100.0	1,157
Highest	79.7	34.9	44.8	19.2	0.8	0.2	100.0	1,033
Total	32.6	18.2	14.4	66.4	0.4	0.7	100.0	6,219

<sup>1</sup> Sum of percentage delivered at a public sector facility and percentage delivered at a private sector facility

<sup>2</sup> Includes only the most recent birth in the five years preceding the survey

Two-thirds of births in Nigeria are delivered at home; this means the majority of births occur without quality delivery services. Only one-third of deliveries occur in a health facility: 18 percent in the public sector and 14 percent in the private sector.

Urban women are more than twice as likely as rural women to deliver in a health facility. There are significant regional differentials in place of delivery. Births in health facilities range from a low of 10 percent in the North West to a high of 84 percent in the South East. Educational attainment, number of antenatal care visits, and household economic status are all positively correlated with the likelihood of delivering in a facility. However, birth order is positively correlated with the likelihood of delivering at home.

### **9.2.1 Assistance during Delivery**

The level of assistance received by a woman during delivery can reduce maternal and child deaths and related complications, which is one of the goals of the global Safe Motherhood Initiative. Maternal complications may arise during puerperium as a result of trauma sustained during labour, disorders of the circulatory system, or psychological disorders. The presence of a trained assistant during delivery, therefore, becomes imperative. Table 9.6 shows the percent distribution of live births by assistance provided during delivery, according to background characteristics.

Slightly more than one-third of births in Nigeria are attended by doctors, nurses, or midwives. One-fifth of births receive the assistance of a traditional birth attendant. One in every four births is assisted by a relative or some other untrained person, while 17 percent are unassisted. Differentials in delivery assistance are similar to those described previously in this chapter.



Table 9.6 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, according to background characteristics, Nigeria 2003

Background characteristic	Person providing assistance during delivery							Total	Number of births
	Doctor	Nurse/ midwife/ auxiliary midwife	Community health extension worker	Traditional birth attendant	Relative/ other	No one	Don't know/ missing		
<b>Mother's age at birth</b>									
<20	5.1	19.1	1.9	25.3	33.6	13.9	1.1	100.0	1,121
20-34	7.1	30.7	0.9	19.3	24.0	17.3	0.7	100.0	4,206
35-49	5.7	30.6	1.0	19.4	23.1	19.1	1.2	100.0	892
<b>Birth order</b>									
1	10.7	34.4	1.9	18.8	25.8	7.5	0.9	100.0	1,278
2-3	7.1	30.2	0.6	20.8	26.2	14.3	0.8	100.0	1,908
4-5	6.0	29.3	0.7	18.9	25.7	18.9	0.6	100.0	1,365
6+	3.2	21.7	1.3	22.3	24.8	25.6	1.1	100.0	1,667
<b>Residence</b>									
Urban	14.1	44.4	0.3	11.6	17.9	10.6	1.0	100.0	1,795
Rural	3.5	22.2	1.4	23.9	28.7	19.4	0.8	100.0	4,424
<b>Region</b>									
North Central	9.6	39.0	1.5	6.1	34.7	9.0	0.1	100.0	897
North East	2.4	17.4	2.2	25.4	31.7	19.8	1.0	100.0	1,472
North West	0.8	11.5	0.7	24.3	31.0	30.5	1.2	100.0	2,161
South East	20.2	67.3	0.2	3.0	6.2	0.4	2.8	100.0	371
South South	8.6	47.0	0.2	32.2	9.8	1.8	0.3	100.0	789
South West	23.9	57.0	0.7	9.0	8.4	0.9	0.1	100.0	529
<b>Mother's education</b>									
No education	2.0	10.7	1.2	26.3	32.1	26.8	1.0	100.0	3,224
Primary	5.3	38.6	1.1	19.6	24.3	10.2	0.9	100.0	1,465
Secondary	13.8	57.9	0.9	9.8	13.9	2.9	0.7	100.0	1,316
Higher	38.9	50.0	0.0	2.2	8.3	0.4	0.2	100.0	215
<b>Wealth quintile</b>									
Lowest	1.8	9.8	1.4	31.6	34.3	20.3	0.8	100.0	1,394
Second	1.5	16.2	1.3	25.4	31.1	23.3	1.2	100.0	1,379
Middle	3.8	22.5	1.3	21.7	29.5	20.6	0.6	100.0	1,255
Fourth	6.6	43.6	1.0	13.8	20.5	13.2	1.5	100.0	1,157
Highest	23.1	61.2	0.2	4.3	7.5	3.5	0.2	100.0	1,033
Total	6.6	28.6	1.1	20.4	25.6	16.9	0.9	100.0	6,219

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.

## 9.2.2 Delivery Characteristics

Caesarean section (C-section) may be performed as a result of adverse conditions developing during labour as well as a decision reached before labour. In both cases, it tends to reduce the risks of delivery for mother and child. Table 9.7 shows that C-sections are rare in Nigeria: less than 2 percent of births are delivered by this procedure. Women with higher education are the most likely to have had a C-section; among these women, 14 percent of births are delivered by C-section. Caesarean section occurs more frequently in the South East (9 percent of births) than in other regions.

Table 9.7 Delivery characteristics

Percentage of live births in the five years preceding the survey delivered by caesarian section, and percent distribution by birth weight and by mother's estimate of baby's size at birth, according to background characteristics, Nigeria 2003

Background characteristic	Delivery by caesarian section	Birth weight					Size of child at birth					Number of births
		Not weighed	Less than 2.5 kg	2.5 kg or more	Don't know/missing	Total	Very small	Smaller than average	Average or larger	Don't know/missing	Total	
<b>Mother's age at birth</b>												
<20	1.3	84.2	0.4	5.2	10.3	100.0	8.3	8.2	81.8	1.7	100.0	1,121
20-34	1.8	70.1	1.5	13.8	14.6	100.0	6.2	8.5	84.2	1.1	100.0	4,206
35-49	1.9	70.2	1.5	11.9	16.4	100.0	5.1	6.3	86.9	1.7	100.0	892
<b>Birth order</b>												
1	3.6	68.1	1.6	15.1	15.2	100.0	6.9	8.3	83.3	1.4	100.0	1,278
2-3	1.3	70.1	1.2	14.9	13.8	100.0	5.7	7.7	85.3	1.3	100.0	1,908
4-5	1.6	72.9	1.0	11.9	14.2	100.0	6.2	8.4	84.3	1.1	100.0	1,365
6+	0.8	79.0	1.4	6.3	13.4	100.0	7.0	8.2	83.5	1.3	100.0	1,667
<b>Residence</b>												
Urban	3.5	50.3	2.5	26.6	20.5	100.0	5.0	6.8	87.2	1.0	100.0	1,795
Rural	1.0	81.8	0.8	6.0	11.5	100.0	7.0	8.6	82.9	1.4	100.0	4,424
<b>Region</b>												
North Central	0.9	63.7	2.2	7.9	26.2	100.0	6.4	9.9	83.5	0.2	100.0	897
North East	1.1	87.2	0.4	4.2	8.2	100.0	8.7	10.1	78.7	2.5	100.0	1,472
North West	0.5	90.3	0.3	2.6	6.8	100.0	6.8	6.0	86.2	1.0	100.0	2,161
South East	8.6	30.9	5.6	47.9	15.6	100.0	3.6	10.3	82.5	3.6	100.0	371
South South	2.5	55.1	1.4	23.8	19.7	100.0	5.2	6.9	87.4	0.5	100.0	789
South West	3.9	31.2	2.8	35.8	30.2	100.0	2.3	8.3	88.5	0.9	100.0	529
<b>Mother's education</b>												
No education	0.4	90.7	0.4	1.7	7.2	100.0	8.3	8.9	81.0	1.7	100.0	3,224
Primary	1.3	67.7	1.3	9.9	21.1	100.0	4.9	7.5	86.5	1.0	100.0	1,465
Secondary	3.4	43.3	3.2	30.2	23.2	100.0	3.9	7.4	88.0	0.7	100.0	1,316
Higher	13.9	15.9	3.2	68.3	12.7	100.0	4.0	3.9	91.6	0.5	100.0	215
<b>Wealth quintile</b>												
Lowest	0.5	91.4	0.1	1.9	6.6	100.0	9.3	10.5	78.2	2.0	100.0	1,394
Second	0.7	88.7	0.2	2.1	8.9	100.0	7.5	8.4	82.6	1.5	100.0	1,379
Middle	1.0	80.5	1.1	5.6	12.9	100.0	5.6	6.8	86.4	1.2	100.0	1,255
Fourth	1.6	63.0	1.5	12.3	23.2	100.0	5.2	6.4	87.2	1.2	100.0	1,157
Highest	5.8	27.5	4.2	46.1	22.2	100.0	3.4	8.0	88.2	0.4	100.0	1,033
Total	1.7	72.7	1.3	12.0	14.1	100.0	6.4	8.1	84.2	1.3	100.0	6,219

Birth weight is a major determinant of infant and child health and mortality. Birth weight of less than 2.5 kilograms is considered low. For all births during the five-year period preceding the survey, mothers were asked about their perception of the child's size at birth. They were then asked to report the actual weight in kilograms if the child had been weighed after delivery. It is not surprising that with the majority of deliveries occurring at home, the vast majority of newborns were not weighed at birth (73 percent). Birth weight was reported for one in seven births in the preceding five years. The same proportion of mothers said that their newborns were weighed but they did not remember the weight. Among births for which the birth weight was known, one in ten was classified as low birth weight (i.e., the infant weighed less than 2.5 kg at birth).

The percentage of children not weighed varies by background characteristics. Weighing at birth is less prevalent among teenage mothers, higher parity births, births in rural areas, and those in the North East and North West. The likelihood of being weighed at birth is also low among mothers with no education and those living in households in the lowest wealth quintile.

According to mothers' estimates of their newborns' size, more than eight in ten (84 percent) were of average or larger size. However, almost one in six births was reported as either very small or smaller than average.

### **9.3 POSTNATAL CARE**

Postnatal care is important both for the mother and the child to treat complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. The postnatal period is defined as the time between the delivery of the placenta and 42 days (6 weeks) following the delivery. The timing of postnatal care is important. The first two days after delivery are critical, since most maternal and neonatal deaths occur during this period. Table 9.8 measures postnatal care for births that occurred outside a health facility in the five years preceding the survey. If a woman had more than one live birth outside a health facility, only the most recent birth is considered.

In Nigeria, less than one-fourth of women who gave birth outside a health facility receive postnatal care within two days of birth (23 percent). An additional 3 percent have a checkup within the first week after birth. However, more than seven out of ten women who deliver outside a health facility receive no postnatal care. There are significant differentials by residence, region, education, and economic index.

Table 9.8 Postnatal care by background characteristics

Percent distribution of women whose last live birth in the five years preceding the survey occurred outside a health facility, by timing of postnatal care, according to background characteristics, Nigeria 2003

Background characteristic	Timing of first postnatal checkup				Did not receive postnatal checkup <sup>1</sup>	Total	Number of women
	Within 2 days of delivery	3-6 days after delivery	7-41 days after delivery	Don't know/missing			
<b>Age at birth</b>							
<20	23.9	2.1	2.7	0.3	71.0	100.0	546
20-34	23.9	2.9	2.2	0.6	70.5	100.0	1,570
35-49	20.1	1.6	3.4	0.7	74.2	100.0	449
<b>Birth order</b>							
1	25.0	2.0	2.5	0.4	70.1	100.0	454
2-3	23.6	3.1	3.0	0.5	69.8	100.0	691
4-5	25.1	2.0	2.5	0.5	69.8	100.0	561
6+	20.7	2.5	2.1	0.7	74.0	100.0	860
<b>Residence</b>							
Urban	31.3	4.4	3.5	0.4	60.4	100.0	498
Rural	21.3	2.0	2.2	0.6	73.9	100.0	2,068
<b>Region</b>							
North Central	13.8	1.7	4.3	0.2	80.1	100.0	303
North East	31.5	1.7	1.9	0.8	64.0	100.0	701
North West	18.6	1.5	1.3	0.5	78.1	100.0	1,194
South East	17.2	2.3	3.1	1.4	76.0	100.0	37
South South	32.9	7.7	3.4	0.7	55.4	100.0	251
South West	26.9	10.7	15.0	0.0	47.4	100.0	81
<b>Education</b>							
No education	21.0	1.5	2.0	0.6	74.9	100.0	1,766
Primary	25.5	4.2	3.1	0.4	66.8	100.0	519
Secondary	32.7	5.6	3.0	0.6	58.1	100.0	265
Higher	*	*	*	*	*	*	15
<b>Wealth quintile</b>							
Lowest	18.9	1.0	1.7	0.6	77.8	100.0	740
Second	19.0	2.1	1.5	1.3	76.1	100.0	692
Middle	24.9	3.1	2.4	0.0	69.7	100.0	589
Fourth	29.8	3.7	3.7	0.0	62.8	100.0	412
Highest	41.5	6.6	8.8	0.4	42.7	100.0	133
Total	23.2	2.5	2.5	0.6	71.3	100.0	2,566

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

<sup>1</sup> Includes women who received the first postnatal checkup after 41 days

## 9.4 REPRODUCTIVE HEALTH CARE BY WOMEN'S STATUS

Table 9.9 shows women's use of antenatal, delivery, and postnatal care services by three indicators of women's status (empowerment) defined in Chapter 3. In societies where health care is widespread, women's status and age may not affect their access to reproductive health services; in other societies, however, increased empowerment of women is likely to be associated with increased ability to seek out and use health services to better meet their reproductive health needs, including the need for safe motherhood.

**Table 9.9 Reproductive health care by women's status**

Percentage of women with a live birth in the five years preceding the survey who received antenatal and postnatal care from a health professional for the most recent birth, and percentage of births in the five years preceding the survey for which mothers received professional delivery care, by women's status indicators, Nigeria 2003

Women's status indicator	Percentage of women who received antenatal care from a doctor, nurse/midwife, or auxiliary midwife	Percentage of women who received postnatal care within first two days of delivery <sup>1</sup>	Number of women	Percentage of births for which mothers received delivery care from a doctor, nurse/midwife, or auxiliary midwife	Number of births
<b>Number of decisions in which woman has final say<sup>2</sup></b>					
0	50.2	35.4	1,616	24.0	2,585
1-2	60.4	54.8	1,328	34.7	2,152
3-4	77.4	66.3	478	59.1	756
5	75.5	66.3	489	60.6	726
<b>Number of reasons to refuse sex with husband</b>					
0	53.3	44.6	359	33.7	557
1-2	54.3	45.0	1,037	27.3	1,677
3-4	63.5	52.2	2,515	40.3	3,985
<b>Number of reasons wife beating is justified</b>					
0	72.3	61.5	1,188	54.1	1,821
1-2	63.3	49.5	836	36.2	1,327
3-4	57.0	48.1	667	31.5	1,095
5-6	47.7	38.9	1,220	22.4	1,977
Total	60.1	49.6	3,911	36.2	6,219

<sup>1</sup> Includes mothers who delivered in a health facility

<sup>2</sup> Either by herself or jointly with others

The first women's status indicator in Table 9.9 is positively related to women's empowerment and reflects the degree of decisionmaking control women are able to exercise in areas that affect their lives and environments. The second indicator reflects women's perception of sexual roles and women's rights over their bodies, and relates positively to women's sense of self and empowerment. The final indicator, which reflects women's perception of gender roles, is negatively related to women's level of empowerment. A higher value for this indicator (the number of reasons a woman believes wife beating is justified) is interpreted as indicating lower empowerment.

Table 9.9 shows that decisionmaking ability and perceptions regarding the justification of wife beating are strongly correlated with reproductive health care. The more empowered a woman, the more likely she is to receive reproductive health services. The pattern is less clear regarding the relationship between reproductive health care and reasons to refuse sex with the husband, although women who agree with at least three specified reasons are more likely to receive services than women agreeing with fewer reasons.

## 9.5 VACCINATION OF CHILDREN

Vaccination of children is an important part of current preventive measures designed to improve child health and reduce morbidity and mortality. According to the World Health Organization (WHO), to be considered fully vaccinated, a child should receive a dose of BCG vaccine against tuberculosis at birth or soon after; three doses of DPT for the prevention of diphtheria, pertussis (whooping cough), and tetanus; at least three doses of polio vaccine; and a vaccination against measles. The DPT and polio vaccinations should be given at approximately 4, 8, and 12 weeks of age; there is also a dose of polio vaccine that should be given at birth. Measles vaccine should be given at or soon after the child reaches nine months. WHO further recommends that children receive the complete schedule of vaccinations before 12 months of age and that the vaccinations be recorded on a health card given to the parents or caretaker.

Information on vaccination status was collected from vaccination cards shown to the interviewer and from mothers' verbal reports if no card was available. If the cards were available, the interviewers copied vaccination dates directly onto the questionnaire. If a vaccination card was presented but a vaccine had not been recorded on the card as having been given, the mother was asked to recall whether that particular vaccine had been given. The mother was then asked whether the child had received other vaccinations that were not recorded on the card, and if so, they too were noted on the questionnaire. If the mother was not able to provide a card for the child, she was asked to recall whether the child had received BCG, polio, DPT (including the number of doses for each), and measles vaccinations. The information collected covered all children under age five, although most data presented here are restricted to children age 12-23 months to better reflect children who have reached the age by which they should be fully vaccinated.

Information on vaccination coverage among children age 12-23 months is shown in Table 9.10 by source of information used to determine coverage (i.e., vaccination record or mother's report). Health cards were presented for just one-fifth (21 percent) of children age 12-23 months. The third row of the table shows the proportion of children who were immunized at any age up to the time of the survey, while the last row shows the proportion who were vaccinated by age 12 months, the age at which vaccination coverage should be complete.

Table 9.10 Vaccinations by source of information												
Percentage of children 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 2003												
Source of information	Percentage of children who received:											Number of children
	BCG	DPT			Polio <sup>1</sup>			Measles	All <sup>2</sup>	No vaccinations		
		1	2	3	0	1	2	3				
<b>Vaccinated at any time before the survey</b>												
Vaccination card	20.2	18.0	14.0	10.4	14.6	17.8	14.4	10.7	13.5	8.3	0.1	213
Mother's report	28.1	24.6	17.7	11.0	13.1	49.4	37.9	18.7	22.4	4.7	26.5	786
Either source	48.3	42.6	31.7	21.4	27.8	67.2	52.3	29.4	35.9	12.9	26.5	999
Vaccinated by 12 months of age <sup>3</sup>	46.9	38.7	30.1	20.1	27.1	63.7	50.6	26.8	31.4	11.3	30.6	999

<sup>1</sup> Polio 0 is the polio vaccination given at birth.  
<sup>2</sup> BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)  
<sup>3</sup> For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.

According to information from both the vaccination records and mothers' recall, only 13 percent of Nigerian children age 12-23 months can be considered fully immunized, the lowest vaccination rate among the African countries in which DHS surveys have been conducted since 1998. Less than half of children have received each of the vaccinations, with the exception of Polio 1 (67 percent) and Polio 2 (52 percent). Although 43 percent of children receive DPT 1, the proportion who go on to receive the third dose falls off to 21 percent; the dropout rate<sup>1</sup> is thus 50 percent, slightly lower than the dropout rate of 56 percent for polio.

WHO recommends that children receive the complete schedule of recommended vaccinations by 12 months of age. In Nigeria, however, only 11 percent of children age 12-23 months received all of the recommended vaccinations before their first birthday.

### 9.5.1 Vaccination by Background Characteristics

Table 9.11 presents vaccination coverage levels among children age 12-23 months by background characteristics, to provide an indication of the success of the vaccination programme in reaching all sub-groups of the population.

The data show that the percentage of female children age 12-23 months who are fully immunized is almost twice that of their male counterparts (17 versus 9 percent). There are variations in percentage of children who received specific vaccinations by urban-rural residence, region, level of education, and wealth quintile. More than three times as many urban children as rural children are fully immunized (7 and 25 percent, respectively). In general, a higher proportion of children in the southern regions were vaccinated compared with those in the north. In the northern regions, vaccination coverage ranges from 4 to 12 percent, whereas in the southern regions the lowest vaccination rate is 21 percent and the highest in 45 percent. The differentials by wealth quintile are almost as large. While less than 4 percent of children living in households in the two lowest quintiles are fully vaccinated, 40 percent of children in households in the highest quintile have received all recommended vaccinations.

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<sup>1</sup> Dropout rate = (Dose 1 – Dose 3) \* 100/Dose 1

Table 9.11 Vaccinations by background characteristics

Percentage of children 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 2003

Background characteristic	Percentage of children who received:											Percentage with a vaccination card	Number of children
	BCG	DPT			Polio <sup>1</sup>				Measles	All <sup>2</sup>	No vaccinations		
		1	2	3	0	1	2	3					
<b>Sex</b>													
Male	46.5	41.4	30.4	19.1	28.2	65.8	50.8	26.5	33.8	9.1	27.7	20.2	512
Female	50.2	44.0	33.1	23.8	27.3	68.6	53.9	32.5	38.1	17.0	25.3	22.5	486
<b>Birth order</b>													
1	59.6	51.5	39.8	29.0	37.3	68.7	54.4	32.1	43.5	17.8	19.2	33.1	188
2-3	48.0	44.5	32.5	22.3	27.0	66.0	53.8	29.2	33.8	13.4	29.8	20.6	332
4-5	52.8	42.7	34.9	24.1	30.2	71.3	54.6	32.1	39.3	14.4	22.7	21.7	220
6+	36.8	33.8	22.3	12.3	19.8	64.2	46.8	25.7	30.2	7.6	30.8	13.2	259
<b>Residence</b>													
Urban	70.1	63.5	51.3	40.2	40.2	75.3	64.4	42.0	52.1	25.1	16.7	35.6	312
Rural	38.4	33.1	22.9	12.8	22.1	63.5	46.8	23.7	28.5	7.4	31.0	14.8	687
<b>Region</b>													
North Central	63.4	54.1	33.0	23.8	36.2	70.0	52.6	36.8	44.6	12.4	20.7	22.9	149
North East	31.1	23.8	14.0	9.1	18.7	61.6	41.7	24.8	22.5	6.0	30.5	17.1	219
North West	27.5	20.9	13.2	5.8	12.0	54.4	39.9	16.4	15.6	3.7	40.5	9.6	356
South East	83.4	83.2	66.3	58.5	39.6	80.7	68.1	57.4	64.1	44.6	15.3	43.1	74
South South	76.1	74.3	63.3	32.5	47.8	86.0	77.2	40.0	66.9	20.8	6.5	37.9	120
South West	85.0	83.7	80.2	67.8	65.4	93.0	83.1	44.8	73.1	32.5	5.1	36.4	81
<b>Mother's education</b>													
No education	22.7	19.4	9.8	5.6	12.8	54.7	38.9	18.7	15.6	3.8	41.1	7.3	484
Primary	57.7	48.5	37.6	20.5	26.7	77.7	58.5	34.2	42.5	13.0	18.6	26.1	247
Secondary	84.1	77.8	68.4	54.0	52.5	80.4	70.9	46.8	66.2	32.4	8.4	41.5	230
Higher	(97.0)	(88.4)	(52.1)	(29.4)	(76.1)	(78.1)	(69.9)	(30.8)	(68.1)	(11.3)	(2.4)	(46.2)	38
<b>Wealth quintile</b>													
Lowest	22.8	21.9	15.3	7.1	12.6	61.5	43.9	20.0	15.9	3.4	36.1	11.5	206
Second	30.2	27.1	17.5	7.7	16.6	61.6	41.3	23.6	22.9	3.9	34.8	13.3	202
Middle	42.8	33.8	20.8	13.3	19.0	61.0	47.0	25.1	32.0	8.9	31.8	16.1	219
Fourth	59.6	48.5	35.3	22.2	37.0	67.3	57.2	26.3	41.9	11.0	22.9	25.9	185
Highest	91.4	86.9	74.6	60.6	57.7	86.7	74.7	54.4	70.7	39.9	4.3	42.3	187
Total	48.3	42.6	31.7	21.4	27.8	67.2	52.3	29.4	35.9	12.9	26.5	21.3	999

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

<sup>1</sup> Polio 0 is the polio vaccination given at birth.

<sup>2</sup> BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

### 9.5.2 Vaccination in the First Year of Life

Table 9.12 shows the percentage of children age 12-59 months who received specific vaccinations during the first year of life, according to age cohort. There has been little change in vaccination coverage over time. However, the data indicate that the children age 24-35 months at the time of the survey were the most likely of all the cohorts to have received at least one vaccination by 12 months of age. For example, whereas 24 percent of these children received no vaccination during the first year of life, 31 percent of the youngest children age 12-23 months at the time of the survey received no vaccinations, indicating a slight decrease in vaccination rates. In particular, the data indicate a decline in vaccination rates for all three doses of polio.



**Table 9.12 Vaccinations in first year of life**

Percentage of children age 12-59 months at the time of the survey who received specific vaccines by 12 months of age, and percentage with a vaccination card, by current age of child, Nigeria 2003

Current age in months	Percentage of children who received:										No vaccinations	Percentage with a vaccination card	Number of children
	BCG	DPT			Polio <sup>1</sup>				Measles	All <sup>2</sup>			
		1	2	3	0	1	2	3					
12-23	46.9	38.7	30.1	20.1	27.1	63.7	50.6	26.8	31.4	11.3	30.6	21.3	999
24-35	51.4	41.8	31.5	22.9	23.4	70.8	58.5	34.8	28.6	10.3	23.9	17.2	1,050
36-47	40.5	32.8	27.1	19.8	16.3	61.4	55.8	36.2	26.6	10.3	35.8	10.1	1,067
48-59	41.4	36.3	29.0	18.1	18.2	65.8	60.1	34.6	32.0	8.7	30.0	8.5	899
12-59	46.0	38.0	30.0	20.8	21.4	66.2	56.9	33.5	30.4	10.6	29.3	14.4	4,014

Note: Information was obtained from the vaccination card or if there was no written record, from the mother. For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccinations.

<sup>1</sup> Polio 0 is the polio vaccination given at birth.

<sup>2</sup> BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

## 9.6 ACUTE RESPIRATORY INFECTION AND FEVER

Acute respiratory infection (ARI) is a common cause of illness and death during infancy and childhood. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by ARI. In the 2003 NDHS, the prevalence of ARI was estimated by asking mothers whether their children under age five had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the survey. These symptoms are consistent with ARI. It should be noted that the morbidity data collected are subjective in the sense that they are based on a mother's perception of illness without validation by medical personnel.

Table 9.13 shows that in the two weeks preceding the survey, 10 percent of children experienced symptoms of ARI and 31 percent had a fever. Prevalence peaks at age 6-11 months and then declines among older children. Children of more educated mothers and those living in more economically advantaged households are the least likely to experience these illnesses. There is significant regional variation in prevalence of fever and ARI symptoms.

Among children who experienced symptoms of ARI or fever, treatment was sought from a health facility or health care provider for almost one-third (31 percent). The likelihood of seeking treatment increases as the education of the mother and the economic index of the household increases. The proportion of children ill with fever and/or who had symptoms of ARI for whom treatment was sought ranges from a low of 20 percent in the North East to a high of 53 percent in the South West.

Table 9.13 Prevalence and treatment of symptoms of ARI and fever

Percentage of children under five years of age who had a cough accompanied by short, rapid breathing (symptoms of ARI), and percentage of children who had fever in the two weeks preceding the survey, and percentage of children with symptoms of ARI and/or fever for whom treatment was sought from a health facility or provider, by background characteristics, Nigeria 2003

Background characteristic	Percentage of children with symptoms of ARI	Percentage of children with fever	Number of children	Among children with symptoms of ARI and/or fever, percentage for whom treatment was sought from a health facility/provider <sup>1</sup>	Number of children
<b>Age in months</b>					
<6	12.6	24.3	663	24.4	196
6-11	16.3	41.2	668	34.3	303
12-23	11.8	39.5	999	34.8	429
24-35	9.9	33.4	1,050	35.8	376
36-47	7.8	26.4	1,067	29.7	316
48-59	5.9	21.7	899	21.4	210
<b>Sex</b>					
Male	10.5	31.0	2,717	32.1	935
Female	10.1	31.1	2,628	30.6	896
<b>Residence</b>					
Urban	7.8	27.0	1,620	40.0	484
Rural	11.4	32.8	3,726	28.3	1,347
<b>Region</b>					
North Central	6.7	23.9	781	49.5	201
North East	16.2	37.4	1,225	19.5	514
North West	8.8	35.7	1,818	33.4	682
South East	6.3	22.9	347	36.6	89
South South	12.2	29.5	684	25.1	243
South West	6.8	17.2	489	52.6	102
<b>Mother's education</b>					
No education	11.0	35.7	2,675	22.0	1,022
Primary	11.3	28.3	1,259	39.5	409
Secondary	8.4	24.2	1,215	46.4	343
Higher	5.4	27.6	197	51.7	57
<b>Wealth quintile</b>					
Lowest	11.0	32.8	1,162	18.9	419
Second	12.4	35.0	1,116	21.5	432
Middle	12.1	34.0	1,071	30.1	391
Fourth	9.2	30.5	1,024	44.5	348
Highest	6.2	21.7	972	54.2	240
Total	10.3	31.0	5,345	31.4	1,831

ARI = Acute respiratory infection

<sup>1</sup> Excludes pharmacy, shop, and traditional practitioner

## 9.7 HOUSEHOLD HYGIENE

### 9.7.1 Presence of Materials for Washing Hands

The connection between hand-washing and diarrhoea is well established. Increasing the frequency of hand-washing substantially decreases the occurrence of diarrhoea in young children. The proximity of the materials necessary for washing hands, such as running water, soap or cleanser, and a basin, may lead to more frequent hand-washing. Table 9.14 shows that less than half of households in the country have access to the three specified materials to wash hands (43 percent). The presence of these materials is higher in urban than rural areas (50 versus 40 percent). Prevalence by region ranges from a high of seven in ten households in the South South and South East to a low of three in ten households in the North West. It should be noted that a quarter of households do not have any hand-washing materials.

Table 9.14 Hand-washing materials in the household

Percentage of households with hand-washing materials in dwelling, yard, or plot, by background characteristics, Nigeria 2003

Background characteristic	Hand-washing materials			All three hand-washing materials	No hand-washing materials	Number of households
	Water/tap	Soap, ash, or other cleansing agent	Basin			
<b>Residence</b>						
Urban	64.3	66.7	66.1	49.8	22.0	2,598
Rural	63.4	55.0	53.5	39.8	27.3	4,627
<b>Region</b>						
North Central	55.3	51.4	56.2	36.8	32.6	1,040
North East	73.3	50.2	50.1	35.3	19.6	1,185
North West	56.9	55.4	36.3	29.0	31.0	1,911
South East	72.3	77.8	87.0	67.5	12.5	690
South South	76.8	81.2	88.8	68.6	9.6	1,315
South West	52.4	44.6	50.9	38.0	42.2	1,083
<b>Source of drinking water</b>						
Piped	67.6	65.8	61.9	50.0	22.5	1,249
Protected well	68.2	71.1	71.0	56.1	18.8	1,737
Open well	60.4	47.4	40.3	30.8	32.8	2,058
Surface	58.6	52.9	60.0	38.0	27.9	1,597
Other	68.0	68.7	68.0	50.3	18.2	579
<b>Time to get water</b>						
In dwelling/yard/plot	69.1	65.3	62.2	51.5	23.1	2,046
<5 minutes	63.1	64.8	55.0	38.8	21.6	319
5 to 9 minutes	64.9	62.8	63.7	47.0	22.8	866
10 to 29 minutes	59.3	54.1	53.5	38.1	29.5	1,780
30 to 59 minutes	58.9	51.3	50.9	35.7	29.3	1,142
60+ minutes	65.6	59.6	61.6	43.3	21.7	1,011
Total	63.8	59.2	58.0	43.4	25.4	7,225

Note: Total includes 5 cases with data missing on source of water and 60 cases with data missing on time to get water.

## 9.7.2 Disposal of Children's Stools

The proper disposal of children's faeces is extremely important in preventing the spread of disease. If faeces are left uncontained, disease may be spread by direct contact or through animal contact. Table 9.15 presents information on the disposal of faecal matter of children under age five, by background characteristics. Two-thirds of children's stools are usually contained. Children's stools are more likely to be contained in urban than rural areas (83 and 61 percent, respectively). There is a positive relationship between mothers' education and children's stool containment.

Table 9.15 Disposal of child's stools

Percent distribution of mothers whose youngest child under five years is living with her by way in which child's faecal matter is disposed of, according to background characteristics and type of toilet facilities in household, Nigeria 2003

Background characteristic	Stools contained			Stools uncontained			Uses diapers			Total	Number of mothers	
	Child always uses toilet/latrine	Thrown into toilet/latrine	Buried in yard	Thrown outside dwelling	Thrown outside yard	Rinsed away	Disposable	Washable	Other			
<b>Residence</b>												
Urban	9.2	72.3	1.1	4.0	5.3	3.2	1.1	1.4	0.5	1.8	100.0	1,068
Rural	5.2	52.5	3.5	15.4	16.8	2.6	0.4	1.5	0.4	1.8	100.0	2,532
<b>Region</b>												
North Central	7.8	37.0	1.5	19.1	22.5	2.9	1.7	6.8	0.5	0.3	100.0	531
North East	3.4	69.2	0.9	8.2	15.2	1.2	0.5	0.5	0.1	0.8	100.0	793
North West	4.1	69.5	3.5	9.1	8.6	1.2	0.0	0.0	0.2	3.8	100.0	1,251
South East	15.3	54.7	1.0	10.6	7.3	6.3	1.4	1.1	0.8	1.4	100.0	209
South South	6.7	40.6	7.9	22.3	10.6	6.5	0.8	1.9	1.6	1.0	100.0	473
South West	13.9	52.5	0.3	7.4	20.3	4.4	0.3	0.3	0.0	0.6	100.0	343
<b>Mother's education</b>												
No education	4.6	59.7	3.3	12.6	14.8	1.7	0.0	0.8	0.3	2.3	100.0	1,833
Primary	4.8	52.5	2.7	16.1	18.4	2.9	0.1	2.0	0.4	0.1	100.0	836
Secondary	10.2	61.4	2.2	8.0	7.0	5.1	1.4	1.6	0.9	2.1	100.0	798
Higher	18.8	59.2	0.0	2.3	1.9	2.2	5.8	5.9	0.0	3.9	100.0	134
<b>Toilet facilities</b>												
None	2.5	9.3	5.3	33.5	41.2	3.5	0.4	1.9	0.5	1.9	100.0	828
Pit latrine	6.0	76.2	2.0	5.2	5.8	1.4	0.2	1.3	0.2	1.7	100.0	2,238
Improved pit latrine	2.9	72.1	1.1	6.8	2.0	8.4	1.6	0.0	5.0	0.0	100.0	87
Flush toilet	18.7	62.6	0.9	4.2	0.8	6.1	2.7	1.7	0.5	1.8	100.0	398
Other	(0.0)	(12.5)	(14.3)	(34.3)	(14.1)	(17.8)	(0.0)	(0.0)	(1.4)	(5.5)	(100.0)	48
Total	6.4	58.4	2.8	12.0	13.4	2.8	0.6	1.4	0.4	1.8	100.0	3,601

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes one case with data missing on toilet facilities.

## 9.8 DIARRHOEA

Dehydration from diarrhoea is a major cause of death among young children in Nigeria. In the 2003 NDHS, mothers were asked whether any of their children under five years of age had diarrhoea at any time during the two-week period prior to the survey. If any child had diarrhoea, the mother was asked about feeding practices during the diarrhoeal episode and about what actions were taken to treat the diarrhoea. Table 9.16 shows percentage of children less than five years with diarrhoea in the preceding two weeks before the survey, by background characteristics. Nearly one-fifth of children had diarrhoea in the two weeks preceding the survey.

Table 9.16 Prevalence of diarrhoea

Percentage of children under five years with diarrhoea in the two weeks preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Diarrhoea in the two weeks preceding the survey	Number of children
<b>Age in months</b>		
<6	12.8	663
6-11	26.6	668
12-23	27.2	999
24-35	22.8	1,050
36-47	14.4	1,067
48-59	8.8	899
<b>Sex</b>		
Male	19.3	2,717
Female	18.3	2,628
<b>Residence</b>		
Urban	14.5	1,620
Rural	20.7	3,726
<b>Region</b>		
North Central	14.9	781
North East	35.1	1,225
North West	18.9	1,818
South East	8.6	347
South South	8.0	684
South West	6.4	489
<b>Mother's education</b>		
No education	24.0	2,675
Primary	17.2	1,259
Secondary	11.2	1,215
Higher	6.4	197
<b>Hand-washing materials in household</b>		
Water/tap	19.8	3,478
Soap/ash/other cleansing agent	18.2	3,157
Basin	16.3	2,951
All three hand-washing materials	15.9	2,193
None	16.9	1,288
<b>Source of drinking water</b>		
Piped	17.3	801
Protected well	12.6	1,107
Open well	23.9	1,921
Surface	17.2	1,112
Other	19.2	402
<b>Wealth quintile</b>		
Lowest	21.7	1,162
Second	23.6	1,116
Middle	19.6	1,071
Fourth	18.9	1,024
Highest	9.0	972
Total	18.8	5,345

Note: Total includes 2 cases with data missing on source of drinking water.

Children age 6-11 and 12-23 months have the highest prevalence of diarrhoea (27 percent each). Rural children are more likely than urban children to have diarrhoea. The likelihood of children in the North East having diarrhoea is more than five times that of children in the South West (35 versus 6 percent). Incidence of diarrhoea is inversely related to educational attainment. There is little variation by the economic status of the household, with the exception of children in households in the highest wealth quintile, who are the least likely to have had diarrhoea.

### 9.8.1 Knowledge of ORS Packets

A simple and effective response to dehydration associated with diarrhoea is a prompt increase in the child's fluid intake through food and oral rehydration therapy (ORT). ORT may include the use of a solution prepared from commercially produced packets of oral rehydration salts (ORS) or a homemade mixture usually prepared from sugar, salt, and water. Table 9.17 shows the proportion of women with children under five years of age who know about ORS packets.

Two-thirds of mothers (65 percent) know about ORS packets. There is significant variation by background characteristics. The most striking variation is observed at the regional level: knowledge ranges from a low of 37 percent in the South East to a high of 80 percent in the North West.

### 9.8.2 Diarrhoea Treatment

Mothers of children who had diarrhoea in the two weeks preceding the survey were asked what was done to manage or treat the illness. The results are shown in Table 9.18. Twenty-two percent of mothers reported their children with diarrhoea were taken to a health facility. Less than one-fifth of children (18 percent) were given a solution made from ORS. Twenty-nine percent, however, received either ORS or recommended home fluids (RHF), which are either cereal-based liquids or a mixture of sugar, salt, and water. Forty percent received ORS, RHF, or increased fluids. Other treatments were also common. In particular, half of all children received a pill or syrup, and 15 percent received some other home treatment. One in five children with diarrhoea were given no treatment at all.

The small number of children in the sample who had diarrhoea in the two weeks before the survey makes comparisons by region or mother's education difficult. There is a significant differential, however, by residence, with urban children more likely than rural children to have gone to a health facility. For example, 30 percent of urban children were taken to a health care facility compared with just 19 percent of rural children. There is generally a positive correlation between treatment of diarrhoea and the economic status of the household.

Table 9.17 Knowledge of ORS packets

Percentage of mothers with births in the five years preceding the survey who know about oral rehydration salts (ORS) packets for treatment of diarrhoea in children, by background characteristics, Nigeria 2003

Background characteristic	Percentage of mothers who know about ORS packets	Number of mothers
<b>Age</b>		
15-19	54.1	356
20-24	62.5	850
25-29	67.1	1,055
30-34	68.7	713
35-49	65.6	936
<b>Residence</b>		
Urban	75.5	1,144
Rural	60.5	2,766
<b>Region</b>		
North Central	57.0	575
North East	67.7	862
North West	79.7	1,341
South East	36.7	222
South South	38.6	544
South West	72.5	367
<b>Education</b>		
No education	65.2	1,989
Primary	60.3	918
Secondary	67.1	862
Higher	76.1	143
<b>Wealth quintile</b>		
Lowest	50.0	852
Second	58.4	846
Middle	70.0	808
Fourth	73.9	735
Highest	75.7	670
Total	64.9	3,911

ORS = Oral rehydration salts

Table 9.18 Diarrhoea treatment

Percentage of children under five years of age who had diarrhoea in the two weeks preceding the survey taken for treatment to a health provider, percentage who received oral rehydration therapy (ORT), and percentage given other treatments, by background characteristics, Nigeria 2003

Background characteristic	Percent-age taken to a health provider <sup>1</sup>	Oral rehydration therapy					Other treatments					Number of children with diarrhoea	
		ORS packets	RHF	Either ORS or RHF	In-creased fluids	ORS, RHF or in-creased fluids	Pill or syrup	Injec-tion	Intra-venous solution	Home remedy/ other	Missing		No treatment
<b>Age in months</b>													
<6	20.1	14.4	12.2	22.4	9.5	27.2	35.4	1.1	0.0	21.1	1.1	27.6	85
6-11	27.4	20.6	14.8	31.5	16.5	39.2	45.8	0.4	0.0	11.2	0.0	27.4	178
12-23	18.8	17.2	18.3	28.6	26.8	43.5	47.8	2.4	0.2	13.1	0.5	23.3	272
24-35	27.8	25.0	22.2	38.1	20.2	46.6	64.5	3.7	0.2	10.0	0.5	12.7	239
36-47	10.3	8.6	11.3	17.9	19.8	31.6	48.6	1.0	0.0	20.5	2.3	15.7	153
48-59	21.3	18.9	20.9	31.0	21.1	42.4	48.2	2.0	0.0	21.1	2.3	11.6	79
<b>Sex</b>													
Male	23.9	19.8	16.5	30.1	18.8	40.2	52.9	1.8	0.1	13.9	1.1	19.1	524
Female	18.8	16.5	18.0	28.7	22.2	40.2	48.0	2.2	0.1	15.1	0.7	20.5	482
<b>Residence</b>													
Urban	30.3	22.9	17.1	34.3	25.1	49.0	58.9	4.5	0.0	7.2	0.5	17.5	235
Rural	18.8	16.8	17.2	27.9	19.0	37.5	48.0	1.3	0.1	16.7	1.0	20.5	771
<b>Region</b>													
North Central	39.7	22.3	27.3	47.0	36.0	59.9	46.4	3.6	0.5	20.7	0.0	11.4	116
North East	7.6	13.8	8.9	19.7	13.9	29.0	48.9	0.2	0.0	13.9	0.6	26.3	430
North West	29.8	20.5	20.0	30.5	18.0	41.8	53.1	3.1	0.0	15.2	1.9	16.8	343
South East	(24.9)	(17.4)	(25.3)	(33.7)	(15.3)	(39.4)	(63.8)	(12.1)	(1.6)	(5.0)	(0.0)	(11.4)	30
South South	(26.8)	(27.7)	(29.9)	(49.1)	(31.1)	(56.9)	(43.0)	(0.0)	(0.0)	(7.3)	(0.0)	(19.0)	55
South West	(38.9)	(23.3)	(33.4)	(46.6)	(65.1)	(74.3)	(60.1)	(2.4)	(0.0)	(13.3)	(0.0)	(3.4)	31
<b>Mother's education</b>													
No education	16.6	13.2	15.0	22.5	17.3	33.9	47.1	1.4	0.1	16.8	0.8	22.7	641
Primary	24.7	22.4	18.2	35.0	23.8	45.3	54.3	2.2	0.0	10.9	0.0	17.5	216
Secondary	35.3	31.1	24.4	48.0	25.9	57.7	60.0	3.9	0.4	8.9	2.6	11.7	137
Higher	*	*	*	*	*	*	*	*	*	*	*	*	13
<b>Wealth quintile</b>													
Lowest	10.3	12.6	8.6	17.2	17.9	29.5	45.8	1.4	0.0	15.3	0.7	27.2	252
Second	13.1	14.8	15.7	24.1	15.2	31.2	45.4	0.9	0.0	16.7	0.9	24.4	263
Middle	22.5	18.5	28.0	38.4	22.4	48.1	50.4	2.4	0.2	20.3	0.0	14.5	210
Fourth	39.2	21.1	16.8	33.8	23.2	48.6	59.5	1.2	0.3	4.7	2.5	16.3	194
Highest	36.8	37.7	21.7	49.3	32.6	60.8	60.2	7.9	0.0	13.3	0.0	5.0	87
Total	21.5	18.2	17.2	29.4	20.4	40.2	50.5	2.0	0.1	14.5	0.9	19.8	1,006

Note: Oral rehydration therapy (ORT) includes solution prepared from oral rehydration salts (ORS) packets, recommended home fluids (RHF), or increased fluids. 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.

<sup>1</sup> Excludes pharmacy, shop and traditional practitioner

### 9.8.3 Feeding Practices During Diarrhoea

Mothers are encouraged to continue feeding their children normally when the children suffer from diarrhoea and to increase the amount of fluids children are given. These practices help to reduce the likelihood the child will become dehydrated and also minimize the adverse consequences of diarrhoea on the child's nutritional status.

Table 9.19 presents data on feeding practices when a child has diarrhoea. Just one-fifth of children are given more fluids than usual, as recommended. The most common practice is to give the same amount of fluids as usual (41 percent). However, a significant proportion of children are offered less fluid than usual: 22 percent are offered somewhat less and 16 percent are offered much less.

Regarding intake of foods when children are sick with diarrhoea, 37 percent of children are offered the same amount of food, and 8 percent are offered more food than usual. Almost half of children with diarrhoea are offered somewhat less or much less food than usual, or no food at all.

Table 9.19 Feeding practices during diarrhoea	
Percent distribution of children under five years who had diarrhoea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, Nigeria 2003	
Liquid/food offered	Percent
<b>Amount of liquids offered</b>	
Same as usual	40.8
More	20.4
Somewhat less	21.6
Much less	15.5
None	1.1
Don't know/missing	0.6
Total	100.0
<b>Amount of food offered</b>	
Same as usual	36.9
More	8.2
Somewhat less	25.8
Much less	16.1
None	5.2
Never gave food	7.6
Don't know/missing	0.3
Total	100.0
Number of children	1,006

## 9.9 CHILDREN HEALTH CARE BY WOMEN'S STATUS

Status and self-respect can be major determinants of a mother's ability to obtain adequate health care for her children. Table 9.20 shows utilization of child health care services by the mother's level of empowerment, as measured by the three indicators of women's status defined in Chapter 3.

The data indicate that decisionmaking ability has a generally positive relationship with children's access to health care. The more empowered a woman, the more likely her child is to receive services. Justification of wife-beating exhibits a strong negative correlation with access to child health services. There is no clear pattern, however, in the relationship between child's health care and reasons to refuse sex with husband.



Table 9.20 Child health care by women's status

Percentage of children age 12-23 months fully vaccinated, and percentage of children under five years who were ill with a fever, symptoms of ARI and/or diarrhoea, in the two weeks preceding the survey taken to a health provider for treatment, by women's status indicators, Nigeria 2003

Women's status indicator	Percentage of children 12-23 months fully vaccinated <sup>1</sup>	Number of children	Percentage of children with fever and/or symptoms of ARI taken to a health provider <sup>2</sup>	Number of children	Percentage of children with diarrhoea taken to a health provider <sup>2</sup>	Number of children
<b>Number of decisions in which woman has final say<sup>3</sup></b>						
0	7.9	408	28.9	801	21.8	490
1-2	13.2	362	32.5	630	19.6	357
3-4	24.7	104	35.9	192	22.0	91
5	18.6	125	33.6	206	28.4	68
<b>Number of reasons to refuse sex with husband</b>						
0	10.4	87	34.3	136	29.3	74
1-2	9.8	263	30.4	473	24.2	258
3-4	14.5	649	31.5	1,221	19.5	674
<b>Number of reasons wife beating is justified</b>						
0	23.8	323	42.1	433	30.0	178
1-2	9.8	198	33.5	398	33.2	228
3-4	9.1	181	28.9	324	18.1	184
5-6	5.5	297	24.5	676	12.8	415
Total	12.9	999	31.4	1,831	21.5	1,006

<sup>1</sup> Those who have received BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

<sup>2</sup> Excludes pharmacy, shops, and traditional practitioner

<sup>3</sup> Either by herself or jointly with others

## 9.10 PERCEIVED PROBLEMS IN ACCESSING HEALTH CARE

The 2003 NDHS included a series of questions aimed at obtaining information on the problems women perceive as barriers to accessing health care for themselves. This information is particularly important in understanding and addressing the barriers women may face in seeking care in general. To obtain this information, all respondents were asked whether each of the following factors would be a big problem or not for them in obtaining medical advice or treatment when they are sick: knowing where to go, getting permission to go, getting money for treatment, distance to the health facility, availability of transport, not wanting to go alone, and concern that there may not be a female provider.

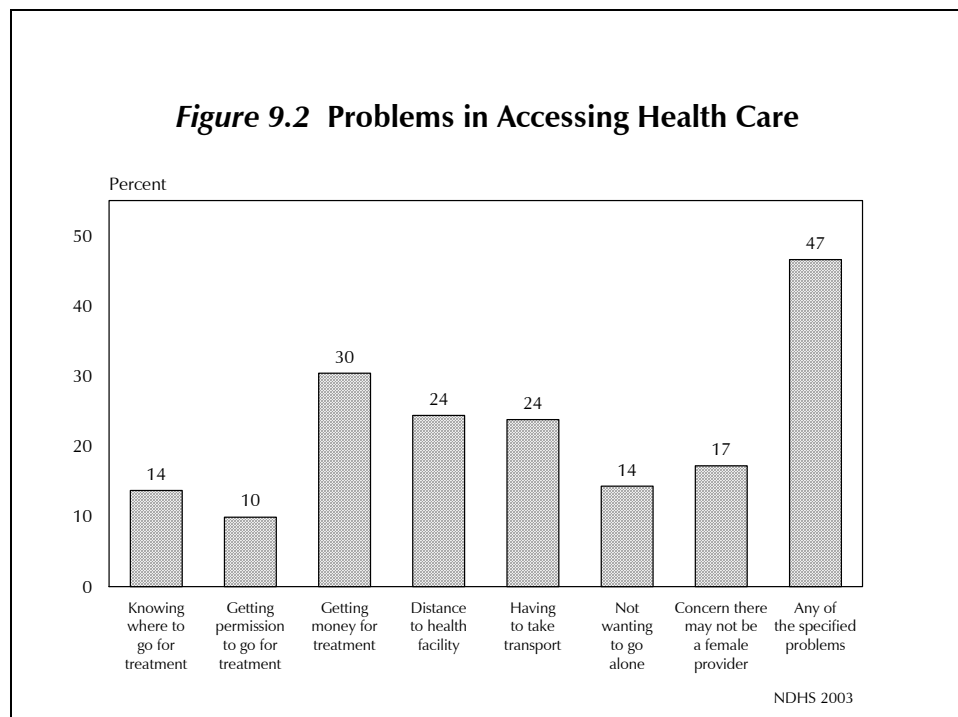
Almost half of women cite at least one problem in accessing health care (Table 9.21). The most commonly cited problem is getting money for treatment (30 percent), followed by distance to health facility and having to take transport (24 percent each). Less than one in five women reported the other three problems: concern that there may not be a female provider (17 percent), not wanting to go alone (14 percent), and knowing where to go for treatment (14 percent). One in ten women say that getting permission to go is a problem (Figure 9.2).

Table 9.21 Problems in accessing health care

Percentage of women who reported they have big problems in accessing health care for themselves when they are sick, by type of problem and background characteristics, Nigeria 2003

Background characteristic	Problems in accessing health care							Any of the specified problems	Number of women
	Knowing where to go for treatment	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Having to take transport	Not wanting to go alone	Concern there may not be a female provider		
<b>Age</b>									
15-19	15.3	11.9	29.5	23.9	23.0	18.3	19.2	48.8	1,716
20-29	13.2	9.6	28.7	23.0	22.4	13.4	16.5	44.8	2,876
30-39	13.5	9.5	30.7	25.0	24.7	12.3	17.5	45.7	1,757
40-49	13.1	8.3	35.2	27.3	26.5	13.4	15.5	49.0	1,271
<b>Number of living children</b>									
0	12.6	8.8	29.8	22.4	21.4	15.3	16.0	44.7	2,499
1-2	15.1	11.3	28.2	24.7	23.9	14.5	18.0	46.2	2,009
3-4	15.5	10.2	30.7	25.2	25.1	13.6	18.1	48.6	1,526
5+	12.1	9.5	34.0	26.5	26.1	13.0	17.1	47.9	1,586
<b>Marital status</b>									
Never married	9.6	7.7	31.6	19.5	19.2	12.2	10.2	41.5	1,926
Married or living together	15.3	11.0	29.4	26.0	25.4	15.2	20.0	48.1	5,336
Divorced, separated, widowed	12.7	4.7	40.2	26.2	24.0	11.7	12.6	51.7	358
<b>Residence</b>									
Urban	5.1	4.0	16.9	9.5	8.5	6.0	7.8	25.6	2,629
Rural	18.3	13.0	37.6	32.2	31.8	18.6	22.1	57.6	4,991
<b>Region</b>									
North Central	5.2	4.7	32.7	18.6	18.7	7.2	6.0	39.5	1,121
North East	20.6	15.5	29.1	25.7	26.5	18.9	19.8	50.2	1,368
North West	20.1	15.5	27.1	29.4	29.0	20.6	33.5	54.3	2,095
South East	10.4	4.5	35.1	21.8	14.8	3.7	4.0	43.4	737
South South	13.8	8.8	47.1	34.8	35.3	19.4	16.5	60.4	1,342
South West	2.5	1.3	10.1	5.6	5.0	2.8	2.0	15.7	958
<b>Education</b>									
No education	22.4	16.9	34.1	32.0	31.8	20.8	28.3	58.6	3,171
Primary	10.7	6.6	37.1	25.9	25.5	13.1	12.3	48.8	1,628
Secondary	6.5	4.5	24.6	16.1	14.8	8.2	8.5	34.3	2,370
Higher	1.7	0.3	11.4	9.0	8.1	4.1	2.8	18.5	451
<b>Employment</b>									
Not employed	16.1	11.9	31.2	24.6	24.7	17.5	19.9	48.4	3,177
Working for cash	11.5	8.5	26.4	22.2	21.1	11.2	15.2	42.3	3,744
Working, not for cash	13.8	7.9	49.1	35.1	34.6	14.9	14.2	60.4	673
<b>Wealth quintile</b>									
Lowest	29.7	19.3	48.9	47.8	48.9	27.8	28.7	75.1	1,414
Second	19.6	15.1	39.4	33.6	33.4	20.1	26.4	62.2	1,439
Middle	12.9	10.7	32.2	23.2	21.8	14.3	18.1	47.5	1,513
Fourth	6.1	4.6	22.8	13.5	12.3	8.0	10.1	33.7	1,526
Highest	3.1	1.7	13.1	8.2	7.0	3.8	5.4	20.8	1,728
Total	13.7	9.9	30.4	24.4	23.8	14.3	17.2	46.6	7,620

Note: Total includes 26 cases with missing information on education.



Getting money for treatment was the problem most commonly reported by women of all backgrounds. The likelihood of citing at least one problem varies by background characteristics. In particular, there is a strong negative correlation between both level of education and wealth quintile and citing at least one problem accessing health care. Furthermore, there are large differentials by residence and region. For example, rural women are more than twice as likely to report at least one of the specified problems as urban women.

### 9.11 USE OF SMOKING TOBACCO

Tobacco smoking during pregnancy increases the risk of having babies with small or low birth weight. Its use at other times adversely affects women's health status and may also adversely affect children's health, particularly in terms of respiratory illness. Table 9.22 shows that smoking is not common among Nigerian women. Ninety-nine percent of women report that they do not use any kind of smoking tobacco, and there is no significant variation by background characteristics.

**Table 9.22 Use of smoking tobacco**

Percentage of women who smoke cigarettes or tobacco, by background characteristics and maternity status, Nigeria 2003

Background characteristic	Uses tobacco			Does not use tobacco	Number of women
	Cigarettes	Pipe	Other tobacco		
<b>Age</b>					
15-19	0.3	0.0	0.0	99.6	1,716
20-34	0.3	0.0	0.1	99.4	3,817
35-49	0.9	0.3	1.4	97.3	2,087
<b>Residence</b>					
Urban	0.3	0.0	0.4	99.3	2,629
Rural	0.6	0.1	0.5	98.7	4,991
<b>Region</b>					
North Central	0.2	0.1	0.4	99.3	1,121
North East	0.9	0.2	0.0	98.8	1,368
North West	1.1	0.1	0.3	98.4	2,095
South East	0.0	0.1	2.1	97.7	737
South South	0.0	0.0	0.3	99.7	1,342
South West	0.1	0.0	0.5	99.3	958
<b>Education</b>					
No education	0.8	0.2	0.8	98.0	3,171
Primary	0.4	0.1	0.3	99.2	1,628
Secondary	0.2	0.0	0.1	99.7	2,370
Higher	0.0	0.0	0.5	99.5	451
<b>Maternity status</b>					
Pregnant	0.4	0.0	0.2	99.2	868
Breastfeeding (not pregnant)	0.5	0.0	0.3	99.0	1,985
Neither	0.5	0.1	0.6	98.8	4,767
<b>Total</b>	<b>0.5</b>	<b>0.1</b>	<b>0.5</b>	<b>98.9</b>	<b>7,620</b>

Malaria is a major public health concern in Nigeria. According to recent estimates, half of the Nigerian population has at least one episode of malaria annually, and the majority of outpatient visits can be attributed to malaria (FMOH, 2001). *Plasmodium falciparum*, transmitted by the anopheles mosquito, is responsible for the majority of malaria deaths in Nigeria, and the groups most at risk are children under five years of age and pregnant women. Pregnant women are vulnerable because their natural immunity is reduced; thus, they are four times more likely to suffer from complications of malaria than nonpregnant women. Malaria is a cause of pregnancy loss, stillbirth, low birth weight, and neonatal mortality (Jamison et al., 1993). Individuals with sickle cell and other low immune groups are also at higher risk.

Malaria negatively impacts the social and economic development of communities in Nigeria. It is responsible for school absenteeism and low productivity at workplaces and on farms. The Federal Government policy on malaria control in Nigeria focuses on the following main interventions: 1) management of cases, 2) prevention of malaria with insecticide-treated nets (ITN), and 3) use of intermittent preventive treatment (IPT) during pregnancy. Health promotion monitoring and evaluation are cross-cutting activities.

## 10.1 MOSQUITO NETS

### Ownership of Mosquito Nets

All households in the 2003 Nigeria Demographic and Health Survey (NDHS) were asked whether they own a mosquito net, and if so, how many. Table 10.1 shows the percentage of households with at least one, and more than one, mosquito net (treated or untreated), and the percentage of households that have at least one, and more than one ITN, by background characteristics.

Table 10.1 shows that ownership of mosquito nets is not widespread in Nigeria. Only 12 percent of households report that they own at least one net. Two percent of households report that they own an ITN. Prevalence of mosquito net ownership varies greatly by residence and region. Rural households are three times as likely as urban households to own at least one mosquito net. Furthermore, ownership ranges from less than 1 percent in the South West to 22 percent in the North East. It is notable that the least advantaged household (in terms of the wealth index) have the highest levels of mosquito net ownership. Whereas 23 percent of the households in the lowest quintile own at least one net, only 3 percent of households in the highest quintile report ownership.

### Use of Mosquito Nets

In the 2003 Nigeria NDHS, respondents to the Household Questionnaire were asked about the use of mosquito nets by household members during the previous night. The use of mosquito nets by children under five and pregnant women is of special interest for public health purposes.

Since the prevalence of malaria-carrying mosquitoes varies seasonally, with a peak during and immediately following periods of rainfall, use of mosquito nets may be expected to follow a similar seasonal pattern. The 2003 NDHS fieldwork was conducted from March to August, which is the rainy season in most areas of Nigeria. Thus, the data collection coincided with the period when mosquito nets are most likely to be used.

**Table 10.1 Ownership of mosquito nets**

Percentage of households with at least one and more than one mosquito net (treated or untreated), and percentage of household that have at least one and more than one insecticide treated net (ITN), by background characteristics, Nigeria 2003

Background characteristic	Percentage of households that have:				Number of households
	At least one net	More than one net	At least one ITN <sup>1</sup>	More than one ITN <sup>1</sup>	
<b>Residence</b>					
Urban	5.4	2.7	1.0	0.4	2,598
Rural	15.5	8.7	2.9	1.5	4,627
<b>Region</b>					
North Central	14.9	9.6	3.9	2.7	1,040
North East	22.1	12.3	1.3	0.8	1,185
North West	13.3	7.8	3.1	1.5	1,911
South East	5.8	2.1	2.4	0.8	690
South South	10.5	4.9	2.0	0.7	1,315
South West	0.5	0.1	0.3	0.0	1,083
<b>Wealth quintile</b>					
Lowest	23.0	13.9	4.5	3.1	1,413
Second	15.5	8.9	1.3	0.3	1,347
Middle	10.8	5.2	2.4	1.0	1,408
Fourth	8.0	4.1	2.1	1.0	1,446
Highest	3.3	1.6	1.0	0.3	1,611
Total	11.8	6.6	2.2	1.1	7,225

<sup>1</sup> An insecticide treated net (ITN) is a permanent net that does not require any treatment, a pretreated net obtained in the past six months, or a net that has been soaked with insecticide in the past six months.

Tables 10.2 and 10.3 show the percentages of children under five years of age, all women age 15-49, and pregnant women who slept under a mosquito net the night before the survey and the percentage who slept under an ITN, by background characteristics. Six percent of children under five slept under a mosquito net including 1 percent of children who slept under an ITN. Approximately twice as many rural as urban children slept under a mosquito net (7 and 4 percent, respectively). There are marked differences by region; for example, whereas 9 percent of children in the South South and in the North Central slept under a net the night preceding the survey, no children in the South West were reported to have slept under a net.

Six percent of all women and 5 percent of pregnant women slept under a mosquito net the night before the survey, approximately one-fourth of them under an ITN (Table 10.3). Similar to children, women in rural areas are several times more likely than their urban counterparts to have slept under a net. There are also significant differences by region.

Table 10.2 Use of mosquito nets by children

Percentage of children under five years who slept under a mosquito net the night before the survey and percentage who slept under an insecticide treated net (ITN), by background characteristics, Nigeria 2003

Background characteristic	Percentage of children who slept under a mosquito net the night before the survey		Number of children
	Any net	ITN <sup>1</sup>	
<b>Age</b>			
<1	6.7	1.3	1,412
1	6.9	1.5	1,078
2	5.2	0.9	1,171
3	6.5	1.4	1,192
4	4.1	0.7	1,008
<b>Sex</b>			
Male	6.3	1.1	2,986
Female	5.6	1.2	2,875
<b>Residence</b>			
Urban	3.6	0.6	1,787
Rural	7.0	1.4	4,074
<b>Region</b>			
North Central	8.9	2.7	854
North East	6.8	0.4	1,349
North West	5.0	1.7	1,965
South East	4.4	1.3	365
South South	8.6	0.5	774
South West	0.0	0.0	554
Total	5.9	1.2	5,861

<sup>1</sup> An insecticide treated net (ITN) is a permanent net that does not require any treatment, a pretreated net obtained in the past six months, or a net that has been soaked with insecticide in the past six months.

**Table 10.3 Use of mosquito nets by pregnant women**

Percentage of all women and pregnant women age 15-49 who slept under a mosquito net (treated or untreated) the night before the survey, and the percentage who slept under an insecticide treated net (ITN), by background characteristics, Nigeria 2003

Background characteristic	Percentage of women who slept under a mosquito net the night before the survey		Number of women	Percentage of pregnant women who slept under a mosquito net the night before the survey		Number of pregnant women
	Any net	ITN <sup>1</sup>		Any net	ITN <sup>1</sup>	
<b>Residence</b>						
Urban	2.6	0.5	2,801	3.2	0.4	254
Rural	7.1	1.8	5,340	6.2	1.6	629
<b>Region</b>						
North Central	8.2	2.6	1,207	9.2	1.6	108
North East	8.4	0.5	1,468	8.4	1.7	197
North West	5.0	2.1	2,235	4.0	1.1	352
South East	2.9	1.4	774	2.0	1.5	51
South South	6.6	1.0	1,434	5.0	1.5	115
South West	0.3	0.1	1,023	0.0	0.0	60
Total	5.6	1.4	8,141	5.4	1.3	883

<sup>1</sup> An insecticide treated net (ITN) is a permanent net that does not require any treatment, a pretreated net obtained in the past six months, or a net that has been soaked with insecticide in the past six months.

## 10.2 ANTIMALARIAL DRUG USE DURING PREGNANCY

Pregnant women who carry the malaria parasite may be at risk of serious problems that jeopardize their own health, that compromise the health of the foetus, and that 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 IPT using two doses of sulfadoxine-pyrimethamine (SP) during the second and early in the third trimester of pregnancy.

In reference to the pregnancy leading to their last live birth, women in the 2003 NDHS were asked whether any antimalarials were taken during the pregnancy and which drug(s) was taken. Table 10.4 presents the percentage of women who had a birth in the last five years preceding the survey who took an antimalarial or other drug during the most recent pregnancy for prevention, and the percentage who received IPT as part of their antenatal care, by background characteristics.

Twenty percent of women report that they took an antimalarial during their last pregnancy. Another 17 percent report that they took an unknown drug, and 4 percent took paracetamol or herbs to prevent malaria. Only 1 percent received IPT during an antenatal care visit.

Among women who took an antimalarial for prevention during pregnancy, there are significant differentials by background characteristics. Urban women are more than twice as likely as rural women to have taken an antimalarial. By region, prevalence ranges from a low of 8 percent in the North East to a high of 32 percent in the South East.



**Table 10.4 Use of intermittent preventive treatment (IPT) by pregnant women**

For the last birth in the five years preceding the survey, percentage for which the mother took antimalarial drugs for prevention during the pregnancy and percentage for which the mother got intermittent preventive treatment (IPT) during an antenatal visit, by background characteristics, Nigeria 2003

Background characteristic	Percentage of women who:				Number of pregnant women
	Took anti-malarial for prevention during last pregnancy	Took unknown drug during last pregnancy	Took Paracetamol or herbs during last pregnancy	Received IPT <sup>1</sup> during ANC visit	
<b>Residence</b>					
Urban	34.0	19.3	5.7	2.0	1,144
Rural	14.8	15.7	3.4	0.6	2,766
<b>Region</b>					
North Central	17.1	19.2	5.3	0.7	575
North East	7.9	19.8	5.1	0.9	862
North West	21.4	4.0	0.8	1.2	1,341
South East	31.9	32.9	2.6	0.2	222
South South	29.2	30.4	3.6	1.3	544
South West	31.4	22.2	13.3	1.1	367
Total	20.4	16.7	4.1	1.0	3,911

<sup>1</sup> Intermittent preventive treatment is preventive treatment with sulfadoxine-pyrimethamine (SP/Fansidar) during an antenatal visit.

Table 10.5 shows the different antimalarial drugs that were taken by the 20 percent of pregnant women who reported preventive use of antimalarials. More than half (58 percent) of these women used Daraprim/Metaprim, which has been found to be ineffective as a chemoprophylaxis during pregnancy (FMOH, 2001). Additionally, 39 percent used chloroquine, which was the chemoprophylactic drug of choice until the introduction of IPT in 2001. Although it is only two years since the introduction of the new IPT recommendation, it is worthy of note that 12 percent of the women who took an antimalarial for prevention used SP/Fansidar. Other antimalarials, Halfan and Amodiaquine, were used by 2 and 1 percent of women, respectively. A larger percentage of urban women than rural women used each of the drugs with the exception of chloroquine. More than 4 in 10 women in all regions use Daraprim/Metaprim. Use of Daraprim/Metaprim is highest in the North West, North East, and South South (74, 63, and 51 percent, respectively).

**Table 10.5 Use of specific drugs for Intermittent Preventive Treatment (IPT)**

For mothers who took antimalarial drugs for prevention during the last pregnancy leading to a live birth in the five years preceding the survey, percentage who took a specific drug, by background characteristics, Nigeria 2003

Background characteristic	Percentage of women who took:					Number of women who took antimalarial drug
	SP/Fansidar	Chloroquine	Halfan	Daraprim/Metaprim	Amodiaquine	
<b>Residence</b>						
Urban	14.1	31.6	3.1	63.5	1.2	390
Rural	9.1	46.4	1.4	51.7	0.4	408
<b>Region</b>						
North Central	6.8	55.1	1.8	40.1	0.0	99
North East	17.7	25.5	0.0	63.1	0.0	68
North West	15.3	26.1	2.6	74.1	0.8	286
South East	13.3	36.6	8.1	41.9	0.5	71
South South	6.7	46.6	1.8	51.4	0.9	159
South West	8.3	58.0	0.0	45.6	2.1	115
<b>Total</b>	<b>11.6</b>	<b>39.2</b>	<b>2.2</b>	<b>57.5</b>	<b>0.8</b>	<b>798</b>

### 10.3 TREATMENT OF CHILDREN WITH FEVER OR CONVULSIONS

Since the major manifestations of malaria are fever and convulsions or fits, mothers were asked whether their children under age five had had a fever, convulsions, or fit in the two weeks preceding the survey. If reported, the mother was asked if the child was given any drugs.

Table 10.6 shows that 32 percent of children under age five had a fever and/or convulsions in the two weeks preceding the survey. Among those sick with fever/convulsions, one-third took antimalarial drugs, and one-quarter received the drugs the same day as the onset of the fever/convulsions or the following day. There are striking differences in both morbidity and treatment by region. Children in the North East and North West were the most likely to have been ill during the two weeks preceding the survey (39 and 36 percent, respectively), while children in the South West were the least likely (18 percent). Although children in the South West were least likely to be sick, they were most likely to have received an antimalarial in response to their symptoms. Forty-three percent of sick children in the South West took an antimalarial compared with 27 percent in the North East, one of the regions with the highest levels of morbidity, and just 15 percent in the South East.

Table 10.6 Prevalence and prompt treatment of fever/convulsions

Percentage of children under age five with fever and/or convulsions in the two weeks preceding the survey, and among children with fever and/or convulsions, percentage who took antimalarial drugs and who took the drugs the same/next day, by background characteristics, Nigeria 2003

Background characteristic	Percentage of children with fever/convulsions	Number of children	Among children with fever and/or convulsions, percentage who:		Number of children with fever/convulsions
			Took antimalarial drugs	Took antimalarial drugs same/next day	
<b>Age</b>					
<1	33.4	1,331	29.3	19.5	445
1	40.0	999	36.3	23.8	399
2	34.0	1,050	41.7	32.3	356
3	27.4	1,067	32.3	25.3	292
4	21.9	899	27.1	23.2	196
<b>Sex</b>					
Male	31.6	2,717	32.5	22.9	858
Female	31.6	2,628	35.2	26.4	832
<b>Residence</b>					
Urban	27.8	1,620	38.5	30.1	450
Rural	33.3	3,726	32.2	22.7	1,239
<b>Region</b>					
North Central	24.2	781	32.2	23.6	189
North East	38.5	1,225	27.0	17.9	471
North West	36.0	1,818	39.6	31.7	654
South East	23.6	347	14.8	13.6	82
South South	30.0	684	36.2	18.8	206
South West	18.0	489	43.2	34.6	88
Total	31.6	5,345	33.9	24.6	1,689

Table 10.7 presents the percentage of children under five who took antimalarial drugs for fever and/or convulsions in the two weeks preceding the survey, by background characteristics. Ninety-seven percent took the first line drug, chloroquine, 1 percent took the second line drug, Fansidar/SP, and 4 percent took other antimalarials. The data show that children of all age groups received the antimalarials, indicating that equal care is given to children of all ages under five. Almost three-quarters of children received the antimalarial the same day as the onset of symptoms or the next day. Promptness of treatment varies significantly by region.

Table 10.7 Type and timing of antimalarial drugs

Among children under age five who took antimalarial drugs for fever and/or convulsions in the two weeks preceding the survey, percentage who took first-line drug, second-line drug, or other antimalarial drugs and percentage who took each type of drug the same/next day after developing fever and/or convulsions, by background characteristics, Nigeria 2003

Background characteristic	Percentage who took:						Number of children who took antimalarial drugs
	First-line drug	First-line drug same/next day	Second-line drug	Second-line drug same/next day	Other antimalarial	Other antimalarial drug same/next day	
<b>Age in years</b>							
<1	98.4	66.0	0.4	0.0	1.6	0.5	130
1	95.7	63.2	2.0	0.0	5.8	3.3	145
2	96.7	75.2	1.5	1.0	5.9	3.1	149
3	98.7	77.0	1.0	1.0	1.3	1.3	95
4	94.7	81.2	1.0	0.0	4.3	4.3	53
<b>Sex</b>							
Male	97.2	68.8	1.2	0.0	3.1	2.0	279
Female	96.8	73.0	1.3	0.8	4.8	2.8	293
<b>Residence</b>							
Urban	97.8	76.5	1.5	0.4	3.9	3.2	173
Rural	96.6	68.5	1.1	0.4	4.0	2.0	399
<b>Region</b>							
North Central	94.3	68.5	1.3	1.3	4.5	3.5	61
North East	96.4	63.1	0.4	0.0	4.0	3.0	127
North West	99.4	79.2	0.7	0.7	3.5	2.2	259
South East	(91.7)	(83.3)	(0.0)	(0.0)	(8.3)	(8.3)	12
South South	92.9	50.6	4.8	0.0	5.7	1.2	75
South West	(96.7)	(80.2)	(1.3)	(0.0)	(1.9)	(0.0)	38
Total	97.0	70.9	1.2	0.4	4.0	2.4	572

Note: According to national policy, chloroquine is the first-line drug and SP/Fansidar is the second-line drug. Figures in parentheses are based on 25-49 unweighted cases.

Nutritional deficiencies have been found to contribute to the high rates of disability, morbidity, and mortality in Nigeria, especially among infants and young children (NPC and UNICEF, 2001). Thus, the importance of adequate nutrition for women and children cannot be overemphasized and remains a great concern in the country.

The 2003 Nigeria Demographic and Health Survey (NDHS) collected data on various factors related to the nutrition of women and children. This chapter examines infant feeding practices, including duration of breastfeeding, use of a feeding bottle with a nipple, introduction of complementary foods, and the intake of micronutrients, such as vitamin A, iron supplements, and iodized salt. The nutritional status of all children under age five and all women age 15-49 is analyzed using anthropometric indices (height and weight measures).

## 11.1 BREASTFEEDING

Initiation of breastfeeding at birth is crucial for the health of both child and mother. Suckling at the breast immediately after birth aids the expulsion of the placenta and reduces the risk of postpartum haemorrhage in the mother, helps maintain the body temperature of the baby, and encourages bonding between the mother and child, which enhances their physical and psychological well-being.

Breast milk, a good source of nutrients and natural immunity for infants, is sufficient for newborns; they need not be given anything else to eat or drink besides breast milk. Giving the newborn the first breast milk, which contains colostrum, and exclusive breastfeeding during the first six months of a child's life are recommended because they protect the infant from disease agents as well as provide all required nutrients.

Table 11.1 shows the percentage of children who were ever breastfed, and among children ever breastfed, the proportion who started breastfeeding within one hour and within one day of birth, and those who received a prelacteal feed. Breastfeeding is almost universal in Nigeria, with 97 percent of children born in the five years preceding the survey having been breastfed. However, just one-third of children were given breast milk within one hour of birth (32 percent), and less than two-thirds were given breast milk within 24 hours of birth (63 percent), indicating a delay in the initiation of breastfeeding.

Initiation of breastfeeding in the first hour and in the first 24 hours after birth varies by background characteristics. Women who delivered in a health facility and those assisted at delivery by health professionals are more likely to initiate breastfeeding early (within 1 hour or within 24 hours of delivery). There is considerable variation by region, ranging from a low of 13 percent of women in the South West initiating breastfeeding within one hour of giving birth to a high of 58 percent of women in the South East. Only about half of women in the North West and North East start breastfeeding within the first day (48 and 55 percent, respectively), compared with more than seven in ten women in other regions. Furthermore, women with the least education and women in households that are in the lowest quintile of the wealth index initiate breastfeeding later than those with at least some education and those living in households that are ranked higher on the wealth index.

Table 11.1 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed, and among children ever breastfed, the percentage who started breastfeeding within one hour and within one day of birth, and percentage who received a prelacteal feed, by background characteristics, Nigeria 2003

Background characteristic	Among all children:		Among children ever breastfed, percentage who:			
	Percentage ever breastfed	Number of children	Started breastfeeding within 1 hour of birth	Started breastfeeding within 1 day of birth <sup>1</sup>	Received a prelacteal feed <sup>2</sup>	Number of children ever breastfed
<b>Sex</b>						
Male	97.0	3,186	30.9	61.2	69.7	3,090
Female	97.7	3,033	32.9	64.4	67.2	2,965
<b>Residence</b>						
Urban	97.6	1,795	34.7	73.6	63.5	1,752
Rural	97.3	4,424	30.8	58.4	70.5	4,303
<b>Region</b>						
North Central	97.9	897	46.6	83.5	39.8	878
North East	96.3	1,472	25.9	54.6	83.2	1,418
North West	98.1	2,161	27.1	48.3	78.7	2,121
South East	97.1	371	57.5	81.9	53.6	360
South South	96.8	789	40.3	77.9	49.0	763
South West	97.4	529	12.7	73.4	74.2	515
<b>Mother's education</b>						
No education	97.9	3,224	27.0	50.7	78.4	3,156
Primary	96.7	1,465	35.9	72.2	63.4	1,417
Secondary	97.0	1,316	35.9	78.0	54.4	1,277
Higher	95.8	215	53.9	88.5	39.6	206
<b>Assistance at delivery</b>						
Health professional <sup>3</sup>	96.9	2,253	40.0	79.7	55.8	2,182
Traditional birth attendant	97.8	1,268	29.9	49.8	77.5	1,240
Other	97.4	1,593	26.0	57.4	74.7	1,552
No one	97.6	1,051	27.0	52.5	77.5	1,027
<b>Place of delivery</b>						
Health facility	97.1	2,025	40.3	80.9	55.2	1,967
At home	97.4	4,129	28.1	54.3	75.9	4,024
Other	(100.0)	22	(29.1)	(80.0)	(38.3)	22
<b>Wealth quintile</b>						
Lowest	97.7	1,394	22.4	46.8	77.8	1,363
Second	96.7	1,379	30.6	54.6	72.9	1,334
Middle	96.7	1,255	36.8	65.5	67.2	1,214
Fourth	97.7	1,157	35.4	75.8	64.4	1,131
Highest	98.2	1,033	36.5	77.2	56.2	1,014
Total	97.4	6,219	31.9	62.8	68.5	6,055

Note: Table is based on all births in the past five years whether the children were living or dead at the time of interview. Total includes 54 and 43 children with data missing on assistance at delivery and place of delivery, respectively. Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> Includes children who started breastfeeding within one hour of birth

<sup>2</sup> Children given something other than breast milk during the first three days of life before the mother started breastfeeding regularly

<sup>3</sup> Doctor, nurse/midwife, or auxiliary midwife, or CHEW

The practice of giving something other than breast milk in the first three days of life (prelacteal feeding) is discouraged because it limits the frequency of suckling by the infant and exposes the baby to infections. Prelacteal feeding is widely practiced in Nigeria. Approximately seven in ten newborns receive a prelacteal feed. There are differences in prelacteal feeding practices by region, level of education, place of delivery, assistance at delivery, and wealth quintile. The practice is more common among women with little or no education and those living in households in the lowest wealth quintile than among women with higher education and those in households in the highest wealth quintile. In addition, women who received delivery assistance from a health professional and those who delivered in a health facility are less likely to give prelacteal feeds than those who delivered at home or without the assistance of a trained medical professional. These differentials may be due in part to the Baby-Friendly Hospital Initiative, which promotes exclusive breastfeeding and policies that support breastfeeding in hospitals.

### 11.1.1 Age Pattern of Breastfeeding

UNICEF and WHO recommend that children be exclusively breastfed (receive only breast milk) during the first six months of life and that children be given solid and/or semisolid complementary food starting at age six months (WHO and UNICEF, 1998). Children require adequate complementary foods to follow normal growth patterns. Lack of complementary foods (given at the appropriate age) may lead to malnutrition, frequent illness, and even death. However, even after complementary foods have been introduced, UNICEF recommends that breastfeeding continue for at least the first two years of the child's life (NPC and UNICEF, 2001).

Table 11.2 shows the percent distribution of youngest children under age three living with the mother, by breastfeeding status, according to age. In Nigeria, exclusive breastfeeding of infants is not practiced in compliance with the WHO/UNICEF recommendations. The data show that only 17 percent of infants below six months are exclusively breastfed. Indeed, just one-quarter of infants under two months of age are exclusively breastfed. Among children 4-5 months of age, fewer than one in ten is exclusively breastfed. This is a result of early supplementation of breast milk with plain water. Almost half (48 percent) of newborns under two months of age receive plain water as well as breast milk. An additional 19 percent receive other milk or liquids.

Complementary feeding also starts early. Among children age 4-5 months, more than one-third (36 percent) receive complementary food in addition to breast milk (Table 11.2). Although complementary feeding is introduced early in Nigeria, not all children are in compliance with UNICEF's recommendation of introducing semisolid and/or solid complementary food at six months of age. One in four children age 6-9 months is either exclusively breastfed or receives breast milk and plain water only. Regarding the duration of any breastfeeding, two-thirds of children age 20-23 months have discontinued breastfeeding.

The use of a bottle with a nipple regardless of the content (formula or other liquid) requires attention in terms of hygiene and handling. Because of inadequate and insufficient cleaning and ease of contamination after cleaning, the nipple may house disease-causing agents. Bottle-feeding is common in Nigeria, even among children who should be exclusively breastfed; 23 percent of children under two months and one-quarter of children age 2-3 months drink from a bottle with a nipple.

Table 11.2 Breastfeeding status by child's age

Percent distribution of youngest children under three years living with the mother by breastfeeding status and percentage of children under three years using a bottle with a nipple, according to age in months, Nigeria 2003

Age in months	Breastfeeding and consuming:						Total	Number of children	Using a bottle with a nipple <sup>1</sup>	Number of living children
	Not breast-feeding	Exclusively breast-fed	Plain water only	Water-based liquids/juice	Other milk	Complementary foods				
<2	4.0	26.2	47.5	8.9	8.6	4.7	100.0	182	22.5	183
2-3	0.9	19.3	49.2	6.5	14.1	10.0	100.0	230	25.1	231
4-5	0.6	8.7	38.1	9.9	7.1	35.6	100.0	247	17.6	250
6-7	1.3	3.9	26.5	4.4	7.3	56.6	100.0	230	14.4	239
8-9	1.2	1.6	17.8	1.6	6.9	70.8	100.0	231	16.3	240
10-11	4.5	2.6	10.1	2.3	0.2	80.4	100.0	184	14.7	189
12-15	10.1	3.8	3.9	0.6	1.3	80.2	100.0	387	10.4	403
16-19	33.7	2.1	2.3	1.6	0.4	59.9	100.0	313	6.3	323
20-23	65.9	0.9	0.4	0.9	0.0	31.9	100.0	248	8.3	272
24-27	90.9	0.3	0.0	0.0	0.0	8.8	100.0	361	12.6	441
28-31	90.5	0.0	0.3	0.0	0.0	9.1	100.0	210	5.0	303
32-35	94.8	0.0	0.5	0.0	0.0	4.7	100.0	154	3.2	305
<6	1.7	17.2	44.6	8.4	10.0	18.1	100.0	659	21.6	663
6-9	1.3	2.8	22.1	3.0	7.1	63.7	100.0	460	15.3	478

Note: Breastfeeding status refers to a 24-hour period (yesterday and last night). Children classified as *breastfeeding and consuming plain water only* consume no supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding, and consuming plain water, water-based liquids/juice, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus, children who receive breast milk and water-based liquids and who do not receive complementary foods are classified in the water-based 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.

<sup>1</sup> Based on all children under three years

### 11.1.2 Duration and Frequency of Breastfeeding

Table 11.3 shows the median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey. The percentages of breastfeeding children under six months who were breastfed at least six times in the 24 hours preceding the survey and mean number of daytime and nighttime feeds, by background characteristics, are also presented.

At the national level, the median duration of any breastfeeding among children born in the three years preceding the survey is 18.6 months (Figure 11.1). The median duration of exclusive breastfeeding is half a month, while the median duration of predominant feeding is 4.6 months (Table 11.3). Predominate breastfeeding refers to either exclusive breastfeeding or receiving plain water, water-based liquids, and/or juice in addition to breast milk.



Table 11.3 Median duration and frequency of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, percentage of breastfeeding children under six months living with the mother who were breastfed six or more times in the 24 hours preceding the survey, and mean number of feeds (day/night), by background characteristics, Nigeria 2003

Background characteristic	Median duration (months) of breastfeeding <sup>1</sup>				Breastfeeding children under six months <sup>2</sup>			
	Any breast-feeding	Exclusive breast-feeding	Predominant breast-feeding <sup>3</sup>	Number of children	Percentage breastfed 6+ times in last 24 hours	Mean number of day feeds	Mean number night feeds	Number of children
<b>Sex</b>								
Male	18.6	0.5	4.7	1,947	96.5	7.8	6.0	326
Female	18.6	0.5	4.4	1,867	98.2	7.5	5.6	306
<b>Residence</b>								
Urban	17.2	0.5	3.8	1,137	96.7	8.0	6.5	179
Rural	19.2	0.5	4.8	2,677	97.5	7.5	5.5	453
<b>Region</b>								
North Central	19.0	0.7	3.8	553	97.6	7.8	5.3	85
North East	20.5	0.4	6.6	875	99.2	7.7	6.0	143
North West	19.9	0.4	5.4	1,310	96.5	7.8	4.9	220
South East	13.3	0.4	0.5	245	97.7	6.8	7.8	33
South South	15.8	0.6	2.9	503	97.8	7.7	6.6	82
South West	15.9	0.7	3.4	328	94.5	7.4	6.7	68
<b>Mother's education</b>								
No education	20.0	0.4	5.5	1,893	97.7	8.0	5.6	315
Primary	18.4	0.5	3.7	901	97.6	7.7	6.3	145
Secondary	16.9	0.6	3.3	887	95.9	6.8	5.8	157
Higher	15.7	2.5	4.7	134	100.0	8.6	5.2	15
<b>Wealth quintile</b>								
Lowest	20.2	0.5	5.4	811	96.0	8.4	5.7	135
Second	20.0	0.4	4.9	831	97.0	7.5	5.5	133
Middle	19.1	0.5	3.6	758	96.8	7.3	5.2	105
Fourth	18.4	0.7	4.4	736	99.5	7.7	5.9	135
Highest	14.3	0.5	3.7	679	96.9	7.3	6.4	123
Total	18.6	0.5	4.6	3,815	97.3	7.7	5.8	632
Mean for all children	18.2	2.0	6.3	na	na	na	na	na

Note: Median and mean durations are based on current status.

na = Not applicable

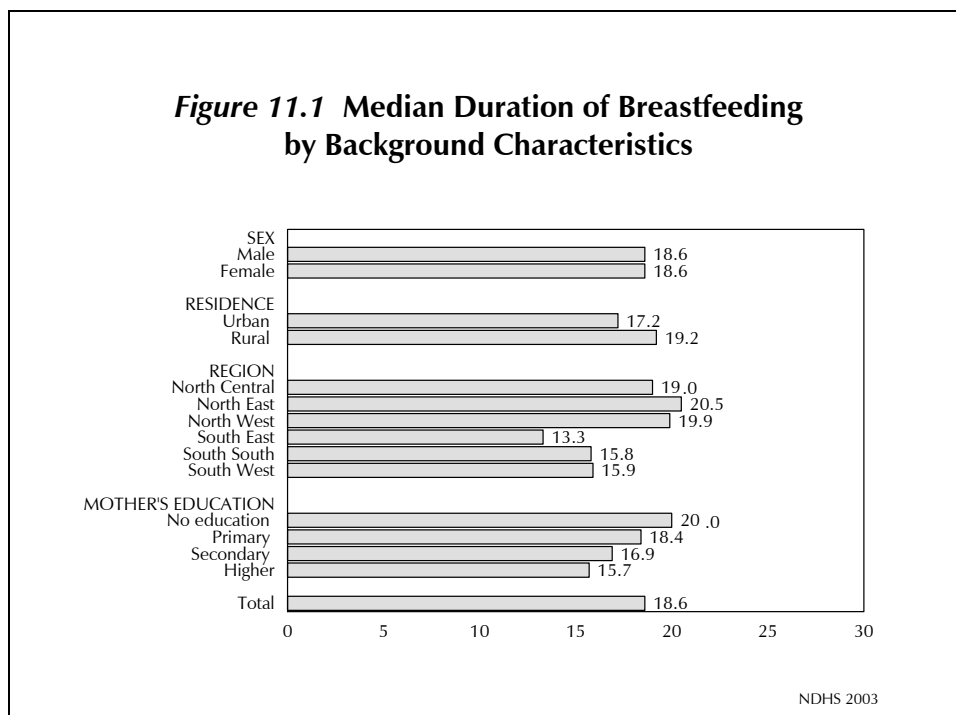
<sup>1</sup> It is assumed that non-last-born children or last-born child not living with the mother are not currently breastfeeding.

<sup>2</sup> Excludes children who do not have a valid answer on the number of times breastfed

<sup>3</sup> Either exclusively breastfed or received breast milk and plain water, water-based liquids, and/or juice only (excludes other milk)

There is little variation in exclusive breastfeeding: women of all backgrounds exclusively breastfeed for a median of less than one month, with the exception of women with higher education who exclusively breastfeed for 2.5 months. The median duration of any breastfeeding varies by region, education, and household economic status. The results of the 2003 NDHS confirm the findings of the 1999 NDHS, which followed a similar pattern.

**Figure 11.1 Median Duration of Breastfeeding by Background Characteristics**



Mothers were asked about the frequency of breastfeeding among children under six months of age in the preceding 24 hours. Table 11.3 shows that almost all children under six months of age are breastfed at least six times per day in Nigeria, which meets the international recommendation (NPC and UNICEF, 2001). The mean number of feeds is eight in the daytime and six at night.

## 11.2 TYPES OF FOOD CONSUMED BY CHILDREN

Table 11.4 shows the percentage of youngest children under three years of age living with the mother who consumed specific foods during the day or night preceding interview. The table shows that 13 percent of breastfeeding infants under six months of age consume infant formula, 11 percent consume milk or other dairy products, and 18 percent consume other liquids. Breastfeeding children under six months also commonly eat food made from grains (15 percent). At age 6-9 months, when complementary foods should be introduced, three-quarters of breastfeeding infants receive solid or semisolid foods; 56 percent receive food made from grains; 25 percent receive meat, fish, shellfish, poultry, or eggs; and 24 percent receive fruits or vegetables. Fruits and vegetables rich in vitamin A are consumed by one-fifth of breastfeeding infants 6-9 months old.

At almost one year of age (10-11 months), a higher proportion of breastfeeding children receive these complementary foods. By 20-23 months of age, three in ten breastfeeding children receive other milk products, nine in ten eat foods made from grains, six in ten receive fruits and vegetables, and the same proportion gets eggs and animal products. Less than half receive food with oil or butter added.

Table 11.4 Foods consumed by children in the day or night preceding the interview

Percentage of children under three years of age living with the mother who consumed specific foods in the day or night preceding the interview, by breastfeeding status and age, Nigeria 2003

Child's age in months	Solid/semisolid foods										Any solid or semi-solid food	Number of children
	Infant formula	Other milk/cheese/yogurt	Other liquids <sup>1</sup>	Food made from grains	Fruits/vegetables <sup>2</sup>	Food made from roots/tubers	Food made from legumes	Meat/fish/shellfish/poultry/eggs	Food made with oil/fat/butter	Fruits and vegetables rich in vitamin A <sup>3</sup>		
<b>BREASTFEEDING CHILDREN</b>												
<2	5.5	7.2	11.9	4.2	2.0	1.7	1.3	0.3	1.8	2.0	11.6	175
2-3	14.6	7.3	14.5	8.9	2.0	0.8	0.9	1.2	1.9	2.0	15.2	227
4-5	15.7	16.5	25.1	27.1	15.1	6.5	6.3	10.3	7.3	13.5	50.2	246
6-7	11.3	15.6	25.5	49.6	17.6	8.5	13.4	16.6	18.7	14.2	69.1	227
8-9	14.1	21.7	25.5	61.5	30.8	10.4	14.1	32.8	27.3	26.0	83.0	228
10-11	12.3	26.4	30.6	78.3	41.3	26.9	27.5	47.0	33.0	39.4	89.3	176
12-15	10.6	30.8	36.1	83.6	57.6	26.7	29.3	55.2	45.0	52.9	96.4	348
16-19	6.0	26.5	36.5	81.4	64.2	27.2	32.5	58.2	42.6	56.6	96.2	208
20-23	8.5	30.3	36.7	89.3	59.6	26.9	30.1	56.6	45.6	53.6	98.8	85
24-35	16.0	30.5	47.1	89.5	73.1	35.0	31.3	55.3	37.6	73.1	98.9	61
<6	12.6	10.7	17.8	14.5	6.9	3.2	3.1	4.4	3.9	6.3	27.5	648
6-9	12.7	18.7	25.5	55.6	24.2	9.5	13.8	24.7	23.1	20.1	76.1	455
<b>NONBREASTFEEDING CHILDREN</b>												
16-19	11.0	37.4	57.3	83.7	78.2	37.7	35.6	79.4	40.1	72.0	99.5	105
20-23	3.7	32.5	40.5	86.5	74.8	46.2	39.6	73.0	50.3	66.9	99.6	163
24-35	9.5	40.1	51.6	88.2	75.8	40.7	36.6	71.3	57.0	71.7	99.6	664

Note: Breastfeeding status and food consumed refer to a 24-hour recall period (yesterday and last night).

<sup>1</sup> Does not include plain water

<sup>2</sup> Includes fruits and vegetables rich in vitamin A

<sup>3</sup> Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A

As previously shown in Table 11.2, few children under age 16 months are not breastfed in Nigeria. Table 11.4 shows that among those who are not breastfed by age 20-23 months, the proportion receiving milk products is almost the same as among children who are breastfeeding and receiving other milk products. There are only slight differences between breastfeeding and nonbreastfeeding children receiving food made from grains, but the proportion of children receiving other complementary foods is higher among the latter group of children.

Table 11.5 presents the frequency of consumption of specific foods by children less than three years of age in the day or night preceding the interview. Among breastfeeding children age 6-9 months, who should be receiving complementary foods, grains are consumed slightly more than once a day. All other foods are consumed less than once a day. Beginning at age two, grains are received twice a day, as are fruits and vegetables. The frequency of foods consumed by nonbreastfeeding children is similar to that of breastfeeding children.

Table 11.5 Frequency of foods consumed by children in the day or night preceding the interview

Mean number of times specific foods were consumed in the day or night preceding the interview by youngest children under three years of age living with the mother, according to breastfeeding status and age, Nigeria 2003

Child's age in months	Solid/semisolid foods										Number of children
	Infant formula	Other milk/cheese/yogurt	Other liquids <sup>1</sup>	Food made from grains	Fruits/vegetables <sup>2</sup>	Food made from roots/tubers	Food made from legumes	Meat/fish/shellfish/poultry eggs	Food made with oil/fat/butter	Fruits and vegetables rich in vitamin A <sup>3</sup>	
BREASTFEEDING CHILDREN											
<2	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	175
2-3	0.4	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.1	227
4-5	0.3	0.3	0.5	0.6	0.5	0.1	0.1	0.2	0.2	0.4	246
6-7	0.3	0.3	0.5	1.0	0.4	0.1	0.2	0.2	0.3	0.3	227
8-9	0.3	0.4	0.6	1.2	0.7	0.1	0.2	0.5	0.5	0.5	228
10-11	0.3	0.5	0.6	1.7	1.0	0.4	0.3	0.8	0.6	0.8	176
12-15	0.2	0.6	0.8	1.7	1.4	0.4	0.4	0.9	0.7	1.1	348
16-19	0.1	0.5	0.8	1.8	1.6	0.4	0.4	1.0	0.7	1.1	208
20-23	0.2	0.6	0.7	2.0	1.3	0.4	0.4	0.8	0.7	1.0	85
24-35	0.3	0.4	0.7	2.1	2.3	0.4	0.4	0.7	0.6	1.8	61
<6	0.3	0.2	0.3	0.3	0.2	0.1	0.0	0.1	0.1	0.2	648
6-9	0.3	0.4	0.5	1.1	0.6	0.1	0.2	0.4	0.4	0.4	455
NONBREASTFEEDING CHILDREN											
16-19	0.2	0.7	1.3	1.6	2.0	0.7	0.4	1.5	0.8	1.5	105
20-23	0.1	0.5	0.9	1.9	2.1	0.7	0.5	1.3	1.1	1.5	163
24-35	0.2	0.7	1.1	1.9	2.1	0.5	0.4	1.2	1.0	1.6	664

Note: Breastfeeding status and food consumed refer to a 24-hour recall period (yesterday and last night).

<sup>1</sup> Does not include plain water

<sup>2</sup> Includes fruits and vegetables rich in vitamin A

<sup>3</sup> Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A

Table 11.6 shows the average number of days specific foods were consumed by youngest children under age three in the seven days preceding the survey. Among breastfeeding children, less than age six months, plain water is consumed about six days a week. Food from grains is given one day a week. All other types of food or drink were given less than one day a week. Breastfeeding children age 6-9 months drank plain water daily in the week preceding the interview. They consumed food made from grains almost four days a week. Meat, fish, shellfish, poultry or eggs were consumed less than two days a week, as were foods made with oil, fat, or butter.

The mean number of days that various nutritious foods are consumed by children who are no longer breastfeeding should be higher than for children who are breastfeeding. Among children 16 months and older, most semisolid or solid foods and fruits and vegetables rich in vitamin A are consumed with greater frequency among nonbreastfeeding than breastfeeding children.

Table 11.6 Frequency of foods consumed by children in preceding seven days

Mean number of days specific foods were consumed in the seven days preceding the interview by youngest children under three years of age living with the mother, according to breastfeeding status and age, Nigeria 2003

Child's age in months	Solid/semisolid foods																	Number of children
	Liquids						Food made from grains	Food made from roots/tubers	Fruits and vegetables rich in vitamin A	Food made from legumes	Cheese/yogurt	Meat/fish/shellfish/poultry/eggs	Food made with oil/fat/butter	Fruit and vegetables rich in vitamin A				
	Plain water	Infant formula	Other milk	Fruit juice	Herbal tea	Other liquids								Pumpkin/red or yellow yams or carrots/red sweet potatoes	Green leafy vegetables	Mango/papaya/other local fruits rich in vitamin A		
<b>BREASTFEEDING CHILDREN</b>																		
<2	5.0	0.4	0.5	0.1	0.8	0.1	0.3	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	175
2-3	5.7	1.0	0.4	0.0	0.6	0.2	0.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	227
4-5	6.4	1.0	0.8	0.2	0.9	0.6	1.9	0.3	0.2	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.3	246
6-7	6.7	0.8	0.7	0.3	0.7	0.6	3.2	0.4	0.4	0.6	0.2	1.0	1.1	0.2	0.6	0.3	0.3	227
8-9	6.8	0.9	0.8	0.5	0.8	1.0	4.1	0.6	0.8	1.1	0.4	1.7	1.6	0.4	0.9	0.6	0.6	228
10-11	6.8	0.8	1.1	0.4	0.9	1.0	5.3	1.3	1.1	1.3	0.6	2.7	2.1	0.7	1.7	0.8	0.8	176
12-15	6.8	0.5	0.7	0.6	0.7	1.4	5.6	1.3	1.2	1.4	1.0	3.0	2.6	1.1	1.5	1.4	1.4	348
16-19	6.8	0.3	0.8	0.5	0.8	1.7	5.6	1.4	1.5	1.6	1.0	3.3	2.7	1.2	1.9	1.7	1.7	208
20-23	6.8	0.6	0.7	0.6	0.8	1.4	6.0	1.3	1.1	1.7	0.9	2.8	2.7	0.7	2.0	1.2	1.2	85
24-35	6.8	0.7	0.9	0.6	0.9	1.9	6.6	1.3	1.3	1.3	1.1	3.1	2.4	0.8	2.6	2.1	2.1	61
<6	5.8	0.8	0.6	0.1	0.8	0.3	1.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	648
6-9	6.8	0.9	0.8	0.4	0.8	0.8	3.7	0.5	0.6	0.8	0.3	1.4	1.4	0.3	0.7	0.5	0.5	455
<b>NONBREASTFEEDING CHILDREN</b>																		
16-19	6.4	0.9	1.7	0.8	0.9	2.7	5.2	2.2	2.1	1.8	0.9	4.9	2.3	1.8	2.4	1.7	1.7	105
20-23	6.7	0.2	1.1	1.0	0.7	1.9	5.4	2.3	1.9	2.2	0.6	4.4	3.0	1.5	2.4	1.9	1.9	163
24-35	6.6	0.5	1.3	0.9	0.7	2.5	5.9	2.1	2.0	1.8	1.2	4.1	3.5	1.4	2.7	2.1	2.1	664
Total	6.6	0.5	1.3	0.9	0.7	2.4	5.6	2.1	2.0	1.9	1.0	4.2	3.3	1.5	2.6	2.0	2.0	997

Note: Breastfeeding status refers to a 24-hour recall period (yesterday and last night).

## 11.3 MICRONUTRIENT SUPPLEMENTATION

Micronutrients are necessary for normal body function and play a vital role in ensuring good health. Children can receive micronutrients from foods, food fortification, and direct supplementation. Deficiency of these elements contributes to childhood morbidity and mortality. The 2003 NDHS collected various data useful for assessing the intake of micronutrients by women and young children.

### 11.3.1 Use of Iodized Salt in Households

Disorders induced by dietary iodine deficiency constitute a major global nutrition concern. A lack of sufficient iodine can lead to goiter, hypothyroidism, impaired mental and physical development, and diminished school performance. Iodine deficiency in the fetus leads to increased rates of abortion, stillbirths, congenital anomalies, cretinism, psychomotor defects, and neonatal mortality. Iodine deficiency can be avoided by using salt that has been fortified with iodine (iodized salt). Fortified salt, which contains 15 parts per million of iodine, prevents iodine deficiency.

The survey undertook a rapid test, using a test kit supplied by UNICEF, to assess whether the household was using iodized salt for cooking. The data presented in Table 11.7 are based on the 94 percent of households where salt was tested. Almost all households in Nigeria use adequately iodized salt (97 percent). The region with the lowest prevalence of adequately iodized salt is North Central (93 percent).

Table 11.7 Iodization of household salt

Percent distribution of households by level of iodine in salt (parts per million), according to background characteristics, Nigeria 2003

Background characteristic	Level of iodine in household salt:			Total	Number of households tested	Percentage of households tested	Percentage of households with no salt	Number of households
	None (0 ppm)	Inadequate (<15 ppm)	Adequate (15+ ppm)					
<b>Residence</b>								
Urban	0.9	0.6	98.5	100.0	2,398	92.3	5.3	2,598
Rural	2.2	1.2	96.7	100.0	4,354	94.1	2.9	4,627
<b>Region</b>								
North Central	5.7	1.6	92.7	100.0	966	92.9	4.4	1,040
North East	0.9	0.3	98.8	100.0	1,095	92.4	5.2	1,185
North West	0.7	1.1	98.2	100.0	1,758	92.0	3.1	1,911
South East	2.6	0.4	97.0	100.0	640	92.6	3.3	690
South South	1.0	1.0	98.0	100.0	1,261	95.9	3.4	1,315
South West	0.9	1.1	98.0	100.0	1,032	95.3	3.4	1,083
Total	1.7	1.0	97.3	100.0	6,752	93.5	3.8	7,225

### 11.3.2 Micronutrient Status of Young Children

Vitamin A is a micronutrient that is essential for the proper development of children's immune and visual systems. It is present in certain fruits and vegetables, such as pumpkin, red or yellow yams or squash, carrots, green leafy vegetables, mango, and paw-paw. Women in Nigeria should receive vitamin A supplements after childbirth. This enhances the micronutrient status of the mothers and their breast-feeding children and, consequently, the survival status of the child.

Table 11.8 shows the percentage of the youngest children under three years of age who consumed fruits and vegetables rich in vitamin A in the seven days preceding the survey. The data show that 43 percent of children ate such foods. The consumption of fruits and vegetables rich in vitamin A varies considerably by the age of the child and breastfeeding status. Although children under six months are recommended to receive no complementary foods, 6 percent received fruits and vegetables rich in vitamin A. The proportion increases from 21 percent among children age 6-9 months to 72 percent among children age 24-35 months. Nonbreastfeeding children are more than twice as likely to consume fruits and vegetables rich in vitamin A as breastfeeding children. This is expected since nonbreastfeeding children are older and should receive more complementary foods than the younger breastfeeding children. The consumption of fruits and vegetables rich in vitamin A is lowest in North Central (29 percent) and highest in South East (56 percent).

Table 11.8 Micronutrient intake among children

Percentage of youngest children under age three living with the mother who consumed fruits and vegetables rich in vitamin A in the seven days preceding the survey, and percentage of children age 6-59 months who received vitamin A supplements in the six months preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Children under age three living with the mother		Children age 6-59 months	
	Percentage who consumed fruits and vegetables rich in vitamin A <sup>1</sup>	Number of children	Percentage who received vitamin A supplements	Number of children
<b>Age in months</b>				
<6	6.4	659	na	na
6-9	20.8	460	30.8	478
10-11	40.1	184	32.6	189
12-23	58.7	949	31.2	999
24-35	71.8	724	40.0	1,050
36-47	na	na	31.2	1,067
48-59	na	na	34.1	899
<b>Sex</b>				
Male	40.7	1,497	34.3	2,370
Female	46.0	1,480	33.2	2,312
<b>Birth order</b>				
1	43.0	597	36.5	939
2-3	41.2	907	36.2	1,471
4-5	44.7	675	37.7	1,046
6+	44.7	798	25.3	1,226
<b>Breastfeeding status</b>				
Breastfeeding	30.0	1,980	27.8	1,397
Not breastfeeding	70.3	980	36.5	3,229
Missing	*	16	23.7	55
<b>Residence</b>				
Urban	49.4	907	48.9	1,438
Rural	40.7	2,070	27.0	3,244
<b>Region</b>				
North Central	29.2	437	32.4	693
North East	43.3	671	25.1	1,075
North West	44.7	1,046	15.2	1,584
South East	55.6	175	60.4	312
South South	50.5	378	55.8	597
South West	42.8	269	76.4	421
<b>Mother's education</b>				
No education	41.3	1,501	16.8	2,340
Primary	41.8	685	40.4	1,106
Secondary	47.6	690	58.8	1,053
Higher	53.7	101	65.6	182
<b>Mother's age at birth</b>				
<20	44.2	540	24.0	816
20-24	43.6	720	35.4	1,310
25-29	42.0	799	39.6	1,185
30-34	42.1	470	32.2	712
35-49	45.6	448	33.5	660
<b>Wealth quintile</b>				
Lowest	40.5	644	22.6	1,013
Second	42.6	630	18.4	977
Middle	46.3	599	24.5	959
Fourth	40.2	568	43.6	887
Highest	47.7	536	64.9	847
Total	43.3	2,977	33.7	4,682

Note: Information on vitamin A supplements is based on mother's recall. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. na = Not applicable

<sup>1</sup> Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A

Table 11.8 also shows that one-third of children age 6-59 months received vitamin A supplements in the six months preceding the survey. Children residing in urban areas and in the south are much more likely to receive vitamin A supplementation than those in rural areas and in the north. There is a positive relationship between mother's education and supplementation. Vitamin A supplementation ranges from a low of 17 percent for children of women with no education to a high of 66 percent for children of the most educated mothers. Less than one-quarter of children living in households in the three lowest wealth quintiles receive vitamin A supplementation, compared with 44 percent of children in the fourth quintile and 65 percent of children in the highest quintile.

### 11.3.3 Micronutrient Intake Among Women

A mother's nutritional status during pregnancy is important both for the child's intrauterine development and for protection against maternal morbidity and mortality. Table 11.9 shows that only one-fifth of women who gave birth in the five years preceding the survey received a vitamin A dose within two months of giving birth. There is variation in postpartum vitamin A supplementation by age at birth, residence, region, level of education, and wealth quintile. Supplementation is higher among women over 20 years of age than among younger women and much higher among women in the south than in the north. Urban women are more than twice as likely as rural women to have received a postpartum vitamin A dose. Furthermore, there is a positive relationship between education and household economic status and postpartum vitamin A supplementation.

Night blindness is an indicator of severe vitamin A deficiency, and pregnant women are especially prone to suffer from it. Table 11.9 shows that 8 percent of women with a recent birth reported that they experienced night blindness. After adjusting for women who also reported vision problems during the day, an estimated 2 percent of women suffered from night blindness. The small percentages make it difficult to examine variation among subgroups of Nigeria's population.

Anaemia usually results from a nutritional deficiency of iron, folate, vitamin B<sub>12</sub>, or some other nutrients. Anaemia may have detrimental effects on the health of women and children and may become an underlying cause of maternal mortality and perinatal mortality. Anaemia also results in an increased risk of premature delivery and low birth weight. Early detection of anaemia can help to prevent complications related to pregnancy and delivery, as well as child-development problems. Anaemia is a serious concern for young children because it can result in impaired cognitive performance, behavioural and motor development, coordination, language development, and scholastic achievement, as well as increased morbidity from infectious diseases. It is recommended that iron tablets be taken daily for at least three months during pregnancy. Thus, information on the prevalence of iron supplementation can be useful for the development of health-intervention programs, such as iron-fortification programs, designed to prevent anaemia.

The 2003 NDHS asked women who had a recent birth whether they received or purchased any iron tablets during the last pregnancy. If so, the woman was asked to report the number of days that the tablets were actually taken during that pregnancy. Table 11.9 shows that one-fifth of women (21 percent) reported taking iron supplements for at least 90 days during the pregnancy, which is the recommended supplementation. Forty percent of women received no iron at all.

There is significant variation by background characteristics. Almost half of women in rural areas did not receive any iron supplementation, which is more than twice the proportion in urban areas. Pregnant women living in the South West are the most likely subgroup to have taken iron for at least 90 days (63 percent). This compares with just 10 percent of women in the North West. Iron supplementation is positively correlated with education and household economic status.



Table 11.9 Micronutrient intake among mothers

Among women who gave birth in the five years preceding the survey, percentage who received a vitamin A dose in the two months after delivery, percentage who had night blindness during pregnancy, and percent distribution by whether iron tablets or syrup were taken during pregnancy for specific numbers of days, by background characteristics, Nigeria 2003

Background characteristic	Received vitamin A dose post-partum <sup>1</sup>	Suffered night blindness during pregnancy		Number of days took iron tablets or syrup during pregnancy					Total	Number of women
		Reported	Adjusted <sup>2</sup>	None	<60	60-89	90+	Don't know/missing		
<b>Age at birth</b>										
<20	11.1	7.3	2.7	48.5	25.4	5.1	13.6	7.4	100.0	719
20-24	18.4	7.5	3.1	40.5	23.9	6.6	20.9	8.1	100.0	921
25-29	24.2	7.1	1.5	34.7	25.7	6.2	24.1	9.3	100.0	965
30-34	20.3	8.9	1.4	37.5	25.4	4.8	23.3	9.0	100.0	628
35-49	23.2	8.0	2.1	38.8	25.6	3.4	23.5	8.7	100.0	678
<b>Number of children ever born</b>										
1	19.4	5.6	1.1	37.5	26.9	6.0	20.9	8.7	100.0	803
2-3	21.1	7.2	2.4	36.6	25.6	6.5	24.4	6.8	100.0	1,102
4-5	23.4	8.9	2.7	37.5	25.3	5.6	22.4	9.1	100.0	874
6+	15.4	8.5	2.4	46.1	23.5	3.7	17.3	9.5	100.0	1,132
<b>Residence</b>										
Urban	33.0	5.6	0.9	19.7	28.1	6.2	35.2	10.7	100.0	1,144
Rural	14.1	8.5	2.7	48.1	24.0	5.0	15.4	7.6	100.0	2,766
<b>Region</b>										
North Central	18.5	5.6	0.1	29.8	23.8	6.5	17.1	22.8	100.0	575
North East	11.5	11.1	3.8	45.2	25.0	6.7	20.6	2.6	100.0	862
North West	6.5	4.9	2.4	58.8	23.2	3.4	9.5	5.0	100.0	1,341
South East	51.7	5.3	0.3	4.0	39.4	5.3	30.9	20.4	100.0	222
South South	33.6	11.0	1.9	29.7	34.1	5.6	22.9	7.8	100.0	544
South West	48.0	9.3	2.3	9.4	13.1	7.4	63.4	6.7	100.0	367
<b>Education</b>										
No education	8.1	7.4	2.8	58.8	20.8	3.8	10.3	6.4	100.0	1,989
Primary	25.5	9.0	1.5	27.5	29.1	6.8	25.7	10.9	100.0	918
Secondary	34.7	7.5	2.0	14.0	29.5	7.1	38.1	11.3	100.0	862
Higher	51.1	3.8	0.0	8.3	36.0	8.0	42.2	5.5	100.0	143
<b>Wealth quintile</b>										
Lowest	10.3	15.5	5.5	61.0	21.0	3.2	8.1	6.7	100.0	852
Second	10.4	5.4	1.6	61.1	19.3	3.2	11.2	5.2	100.0	846
Middle	13.7	5.8	1.2	39.4	28.5	6.7	15.2	10.3	100.0	808
Fourth	24.2	5.0	1.1	21.8	30.3	6.8	29.0	12.1	100.0	735
Highest	45.2	5.6	1.0	6.0	28.4	7.8	49.1	8.8	100.0	670
Total	19.6	7.7	2.2	39.8	25.2	5.4	21.2	8.5	100.0	3,911

Note: For women with two or more live births in the five-year period, data refer to the most recent birth.

<sup>1</sup> In the first two months after delivery

<sup>2</sup> Women who reported night blindness but did not report difficulty with vision during the day

## 11.4 Nutritional Status of Children

Malnutrition places children at increased risk of morbidity and mortality and has also been shown to be related to impaired mental development. Anthropometry provides one of the most important indicators of children's nutritional status. Height and weight measurements were obtained for all children born in the five years preceding the 2003 NDHS. The height and weight data are used to compute the following three summary indices of nutritional status: height-for-age, weight-for-height, and weight-for-age. The indices are expressed as standardized scores (Z-scores) or standard deviation units from the median for the international reference population recommended by WHO. Children who fall more than two stan-

standard deviations below the reference median (-2 SD) are regarded as undernourished, while those who fall more than three standard deviations below the reference median (-3 SD) are considered severely undernourished. Table 11.10 shows the nutritional status of children under five years of age, by background characteristics.

Children whose height-for-age is below -2 SD from the median of the reference population are considered *stunted* or short for their age. Stunting is the outcome of failure to receive adequate nutrition over an extended period and is also affected by recurrent or chronic illness. Almost two in five children are short for their age; half of these undernourished children are severely stunted.

Children whose weight-for-height is below -2 SD from the median of the reference population are considered *wasted* (or thin). Wasting represents the failure to receive adequate nutrition in the period immediately before the survey and typically is the result of a recent episode of illness, especially diarrhoea, or a rapid deterioration in the food supply. Almost one in ten children is wasted.

Children whose weight-for-age is below -2 SD from the median of the reference population are considered *underweight*. The measure reflects the effects of both acute and chronic malnutrition. Twenty-nine percent of all children are underweight; almost one in three of these children is severely underweight.

Nutritional status varies substantially by background characteristics. The impact of weaning can be seen in younger children, whose nutritional status deteriorates after six months of age, when children are being weaned. Rural children and children of younger or less educated mothers are disadvantaged in terms of nutritional status. Children living in the North West stand out as being particularly disadvantaged in terms of nutritional status (Figure 11.2).

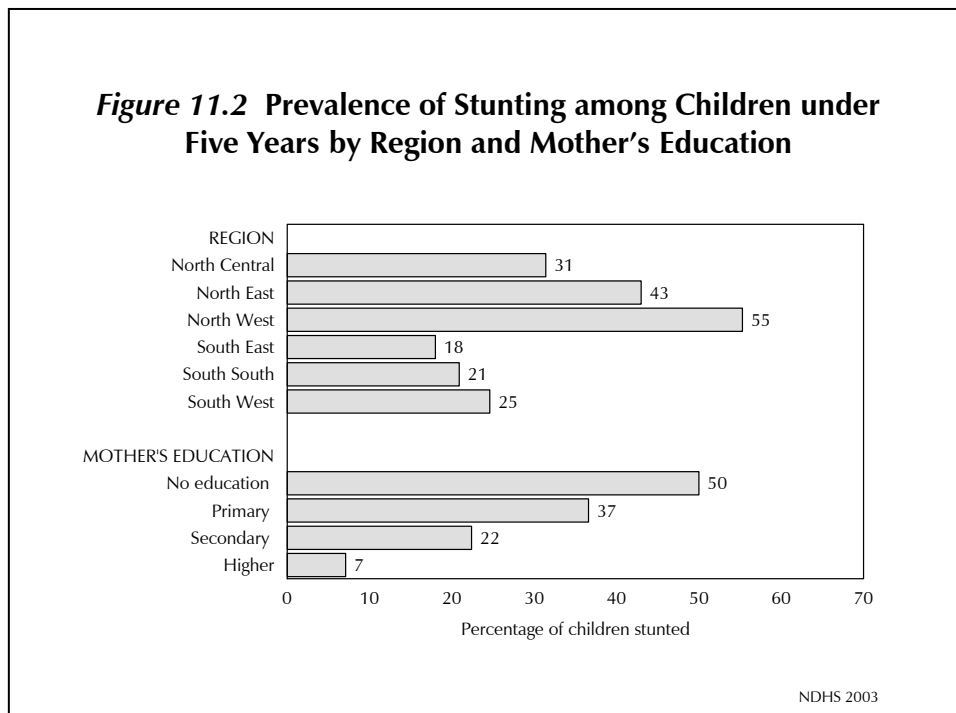


Table 11.10 Nutritional status of children

Percentage of children under five years 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 2003

Background characteristic	Height-for-age (stunted)			Weight-for-height (wasted)			Weight-for-age (underweight)			Number of children
	Percent-age below -3 SD	Percent-age below -2 SD <sup>1</sup>	Mean z-score -SD	Percent-age below -3 SD	Percent-age below -2 SD <sup>1</sup>	Mean z-score -SD	Percent-age below -3 SD	Percent-age below -2 SD <sup>1</sup>	Mean z-score -SD	
<b>Age in months</b>										
<6	2.7	7.4	-0.0	2.9	7.9	0.1	0.5	6.6	0.2	527
6-9	9.3	24.7	-0.9	3.5	14.2	-0.5	6.8	20.4	-1.1	425
10-11	17.1	36.2	-1.4	1.6	9.8	-0.3	10.9	31.7	-1.4	179
12-23	24.9	49.4	-2.0	4.0	15.0	-0.7	15.6	41.4	-1.8	889
24-35	21.7	43.3	-1.6	1.5	5.9	-0.4	11.3	34.8	-1.3	972
36-47	21.7	43.9	-1.7	1.7	8.0	-0.3	8.0	26.6	-1.3	985
48-59	23.6	41.3	-1.7	0.7	6.4	-0.3	5.8	27.9	-1.3	812
<b>Sex</b>										
Male	20.3	40.8	-1.5	2.2	9.3	-0.4	9.3	29.2	-1.2	2,390
Female	18.2	35.9	-1.4	2.2	9.2	-0.4	8.4	28.1	-1.2	2,399
<b>Birth order<sup>2</sup></b>										
1	16.3	36.9	-1.4	2.2	9.3	-0.4	8.2	28.5	-1.2	885
2-3	18.9	36.1	-1.4	1.9	9.6	-0.3	9.3	28.5	-1.2	1,392
4-5	20.2	35.7	-1.4	2.0	8.0	-0.4	9.1	28.1	-1.2	1,009
6+	22.0	45.0	-1.7	2.6	10.0	-0.4	9.4	29.9	-1.3	1,143
<b>Birth interval in months<sup>3</sup></b>										
First birth <sup>3</sup>	16.3	36.8	-1.4	2.2	9.4	-0.4	8.2	28.6	-1.2	888
<24	27.1	44.5	-1.8	2.1	9.1	-0.4	12.1	33.0	-1.4	808
24-47	19.1	38.8	-1.5	2.1	8.7	-0.4	8.8	29.1	-1.2	2,092
48+	15.7	32.1	-1.2	2.4	11.0	-0.3	7.2	22.7	-1.0	641
<b>Size at birth<sup>2</sup></b>										
Very small	27.7	50.4	-1.9	2.6	15.0	-0.6	16.6	42.2	-1.6	243
Small	21.4	42.2	-1.6	2.4	12.3	-0.7	13.8	37.9	-1.6	353
Average or larger	18.9	37.4	-1.4	2.2	8.6	-0.3	8.1	27.1	-1.2	3,801
<b>Residence</b>										
Urban	12.9	28.8	-1.1	1.6	8.3	-0.4	6.8	22.2	-1.0	1,553
Rural	22.3	42.9	-1.6	2.5	9.7	-0.4	9.9	31.8	-1.3	3,236
<b>Region</b>										
North Central	11.3	31.4	-1.1	1.2	5.5	-0.4	4.9	19.6	-1.0	758
North East	21.6	43.0	-1.6	1.2	7.9	-0.4	9.5	33.1	-1.4	1,089
North West	34.4	55.3	-2.2	3.8	12.5	-0.3	14.7	42.9	-1.6	1,452
South East	5.3	19.7	-0.5	0.7	4.9	0.0	2.1	8.5	-0.3	338
South South	6.3	20.9	-0.7	2.5	11.1	-0.5	6.4	18.0	-0.9	643
South West	8.6	24.6	-1.0	2.1	8.6	-0.4	4.7	19.1	-1.0	510
<b>Mother's education<sup>4</sup></b>										
No education	28.7	50.0	-2.0	2.2	10.2	-0.4	11.7	37.6	-1.5	2,172
Primary	15.9	36.6	-1.4	2.6	9.4	-0.4	8.6	26.1	-1.2	1,105
Secondary	7.3	22.4	-0.8	2.3	6.9	-0.3	5.3	16.9	-0.8	1,068
Higher	2.3	7.1	-0.3	0.6	10.3	-0.3	2.1	8.9	-0.5	194
<b>Mother's age<sup>4</sup></b>										
15-19	18.0	40.8	-1.5	4.1	12.0	-0.4	10.6	31.2	-1.3	294
20-24	23.9	41.8	-1.7	2.2	8.5	-0.4	11.3	34.5	-1.4	913
25-29	18.4	36.7	-1.4	2.6	9.1	-0.3	8.8	27.9	-1.1	1,389
30-34	19.7	37.7	-1.4	1.8	9.6	-0.4	8.8	29.2	-1.2	903
35-49	17.0	37.5	-1.4	1.9	9.0	-0.4	7.1	23.5	-1.2	1,039
<b>Mother's status</b>										
Mother interviewed	19.5	38.5	-1.5	2.2	9.3	-0.4	9.0	28.8	-1.2	4,429
Mother not interviewed but in household	16.4	34.8	-1.4	5.9	8.4	-0.3	8.3	26.4	-1.1	110
Mother not interviewed and not in the household <sup>5</sup>	16.1	38.1	-1.2	0.8	8.1	-0.4	6.4	27.2	-1.1	247
<b>Wealth quintile</b>										
Lowest	26.4	48.8	-1.8	2.4	10.4	-0.4	10.8	34.8	-1.4	977
Second	26.0	47.7	-1.9	2.8	11.2	-0.4	12.0	37.5	-1.5	971
Middle	22.5	44.2	-1.6	2.6	8.1	-0.3	10.3	30.7	-1.3	954
Fourth	15.8	32.5	-1.3	1.6	8.2	-0.4	7.8	26.6	-1.2	934
Highest	5.2	17.9	-0.6	1.6	8.2	-0.3	3.4	13.4	-0.7	952
Total	19.2	38.3	-1.5	2.2	9.2	-0.4	8.9	28.7	-1.2	4,789

Note: Table is based on children who stayed in the household the night before the interview. Each of the indices is expressed in standard deviation (SD) units from the median of the NCHS/CDC/WHO International Reference Population. The percentage of children who are more than three or more than two standard deviations below the median of the reference population (-3 SD and -2 SD) are considered malnourished. Table is based on children with valid dates of birth (month and year) and valid measurements (height and weight). Total includes 25 cases with missing information on size at birth.

<sup>1</sup> Includes children who are below -3 SD

<sup>2</sup> Excludes children whose mothers were not interviewed

<sup>3</sup> First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

<sup>4</sup> For women who were not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers were not listed in the household schedule.

<sup>5</sup> Includes children whose mothers are dead

## 11.5 NUTRITIONAL STATUS OF WOMEN

The 2003 NDHS collected anthropometric data from all women age 15-49. Women's nutritional status is important both as an indicator of overall health and as a predictor of pregnancy outcome for both mother and child. Two indices of women's nutritional status—height and body mass index (BMI)—are presented in Table 11.11.

Maternal height is a measure of past nutritional status and reflects in part the cumulative effect of social and economic outcomes on access to nutritional foods during childhood and adolescence. It can be used to predict the risks associated with difficult deliveries since small stature is often associated with small pelvis size and a greater likelihood of obstructed labor. Short stature is also correlated with low birth weight in infants, high risk of stillbirths, and high rates of miscarriage. The height below which a woman is considered to be at nutritional risk is in the range of 140 to 150 centimeters. The mean height of Nigerian women is 158 centimeters, and varies little by background characteristics. However, short stature is more prevalent among teenagers, with 5 percent of women age 15-19 below 145 centimeters tall.

The BMI, which incorporates both height and weight and provides a better measure of thinness and obesity than weight alone, is defined as weight in kilograms divided by the square of the height in meters ( $\text{kg}/\text{m}^2$ ). For the BMI, a cutoff of 18.5 has been recommended for indicating chronic energy deficiency among nonpregnant women. To avoid bias in the measurement of women's nutritional status, pregnant women and women who had given birth in the two months preceding the survey were excluded from the calculation of weight and body mass measures. Table 11.11 shows that the mean BMI of Nigerian women (22.3) falls well within the internationally accepted normal range. Almost two-thirds of women (64 percent) have BMIs in the normal range, 15 percent are thin, and 2 percent are severely thin. The youngest women are the most likely subgroup to be thin; one-quarter of women age 15-19 have a BMI of less than 18.5. There is significant regional variation, with the prevalence of thinness ranging from 7 percent in the North Central to 23 percent in the North East.

The BMI is also used to evaluate the proportion of women who are overweight or obese. A cutoff point of 25.0 has been recommended for defining overweight, while 30.0 is the cutoff point for defining obesity. According to the 2003 NDHS, one-fifth of Nigerian women weigh more than they should: 15 percent are overweight, and 6 percent are obese. There is a strong relationship between age and high BMI. For example, only 7 percent of women age 15-19 are overweight or obese, compared with one-third (34 percent) of women age 45-49. There are marked variations by residence, education, and household economic status.

**Table 11.11 Nutritional status of women by background characteristics**

Among women age 15-49, mean height, percentage under 145 cm, mean body mass index (BMI), and percentage with specific BMI levels, by background characteristics, Nigeria 2003

Background characteristic	Height			Body mass index BMI <sup>1</sup> (kg/m <sup>2</sup> )									
	Mean height in cm	Percent-age below 145 cm	Number of women	Normal		Thin			Overweight/obese			Number of women	
				Mean BMI	18.5-24.9 (normal)	<18.5 (thin)	17.0-18.4 (mildly thin)	16.0-16.9 (moderately thin)	<16.0 (severely thin)	≥25.0 (overweight/obese)	25.0-29.9 (overweight)		30.0 or higher (obese)
<b>Age</b>													
15-19	155.8	4.5	1,641	20.5	69.0	24.5	17.5	4.0	3.0	6.5	5.5	0.9	1,504
20-24	158.4	1.1	1,461	21.8	71.2	14.4	10.2	3.1	1.2	14.3	11.3	3.1	1,201
25-29	159.0	0.9	1,347	22.6	65.0	11.9	8.7	2.4	0.8	23.1	17.6	5.5	1,080
30-34	158.9	1.5	924	23.2	62.7	10.4	7.4	1.9	1.2	26.9	18.2	8.6	746
35-39	159.0	1.0	795	23.7	55.0	12.7	10.0	1.3	1.4	32.3	21.8	10.5	664
40-44	158.8	0.7	667	23.5	56.2	13.1	9.0	3.4	0.7	30.7	20.9	9.8	620
45-49	157.8	2.3	559	23.8	57.4	9.2	4.5	2.7	2.0	33.5	22.2	11.3	546
<b>Residence</b>													
Urban	159.0	1.3	2,544	23.2	59.2	13.1	9.1	2.4	1.6	27.7	18.1	9.6	2,258
Rural	157.6	2.2	4,850	21.8	67.1	16.3	11.6	3.1	1.6	16.6	13.0	3.6	4,105
<b>Region</b>													
North Central	157.8	1.5	1,086	23.1	70.3	6.6	5.3	1.0	0.3	23.1	16.9	6.2	944
North East	158.2	1.6	1,320	21.4	62.9	23.0	16.1	4.3	2.7	14.1	10.4	3.7	1,095
North West	157.2	2.5	2,022	21.5	65.3	19.7	12.9	4.3	2.5	15.0	10.7	4.2	1,630
South East	158.8	2.9	707	23.6	57.9	8.2	6.2	1.4	0.5	33.9	25.5	8.4	648
South South	158.3	1.3	1,308	22.9	64.2	11.1	8.7	1.6	0.8	24.7	16.8	8.0	1,173
South West	159.1	1.6	950	22.3	62.5	16.7	11.9	3.1	1.7	20.8	15.0	5.9	872
<b>Education</b>													
No education	157.5	2.1	3,052	21.6	65.4	19.8	13.5	4.2	2.1	14.8	11.2	3.5	2,503
Primary	157.3	2.5	1,606	22.6	64.8	12.8	9.4	1.9	1.4	22.4	16.4	6.0	1,385
Secondary	158.7	1.7	2,312	22.5	64.6	13.1	9.6	2.2	1.2	22.3	16.1	6.2	2,080
Higher	161.1	0.0	425	25.0	53.7	4.9	2.9	0.8	1.2	41.4	24.7	16.7	394
<b>Wealth quintile</b>													
Lowest	157.2	3.6	1,364	21.1	67.8	21.5	14.6	4.1	2.8	10.7	8.6	2.1	1,141
Second	157.4	1.3	1,386	21.3	70.0	18.2	12.8	3.6	1.8	11.8	9.0	2.8	1,155
Middle	157.4	2.1	1,464	22.0	66.7	16.0	11.2	3.4	1.3	17.4	12.7	4.6	1,238
Fourth	158.1	1.6	1,492	22.5	65.2	13.1	9.8	1.8	1.5	21.7	15.9	5.8	1,300
Highest	159.7	1.1	1,688	24.0	54.7	9.2	6.5	1.8	0.9	36.1	24.5	11.6	1,528
Total	158.0	1.9	7,394	22.3	64.3	15.2	10.7	2.9	1.6	20.5	14.8	5.8	6,362

<sup>1</sup> Excludes pregnant women and women with a birth in the preceding 2 months

Acquired immunodeficiency syndrome (AIDS) is one of the world's most serious public health concerns, and it poses an enormous challenge to most countries, especially developing countries such as Nigeria. The first case of human immunodeficiency virus (HIV) infection in Nigeria was recorded in 1986, and since then, rates of infection have been increasing.

Estimates of HIV prevalence have increased from 1.8 percent in 1991 to 4.5 percent in 1996, and the 2001 National HIV/Syphilis Sentinel Survey estimated a national HIV seroprevalence rate of 5.8 percent (FMOH, 2001). Regional prevalence rates varied significantly, from a high of 7.7 percent in the South South to a low of 3.3 percent in the North West.

The greatest concern is the projected mortality due to AIDS over the next few years and its socio-economic consequences. Projections of annual deaths caused by AIDS have increased in Nigeria from less than 50,000 in 1999 to about 350,000 by 2003-2004. The number of Nigerian children orphaned as a result of parental AIDS deaths is projected to be near 2 million in 2003-2004. AIDS deaths have economic, health, and social consequences for everyone in the country. The magnitude of the problem has renewed the vigour of the Federal Government of Nigeria to review the national HIV/AIDS policy.

The future course of the Nigerian AIDS epidemic will depend on the efforts of individuals, development partners, local and international nongovernmental organizations (NGOs), religious groups, and traditional institutions to curb the pandemic. A three-year HIV/AIDS Emergency Action Plan (HEAP) was initiated by the Federal Government of Nigeria (FGN) in 2001. The FGN has created the National Action Committee on AIDS (NACA) to do extensive work in collaboration with international development partners and local and international NGOs to mitigate the effects of HIV/AIDS. Strategies employ a multisectoral approach, working at national, state, and local government levels.

Data obtained from the 2003 Nigeria Demographic and Health Survey (NDHS) provide an invaluable resource for witnessing levels and trends of important factors related to HIV/AIDS. These data are intended to inform policy makers and programme planners in their strategies for programme planning and evaluation. This chapter presents information about knowledge, attitudes, and practices related to prevention and control of HIV/AIDS and care of people living with the virus.

## 12.1 KNOWLEDGE OF WAYS TO AVOID HIV/AIDS

Table 12.1 shows that awareness of AIDS in Nigeria is higher among men than women, with 97 percent of men and 86 percent of women reporting that they have "heard of AIDS." There is little variation in knowledge among men by background characteristics; however, there are significant differences among women. The lowest level of AIDS awareness is among women living in households ranked lowest on the wealth index (70 percent). Knowledge of AIDS among women ranges from a low of 76 percent in the North East to a high of 96 percent in the South East. Awareness of AIDS is universal for men and women with higher education (100 percent).

Two aspects of AIDS-related behaviour that AIDS prevention programmes focus their messages on are the use of condoms and limiting the number of sexual partners or staying faithful to one partner. These are considered programmatically important ways to prevent HIV transmission. To ascertain whether programmes have effectively communicated these messages, interviewers asked respondents

Table 12.1 Knowledge of AIDS

Percentage of women and men who have heard of AIDS, by background characteristics, Nigeria 2003

Background characteristic	Women		Men	
	Has heard of AIDS	Number of respondents	Has heard of AIDS	Number of respondents
<b>Age</b>				
15-19	82.8	1,716	92.9	453
20-24	87.4	1,494	97.8	426
25-29	89.7	1,382	98.2	328
30-39	87.9	1,757	99.0	519
40-49	84.0	1,271	97.4	367
15-24	84.9	3,210	95.3	880
<b>Marital status</b>				
Never married	88.4	1,926	95.7	1,048
Ever had sex	94.5	838	98.9	489
Never had sex	83.6	1,087	93.0	559
Married/living together	85.4	5,336	98.4	1,006
Divorced/separated/widowed	88.1	358	(96.4)	40
<b>Residence</b>				
Urban	94.7	2,629	99.0	792
Rural	81.9	4,991	95.9	1,301
<b>Region</b>				
North Central	84.5	1,121	97.1	313
North East	75.7	1,368	97.3	377
North West	86.6	2,095	99.3	529
South East	95.5	737	99.3	192
South South	90.3	1,342	92.1	385
South West	90.3	958	97.7	296
<b>Education</b>				
No education	77.9	3,171	95.9	385
Primary	86.6	1,628	92.8	519
Secondary	94.8	2,370	99.0	932
Higher	100.0	451	100.0	257
<b>Wealth quintile</b>				
Lowest	69.6	1,414	92.3	362
Second	79.9	1,439	95.8	360
Middle	88.5	1,513	99.1	392
Fourth	92.8	1,526	97.2	452
Highest	97.7	1,728	99.5	527
Total	86.3	7,620	97.0	2,093

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

about these behaviours as ways of avoiding AIDS. If respondents reported that AIDS could be avoided, they were asked how “a person could avoid getting the HIV virus.” Two types of questions were asked about ways to avoid getting infected. First, an open-ended question was asked, and respondents were allowed to give all of the ways to avoid HIV/AIDS that they know of without prompting. Next, women and men were asked specific questions on whether condom use and (in a separate question) whether limiting their sexual activity to just one partner can reduce their chances of getting AIDS. Results are presented in Table 12.2.

Table 12.2 Knowledge of HIV prevention methods

Percentage of women and men who, in response to a prompted question, say that people can reduce the risk of getting the AIDS virus by using condoms and by having sex with just one partner who is not infected and who has no other partners, by background characteristics, Nigeria 2003

Background characteristic	Women				Men			
	Knowledge of HIV prevention by:			Number of women	Knowledge of HIV prevention by:			Number of men
	Using condoms	Limiting sex to one uninfected partner	Using condoms and limiting sex to one uninfected partner <sup>1</sup>		Using condoms	Limiting sex to one uninfected partner	Using condoms and limiting sex to one uninfected partner <sup>1</sup>	
<b>Age</b>								
15-19	38.6	53.3	36.5	1,716	58.2	64.8	52.0	453
20-24	47.8	63.0	44.9	1,494	67.8	80.6	65.1	426
25-29	51.3	64.4	49.3	1,382	69.2	86.7	65.4	328
30-39	46.6	61.4	44.1	1,757	67.2	87.3	64.0	519
40-49	39.1	58.0	37.1	1,271	54.1	82.8	52.1	367
15-24	42.9	57.8	40.4	3,210	62.8	72.4	58.4	880
<b>Marital status</b>								
Never married	47.9	63.0	45.6	1,926	65.9	75.6	61.3	1,048
Ever had sex	59.7	72.9	57.2	838	77.7	84.7	74.1	489
Never had sex	38.7	55.4	36.7	1,087	55.5	67.7	50.1	559
Married/living together	43.3	58.7	41.1	5,336	60.3	84.6	57.7	1,006
Divorced/separated/ widowed	46.8	60.4	43.7	358	(74.8)	(87.5)	(72.5)	40
<b>Residence</b>								
Urban	57.5	73.0	54.5	2,629	70.6	83.1	65.3	792
Rural	37.8	53.0	35.9	4,991	59.0	78.4	56.4	1,301
<b>Region</b>								
North Central	34.7	55.6	33.8	1,121	68.1	83.8	66.6	313
North East	34.7	50.6	34.0	1,368	47.5	80.2	45.7	377
North West	48.8	59.8	44.7	2,095	69.8	83.1	62.0	529
South East	43.6	77.3	42.2	737	79.4	85.1	75.5	192
South South	48.8	58.0	47.1	1,342	50.4	68.2	49.8	385
South West	56.3	67.4	52.4	958	73.5	83.4	69.0	296
<b>Education</b>								
No education	33.0	48.0	30.8	3,171	44.9	73.0	41.9	385
Primary	43.3	56.1	40.8	1,628	54.2	74.8	52.2	519
Secondary	55.6	72.5	53.4	2,370	71.4	82.4	66.7	932
Higher	73.7	91.1	70.5	451	80.5	93.8	76.4	257
<b>Wealth quintile</b>								
Lowest	25.0	37.1	23.6	1,414	42.1	66.5	40.4	362
Second	31.1	46.5	29.1	1,439	57.5	79.0	54.7	360
Middle	47.5	61.9	45.2	1,513	68.4	86.5	65.3	392
Fourth	53.4	67.9	50.3	1,526	64.4	82.2	61.8	452
Highest	61.8	80.7	59.2	1,728	77.4	84.0	70.6	527
<b>Total</b>	44.6	59.9	42.3	7,620	63.4	80.2	59.8	2,093

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

<sup>1</sup> Corresponds to UNAIDS Knowledge Indicator 1 "Knowledge of HIV prevention methods"



Knowledge of prevention of AIDS is not quite as widespread as knowledge of the disease itself. Limiting the number of sexual partners is acknowledged by more Nigerians of all backgrounds as a means to avoid AIDS, compared with use of condoms. Forty-five percent of women and 63 percent of men report knowledge of condom use for HIV/AIDS protection. On the other hand, six in ten women and eight in ten men report knowing that limiting the number of sexual partners is a way to avoid HIV/AIDS.

More men than women know about condom use and limiting partners as ways to avoid AIDS, although patterns of knowledge by background characteristics are similar for both women and men. The youngest women and men (age 15-19) are somewhat less likely than older women and men to know these specific ways to avoid transmission of HIV. This is important because sexual debut often occurs before age 20. Variation by education is particularly striking among both women and men. Knowledge of condom use to avoid AIDS ranges from a low of 33 percent among women with no education to a high of 74 percent among those with higher education. Knowledge among men increases steadily with education as well, from a low of 45 percent among men with no education to a high of 81 percent among men with higher education.

## **12.2 BELIEFS ABOUT AIDS**

The 2003 NDHS also inquired about common misconceptions regarding AIDS and HIV transmission. Respondents were asked whether they think it is possible for a healthy-looking person to have the AIDS virus; results are presented in Tables 12.3.1 and 12.3.2 by background characteristics. The tables also present the percentage of the population who know that the common misconceptions regarding transmission of AIDS are not true, in particular, that a person cannot get AIDS from mosquito bites, from witchcraft or other supernatural means, or from sharing food with a person who has AIDS. The tables also show the percentage of the population who know both that it is possible for a healthy-looking person to have AIDS and that the two most common misconceptions regarding transmission (AIDS can be transmitted via mosquito bites or by supernatural means) are not true.

Once again, levels of knowledge are higher among men than among women, and the greatest variability in knowledge is seen by level of education. Overall, about half of women (53 percent) and nearly three-quarters of men (73 percent) know that a healthy-looking person can have AIDS. There are greater gaps in knowledge regarding modes of transmission than knowledge of whether or not a healthy-looking person can have the AIDS virus. For each of the misconceptions regarding transmission of AIDS, approximately four in ten women know that it is not really a mode of transmission; the percentages for men are slightly higher. Respondents who know that a healthy-looking person can have the AIDS virus and who also reject the two most common misconceptions regarding transmission of the AIDS virus are in the minority: 21 percent of women and 28 percent of men. There is room for growth in educating the population about the modes of transmission of the AIDS virus. The lowest levels of knowledge are among persons with no education or primary education.

Table 12.3.1 Beliefs about AIDS: women

Percentage of women who, in response to a prompted question, correctly reject local misconceptions about AIDS transmission or prevention, and who know that a healthy-looking person can have the AIDS virus, by background characteristics, Nigeria 2003

Background characteristic	Percentage of women who know that:				Percentage who reject two most common misconceptions and say that a healthy-looking person can have the AIDS virus <sup>1</sup>	Number of women
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by witchcraft or other supernatural means	A person cannot become infected by sharing food with someone with AIDS		
<b>Age</b>						
15-19	46.3	32.1	36.0	40.5	17.0	1,716
20-24	59.4	41.9	42.3	50.6	24.8	1,494
25-29	59.0	40.3	43.8	49.6	22.7	1,382
30-39	53.0	36.8	41.2	43.8	20.7	1,757
40-49	50.6	33.6	36.7	40.8	19.1	1,271
15-24	52.4	36.7	38.9	45.2	20.6	3,210
<b>Marital status</b>						
Never married	58.8	41.2	43.4	51.8	23.7	1,926
Ever had sex	69.2	45.8	46.9	59.5	28.0	838
Never had sex	50.7	37.7	40.7	45.9	20.4	1,087
Married/living together	51.4	35.5	39.3	42.3	19.9	5,336
Divorced/separated/widowed	54.3	33.1	32.2	46.6	17.6	358
<b>Residence</b>						
Urban	68.6	49.8	51.1	59.0	29.9	2,629
Rural	45.4	30.0	34.1	37.5	15.9	4,991
<b>Region</b>						
North Central	43.3	26.3	29.8	35.6	11.9	1,121
North East	45.4	25.5	35.2	35.0	16.6	1,368
North West	52.3	43.2	42.5	48.0	23.7	2,095
South East	67.1	52.7	57.4	64.8	33.5	737
South South	53.6	31.3	30.3	42.2	14.3	1,342
South West	68.4	47.3	53.3	52.0	29.9	958
<b>Education</b>						
No education	40.4	28.1	31.8	32.7	14.9	3,171
Primary	48.4	30.5	35.0	36.0	15.8	1,628
Secondary	66.9	45.7	48.7	59.4	25.7	2,370
Higher	92.2	75.1	69.5	87.2	54.3	451
<b>Wealth quintile</b>						
Lowest	33.0	19.1	21.0	23.3	9.7	1,414
Second	41.4	25.3	30.4	31.2	14.2	1,439
Middle	51.8	34.5	41.3	42.2	18.0	1,513
Fourth	57.6	43.3	44.1	52.8	22.5	1,526
Highest	77.8	57.4	58.6	69.5	36.2	1,728
Total	53.4	36.9	40.0	44.9	20.8	7,620

Note: The two most common local misconceptions involve transmission by mosquito bites and by witchcraft or other supernatural means.  
<sup>1</sup> Corresponds to UNAIDS Knowledge Indicator 2 "No incorrect beliefs about AIDS"

Table 12.3.2 Beliefs about AIDS: men

Percentage of men who, in response to a prompted question, correctly reject local misconceptions about AIDS transmission or prevention, and who know that a healthy-looking person can have the AIDS virus, by background characteristics, Nigeria 2003

Background characteristic	Percentage of men who know that:				Percentage who reject two most common misconceptions and say that a healthy-looking person can have the AIDS virus <sup>1</sup>	Number of men
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by witchcraft or other supernatural means	A person cannot become infected by sharing food with someone with AIDS		
<b>Age</b>						
15-19	55.8	32.9	47.9	45.2	17.3	453
20-24	74.2	44.4	55.7	64.1	29.1	426
25-29	82.6	49.4	58.6	67.7	33.2	328
30-39	81.9	53.5	54.8	65.0	35.1	519
40-49	72.6	42.7	53.9	53.6	25.3	367
15-24	64.7	38.5	51.7	54.4	23.0	880
<b>Marital status</b>						
Never married	69.7	43.7	54.9	61.0	27.6	1,048
Ever had sex	79.8	52.0	59.5	70.5	34.0	489
Never had sex	60.9	36.5	50.8	52.7	21.9	559
Married/living together	76.5	45.1	53.3	56.4	28.5	1,006
Divorced/separated/widowed	(80.5)	(55.5)	(45.4)	(68.3)	(27.2)	40
<b>Residence</b>						
Urban	82.1	55.0	59.0	68.4	37.5	792
Rural	67.8	38.3	50.8	53.2	22.2	1,301
<b>Region</b>						
North Central	67.9	35.7	47.0	53.1	18.2	313
North East	69.5	47.5	44.5	51.4	20.0	377
North West	77.5	38.9	59.3	56.5	25.2	529
South East	82.3	42.6	47.4	73.9	28.5	192
South South	64.4	46.5	52.8	60.3	33.1	385
South West	81.3	59.6	69.3	67.8	46.6	296
<b>Education</b>						
No education	59.2	30.4	45.7	44.5	14.8	385
Primary	67.1	38.0	43.5	46.2	19.6	519
Secondary	77.7	46.9	56.9	64.9	29.9	932
Higher	89.8	71.1	76.5	84.8	58.0	257
<b>Wealth quintile</b>						
Lowest	55.9	26.5	40.0	36.8	11.7	362
Second	67.2	34.7	45.5	47.8	18.8	360
Middle	72.3	39.9	58.0	61.1	23.2	392
Fourth	80.0	54.8	56.7	64.7	34.1	452
Highest	83.9	58.7	63.8	75.3	43.9	527
Total	73.2	44.6	53.9	59.0	28.0	2,093

Note: The two most common local misconceptions involve transmission by mosquito bites and by witchcraft or other supernatural means. Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> Corresponds to UNAIDS Knowledge Indicator 2 "No incorrect beliefs about AIDS"

## 12.3 STIGMA AND DISCRIMINATION

Knowledge and beliefs about AIDS affect how people treat others whom they know to be living with HIV. To ascertain the level to which people are accepting of others who are living with HIV, the 2003 NDHS asked several questions regarding behavioural treatment of persons with AIDS. Results are presented in Tables 12.4.1 and 12.4.2, which excludes the 14 percent of women and 3 percent of men who reported that they have never heard of an illness called AIDS. Respondents were asked whether or not they would be willing to take on the care of a relative with HIV in their own household. Overall, four in ten respondents reported that they would be willing to care for a sick relative in their own household. Only one-quarter of respondents in the South West reported that they would do so.

Table 12.4.1 Accepting attitudes towards those living with HIV: women

Percentage of women expressing accepting attitudes toward people with HIV, by background characteristics, Nigeria 2003

Background characteristic	Percentage of women who:					Number of women who have heard of HIV/AIDS
	Are willing to care for a family member with HIV at home	Would buy fresh vegetables from shopkeeper with AIDS	Believe HIV-positive female teacher should be allowed to keep teaching	Believe HIV-positive status of a family member does not need to remain a secret	Percentage expressing accepting attitudes on all four measures <sup>1</sup>	
<b>Age</b>						
15-19	41.8	19.3	23.6	54.2	2.1	1,420
20-24	45.8	21.8	24.7	56.7	3.0	1,305
25-29	41.4	21.2	25.3	63.0	4.4	1,240
30-39	45.5	19.1	22.0	64.5	3.6	1,545
40-49	44.6	15.8	18.5	67.1	3.4	1,067
15-24	43.7	20.5	24.2	55.4	2.5	2,725
<b>Marital status</b>						
Never married	47.3	26.3	27.4	55.3	4.5	1,702
Ever had sex	51.0	31.6	32.3	56.1	6.1	793
Never had sex	44.0	21.8	23.2	54.6	3.2	909
Married/living together	42.3	17.3	21.6	62.7	2.7	4,559
Divorced/separated/widowed	47.1	15.5	19.3	64.1	4.5	316
<b>Residence</b>						
Urban	46.1	26.1	27.7	59.0	4.1	2,490
Rural	42.5	15.6	20.1	62.0	2.8	4,087
<b>Region</b>						
North Central	47.5	18.5	16.9	58.5	2.9	947
North East	51.0	12.7	20.3	68.3	3.6	1,036
North West	47.5	18.7	25.9	55.5	2.6	1,813
South East	59.8	26.7	29.2	49.8	2.7	704
South South	32.5	22.2	23.7	68.1	5.2	1,212
South West	26.4	21.2	20.6	64.6	2.5	865
<b>Education</b>						
No education	43.7	12.1	18.7	61.9	2.1	2,470
Primary	38.8	16.1	18.2	64.4	2.2	1,410
Secondary	44.5	25.8	27.3	58.2	4.3	2,246
Higher	57.3	40.4	39.9	57.1	8.4	451
<b>Wealth quintile</b>						
Lowest	37.1	10.6	14.2	62.7	1.1	984
Second	44.0	12.2	19.4	63.9	3.2	1,150
Middle	42.6	15.3	22.6	66.9	2.5	1,339
Fourth	45.3	22.2	23.2	61.1	3.6	1,415
Highest	47.3	30.9	30.6	52.7	4.9	1,689
Total	43.8	19.6	23.0	60.9	3.3	6,577

<sup>1</sup> Corresponds to UNAIDS Stigma and Discrimination Indicator 1 "Accepting attitudes towards those living with HIV"

To assess personal attitudes towards others known to be living with AIDS, the 2003 NDHS asked respondents whether they would be willing to purchase fresh vegetables from a seller who has the AIDS virus, whether they believe a female teacher who has the AIDS virus should be permitted to continue teaching, and whether or not they would want the status of a family member with the AIDS virus to remain a secret. These results are also presented in Tables 12.4.1 and 12.4.2. Only 20 percent of women and 28 percent of men say that they would purchase fresh vegetables from a person with the AIDS virus. Only 23 percent of women and 27 percent of men believe that a female teacher with the AIDS virus should be allowed to continue teaching in school. A majority of respondents (61 percent of women and 70 percent of men), however, say that they believe that the HIV-positive status of a family member does not need to remain a secret.

Table 12.4.2 Accepting attitudes towards those living with HIV: men

Percentage of men expressing accepting attitudes toward people with HIV, by background characteristics, Nigeria 2003

Background characteristic	Percentage of men who:				Percentage expressing accepting attitudes on all four measures <sup>1</sup>	Number of men who have heard of HIV/AIDS
	Are willing to care for a family member with HIV at home	Would buy fresh vegetables from shopkeeper with AIDS	Believe HIV-positive female teacher should be allowed to keep teaching	Believe HIV-positive status of a family member does not need to remain a secret		
<b>Age</b>						
15-19	34.8	19.3	15.5	59.4	3.1	421
20-24	39.8	30.4	27.5	73.3	5.9	417
25-29	43.4	36.3	32.0	72.0	7.8	322
30-39	44.4	29.6	33.2	74.2	9.1	514
40-49	36.7	26.6	25.4	71.8	6.6	357
15-24	37.3	24.8	21.5	66.3	4.5	838
<b>Marital status</b>						
Never married	39.6	29.1	24.7	66.6	6.2	1,003
Ever had sex	45.1	35.4	28.8	74.5	9.3	484
Never had sex	34.6	23.2	20.9	59.3	3.3	519
Married/living together	40.2	27.0	29.0	73.4	7.0	990
Divorced/separated/ widowed	(42.3)	(32.2)	(24.0)	(81.6)	(4.9)	38
<b>Residence</b>						
Urban	35.1	34.2	32.3	68.0	7.1	784
Rural	43.0	24.3	23.4	71.6	6.2	1,247
<b>Region</b>						
North Central	56.6	21.3	20.0	73.0	5.7	304
North East	31.4	31.7	25.0	72.3	6.3	367
North West	42.1	27.9	31.5	63.6	5.0	525
South East	36.0	24.3	33.7	58.8	4.6	191
South South	46.9	33.0	29.2	69.6	13.9	355
South West	23.3	28.0	20.3	84.6	2.8	289
<b>Education</b>						
No education	35.1	18.6	22.0	67.2	2.8	369
Primary	36.3	22.0	20.5	71.7	4.4	482
Secondary	40.6	26.9	26.9	71.2	6.3	923
Higher	51.4	58.1	45.0	68.1	16.8	257
<b>Wealth quintile</b>						
Lowest	36.4	13.3	16.4	67.9	1.2	334
Second	40.6	25.5	22.8	74.8	5.9	345
Middle	48.6	28.8	26.8	73.4	7.3	388
Fourth	32.6	30.5	24.4	70.2	6.6	439
Highest	41.4	36.9	38.1	66.2	9.8	524
Total	39.9	28.2	26.8	70.2	6.6	2,031

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

<sup>1</sup> Corresponds to UNAIDS Stigma and Discrimination Indicator 1 "Accepting attitudes towards those living with HIV"

The percentage of the population expressing the most accepting attitudes towards persons living with the AIDS virus is presented in the last percentage column of the table. This is the percentage of respondents who reported in the affirmative for all four behaviours presented in the table: they would care for an HIV-positive family member in their own home, they would buy fresh vegetables from a shopkeeper with AIDS, they would allow an HIV-positive teacher to continue teaching, and they would not keep the HIV-positive status of a family member a secret. Only 3 percent of women and 7 percent of men report acceptance on all four indicators.

## 12.4 KNOWLEDGE OF MOTHER-TO-CHILD TRANSMISSION

AIDS education programmes include not only informing the population on how to avoid becoming infected with HIV, but also informing them what people living with the illness can do to prevent its transmission to other people. Table 12.5 shows the percentage of respondents who know that HIV can be transmitted from a mother to her child via breastfeeding. Overall, about half of the population know that mother-to-child transmission of HIV is possible through breastfeeding. This knowledge increases with increasing education. Few people (less than one in ten) know that a woman living with HIV can take drugs during pregnancy to reduce the risk of transmission.

Table 12.5 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of women and men 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 2003

Background characteristic	Women				Men			
	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking drugs during pregnancy <sup>1</sup>	Number of women	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking drugs during pregnancy <sup>1</sup>	Number of men
<b>Age</b>								
15-19	40.8	5.2	4.5	1,716	44.6	3.7	3.2	453
20-24	48.9	7.0	5.9	1,494	62.3	6.2	5.5	426
25-29	50.8	7.7	6.6	1,382	65.0	6.1	3.9	328
30-39	45.5	5.6	4.4	1,757	60.3	10.4	8.3	519
40-49	44.7	5.4	4.7	1,271	50.9	10.7	9.6	367
15-24	44.6	6.1	5.1	3,210	53.2	4.9	4.3	880
<b>Marital status</b>								
Never married	53.1	6.3	5.1	1,926	55.0	5.9	4.7	1,048
Ever had sex	62.8	7.4	5.6	838	64.9	6.3	5.1	489
Never had sex	45.7	5.4	4.7	1,087	46.4	5.7	4.3	559
Married/living together	43.4	6.0	5.2	5,336	57.7	9.2	7.8	1,006
Divorced/separated/widowed	45.1	7.1	5.1	358	(57.5)	(4.3)	(4.3)	40
<b>Residence</b>								
Urban	57.1	8.2	6.7	2,629	57.4	8.4	7.4	792
Rural	40.1	5.0	4.4	4,991	55.8	6.9	5.4	1,301
<b>Region</b>								
North Central	48.3	7.7	7.4	1,121	70.2	8.5	7.9	313
North East	34.6	5.3	4.5	1,368	50.5	10.5	8.4	377
North West	33.0	7.3	6.0	2,095	56.5	7.9	6.5	529
South East	64.2	6.9	4.8	737	58.8	8.8	5.4	192
South South	58.8	5.5	4.5	1,342	60.9	2.9	2.9	385
South West	55.8	3.3	2.8	958	41.7	6.9	5.6	296
<b>Education</b>								
No education	28.9	4.1	3.6	3,171	42.4	4.7	4.3	385
Primary	45.2	4.7	4.2	1,628	45.7	5.1	3.4	519
Secondary	63.5	7.6	6.3	2,370	64.4	5.7	5.0	932
Higher	76.3	18.0	13.4	451	69.6	23.0	18.8	257
<b>Wealth quintile</b>								
Lowest	26.6	2.2	1.7	1,414	41.5	4.7	4.6	362
Second	34.0	3.4	3.1	1,439	51.8	6.4	6.4	360
Middle	45.4	6.1	5.2	1,513	62.3	8.8	5.5	392
Fourth	52.0	7.0	6.0	1,526	58.9	5.9	4.9	452
Highest	66.9	10.9	8.9	1,728	63.2	10.4	8.5	527
Total	45.9	6.1	5.2	7,620	56.4	7.5	6.2	2,093

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

<sup>1</sup> Corresponds to UNAIDS Knowledge Indicator 5 "Knowledge of prevention of mother to child transmission of HIV"

## 12.5 HIV TESTING AND COUNSELLING

The 2003 NDHS asked all respondents who have heard of AIDS whether or not they have ever been tested for the illness, how long ago they were tested, and whether they received the test results the most recent time they were tested. Table 12.6 shows that 6 percent of women and 14 percent of men have ever been tested and received the results of their HIV test. Only 3 percent of women and 6 percent of men have been tested and received results during the 12 months preceding the survey. The likelihood of having been tested and receiving the results has a strong positive correlation with education and the wealth index. The vast majority of the population (approximately eight in ten) have never been tested for HIV.

Table 12.6 Population who had an HIV test and received test results

Percent distribution of women and men by HIV testing status, and percentage of women and men who were tested for HIV and received test results in the past 12 months, according to background characteristics, Nigeria 2003

Background characteristic	Women							Men						
	Ever tested		Never tested	Don't know/missing	Total	Percentage who were tested and received results in past 12 months	Number of women	Ever tested		Never tested	Don't know/missing	Total	Percentage who were tested and received results in past 12 months	Number of men
	Received results	No results						Received results	No results					
<b>Age</b>														
15-19	2.5	0.4	80.0	17.2	100.0	1.7	1,716	3.2	1.1	88.6	7.1	100.0	1.3	453
20-24	6.9	0.5	79.9	12.7	100.0	3.3	1,494	10.5	0.8	86.5	2.2	100.0	7.5	426
25-29	11.4	1.1	77.0	10.5	100.0	5.3	1,382	12.5	0.5	85.2	1.8	100.0	7.1	328
30-39	6.9	0.9	79.9	12.3	100.0	3.2	1,757	22.0	0.6	76.3	1.2	100.0	8.1	519
40-49	5.0	0.4	78.6	16.0	100.0	1.8	1,271	19.1	1.5	76.9	2.6	100.0	5.6	367
15-24	4.5	0.4	79.9	15.1	100.0	2.5	3,210	6.7	0.9	87.6	4.7	100.0	4.3	880
<b>Marital status</b>														
Never married	6.7	0.5	81.1	11.6	100.0	3.8	1,926	9.2	0.9	85.6	4.4	100.0	5.2	1,048
Ever had sex	12.8	0.9	80.9	5.5	100.0	7.3	838	17.0	1.0	80.8	1.3	100.0	10.0	489
Never had sex	2.1	0.3	81.3	16.4	100.0	1.0	1,087	2.3	0.8	89.9	7.0	100.0	1.0	559
Married/living together	6.1	0.7	78.5	14.7	100.0	2.6	5,336	18.1	0.9	79.4	1.6	100.0	6.4	1,006
Divorced/separated/widowed	8.6	0.6	79.0	11.9	100.0	4.9	358	(16.3)	(0.0)	(80.1)	(3.6)	(100.0)	(9.2)	40
<b>Residence</b>														
Urban	11.8	0.7	82.1	5.4	100.0	5.3	2,629	16.3	0.8	81.7	1.2	100.0	7.5	792
Rural	3.6	0.6	77.6	18.2	100.0	1.8	4,991	11.9	0.9	83.0	4.1	100.0	4.9	1,301
<b>Region</b>														
North Central	5.3	0.5	78.7	15.5	100.0	3.2	1,121	18.9	1.0	77.1	2.9	100.0	9.6	313
North East	1.3	0.1	74.3	24.3	100.0	0.7	1,368	12.6	1.8	82.8	2.7	100.0	6.0	377
North West	1.1	0.1	85.0	13.8	100.0	0.4	2,095	4.2	0.8	94.2	0.7	100.0	1.2	529
South East	22.9	0.2	72.4	4.5	100.0	9.3	737	25.4	0.4	73.5	0.7	100.0	11.5	192
South South	9.3	1.6	79.4	9.7	100.0	5.3	1,342	13.8	0.2	78.0	7.9	100.0	5.7	385
South West	9.8	1.7	78.7	9.7	100.0	4.0	958	17.8	0.7	78.8	2.7	100.0	6.6	296
<b>Education</b>														
No education	0.8	0.2	76.7	22.2	100.0	0.3	3,171	2.0	1.0	93.0	4.1	100.0	1.1	385
Primary	3.7	1.0	81.7	13.6	100.0	2.0	1,628	11.2	1.1	80.5	7.2	100.0	4.6	519
Secondary	12.2	0.7	81.8	5.2	100.0	5.5	2,370	14.6	0.8	83.7	1.0	100.0	6.1	932
Higher	25.0	2.2	72.8	0.0	100.0	12.7	451	32.3	0.8	66.5	0.4	100.0	15.0	257
<b>Wealth quintile</b>														
Lowest	1.2	0.1	68.2	30.6	100.0	0.4	1,414	6.1	1.5	84.7	7.7	100.0	2.9	362
Second	1.6	0.7	77.6	20.1	100.0	1.0	1,439	5.9	0.6	89.3	4.2	100.0	2.3	360
Middle	2.3	0.6	85.5	11.5	100.0	1.3	1,513	9.2	1.7	88.1	0.9	100.0	3.7	392
Fourth	6.5	0.7	85.6	7.2	100.0	2.5	1,526	15.7	0.0	81.4	2.8	100.0	6.7	452
Highest	18.2	1.1	78.2	2.5	100.0	8.9	1,728	25.3	0.8	73.2	0.7	100.0	11.4	527
Total	6.4	0.7	79.2	13.8	100.0	3.0	7,620	13.6	0.9	82.5	3.0	100.0	5.9	2,093

Note: Figures in parentheses are based on 15-49 unweighted cases.

An appropriate opportunity for educating women about HIV/AIDS arises when they go for an antenatal visit during pregnancy. Table 12.7 shows the percentage of women who received any information or counselling regarding AIDS during an antenatal visit, among women who gave birth during the two years preceding the survey. Overall, almost one-quarter of women received counselling about HIV/AIDS during an antenatal care visit. A majority of women in the South East and South West (about six in ten) received AIDS counselling. Among women in other regions, those who received any information were in the minority, especially in the North East and North West, where less than two in ten women received counselling about HIV/AIDS regarding AIDS. The percentage of women who received information or counseling during an antenatal care visit rises steadily with increasing education and increasing wealth quintile.

## 12.6 SEXUAL NEGOTIATION, ATTITUDES, AND COMMUNICATION

In an effort to assess the ability of women to negotiate safer sex with a spouse who has a sexually transmitted infection (STI), all respondents were asked two attitudinal questions. They were asked whether a wife is justified in refusing to have sex with her husband if she knows her husband has an STI and whether such a wife is justified in asking that her husband use a condom. Overall, about nine in ten Nigerians report that a woman may either refuse to have sex with her husband or ask him to wear a condom if she knows he has an STI (Table 12.8). More men than women report that a woman is justified in either behaviour, although both men and women are more likely to report that a woman may refuse to have sex than to propose using a condom. While there is no particular pattern in attitudes by education, the percentage of people who believe that a woman can propose condom use increases with increasing the education. Regions in which people are the least likely to believe a woman can propose condom use are in South South among men and in the North Central among women.

Table 12.7 Pregnant women counselled about HIV

Among women who gave birth in the two years preceding the survey, percentage who were counselled about HIV during antenatal care visit for the most recent birth, by background characteristics, Nigeria 2003

Background characteristic	Counselled about HIV during antenatal visit	Number of women who gave birth in the past 2 years
<b>Age</b>		
15-19	11.9	271
20-24	19.7	589
25-29	29.4	709
30-39	28.2	721
40-49	22.0	157
15-24	17.2	860
<b>Marital status</b>		
Never married	23.3	71
Married/living together	24.4	2,321
Divorced/separated/ widowed	22.6	55
<b>Residence</b>		
Urban	44.4	701
Rural	16.2	1,746
<b>Region</b>		
North Central	22.8	361
North East	14.9	554
North West	11.4	863
South East	58.8	137
South South	38.1	308
South West	59.9	223
<b>Education</b>		
No education	8.4	1,239
Primary	28.4	588
Secondary	49.5	542
Higher	71.3	78
<b>Wealth quintile</b>		
Lowest	8.7	530
Second	11.1	538
Middle	18.9	487
Fourth	32.0	477
Highest	58.9	414
Total	24.3	2,447



Table 12.8 Attitudes toward negotiating safer sex with husband

Percentage of women and men who believe that, if a husband has an STI, his wife can either refuse to have sex with him or propose condom use, by background characteristics, Nigeria 2003

Background characteristic	Women				Men			
	Woman is justified to:				Woman is justified to:			
	Refuse sex	Propose condom use	Refuse sex or propose condom use <sup>1</sup>	Number of women	Refuse sex	Propose condom use	Refuse sex or propose condom use <sup>1</sup>	Number of men
<b>Age</b>								
15-19	73.5	64.3	81.1	1,716	80.9	70.3	87.0	453
20-24	84.1	76.5	90.9	1,494	90.8	84.8	96.0	426
25-29	88.3	79.7	93.2	1,382	93.5	85.0	97.1	328
30-39	87.0	74.4	90.8	1,757	96.9	84.9	98.4	519
40-49	85.9	70.4	91.0	1,271	94.2	78.3	95.9	367
15-24	78.5	70.0	85.6	3,210	85.7	77.3	91.4	880
<b>Marital status</b>								
Never married	75.3	69.7	84.1	1,926	86.9	78.7	91.9	1,048
Ever had sex	87.2	82.2	95.3	838	90.4	87.2	96.6	489
Never had sex	66.2	60.1	75.5	1,087	83.9	71.2	87.8	559
Married/living together	86.0	73.9	90.8	5,336	95.5	82.3	97.7	1,006
Divorced/separated/ widowed	89.1	74.4	90.7	358	(95.4)	(87.3)	(97.8)	40
<b>Residence</b>								
Urban	86.3	80.4	92.4	2,629	93.5	86.1	97.1	792
Rural	82.0	68.9	87.3	4,991	89.8	77.2	93.4	1,301
<b>Region</b>								
North Central	77.1	55.2	80.6	1,121	93.5	84.7	98.2	313
North East	90.1	74.0	92.2	1,368	96.7	79.2	98.6	377
North West	83.6	76.6	89.5	2,095	93.6	85.4	96.8	529
South East	71.5	70.8	85.8	737	94.1	91.7	99.3	192
South South	86.2	79.0	92.2	1,342	77.1	64.1	81.0	385
South West	86.3	76.6	91.8	958	94.0	83.6	97.8	296
<b>Education</b>								
No education	83.1	66.6	87.2	3,171	92.4	69.8	94.7	385
Primary	81.5	71.3	86.9	1,628	88.4	78.3	91.7	519
Secondary	83.3	79.4	91.4	2,370	91.5	83.2	95.5	932
Higher	93.9	88.3	97.7	451	93.8	91.7	98.6	257
<b>Wealth quintile</b>								
Lowest	81.2	62.1	85.6	1,414	88.7	69.8	90.8	362
Second	82.0	66.9	87.1	1,439	91.5	72.3	94.2	360
Middle	81.4	71.8	86.6	1,513	93.4	85.4	97.3	392
Fourth	86.4	78.7	91.5	1,526	88.2	81.4	92.2	452
Highest	85.7	82.4	93.7	1,728	93.6	89.4	98.3	527
Total	83.5	72.8	89.1	7,620	91.2	80.6	94.8	2,093

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

<sup>1</sup> Corresponds to UNAIDS Sexual Negotiation Indicator 1 "Women's ability to negotiate safer sex with husband"

Men's attitudes towards condoms directly affect their inclination to use them. Men were asked whether they agree with a series of statements regarding condoms; results are presented in Table 12.9. Thirty percent of men agreed with the statement that condoms are inconvenient to use, and thirty-seven percent agreed with the statement that condoms reduce sexual pleasure. Most men know that condoms cannot be reused, although one-quarter agreed with the statement that condoms break easily. Thirty percent of men agreed with the statement that a woman has no right to tell a man to use a condom. Sixty-three percent of men agree with the statement that a condom protects against disease. These questions were asked regardless of whether or not the respondent had ever used a condom.

Table 12.9 Men's attitude toward condoms

Percentage of men who agree with specific statements about condoms, by background characteristics, Nigeria 2003

Background characteristic	Percentage of men who agree with the following statements:							Number of men
	Condoms diminish a man's sexual pleasure	A condom is very inconvenient to use	A condom can be reused	A condom protects against disease	A woman has no right to tell a man to use a condom	Condoms break easily	Condoms are expensive	
<b>Age</b>								
15-19	23.5	16.4	5.8	46.4	23.9	16.1	6.9	453
20-24	38.1	30.0	9.8	68.1	37.1	23.3	10.9	426
25-29	47.6	38.5	9.4	74.4	33.4	31.8	16.9	328
30-39	42.8	36.1	8.6	69.9	28.5	30.2	10.1	519
40-49	37.2	27.7	7.9	58.5	26.2	20.4	6.7	367
<b>Residence</b>								
Urban	36.0	26.3	7.1	67.8	26.3	24.3	7.7	792
Rural	38.3	31.4	9.0	60.4	31.6	24.3	11.4	1,301
<b>Region</b>								
North Central	32.9	24.2	6.6	68.7	15.0	20.2	7.7	313
North East	42.5	32.3	3.1	59.4	25.5	19.6	5.0	377
North West	52.1	53.3	23.1	76.0	72.8	39.0	18.9	529
South East	34.2	19.9	1.4	51.5	10.0	27.4	19.1	192
South South	27.8	15.6	3.2	50.7	11.7	17.9	4.2	385
South West	24.2	13.2	1.1	63.1	9.2	14.6	4.9	296
<b>Education</b>								
No education	36.6	36.0	14.7	52.5	44.2	22.1	12.8	385
Primary	36.2	30.6	8.1	59.8	33.2	24.0	9.8	519
Secondary	35.9	25.6	6.3	64.8	24.1	23.9	8.5	932
Higher	46.8	31.6	6.0	79.9	20.6	29.6	11.7	257
<b>Condom use</b>								
Used at last sex	47.5	27.3	5.4	96.5	20.2	26.2	13.6	253
Ever used (not at last sex)	65.8	41.3	6.5	93.0	19.6	39.0	11.5	310
Never used	30.0	27.5	9.1	51.6	33.2	21.0	9.1	1,530
<b>Marital status</b>								
Never married	32.5	24.2	6.4	59.4	26.3	20.4	9.0	1,048
Ever had sex	46.9	31.0	7.2	76.6	21.2	25.4	12.0	489
Never had sex	19.9	18.2	5.7	44.3	30.7	16.0	6.4	559
Married or living together	42.3	35.1	10.1	66.4	33.4	28.3	11.2	1,006
Divorced/separated/widowed	(44.3)	(27.2)	(11.3)	(81.4)	(20.1)	(25.3)	(6.5)	40
<b>Wealth quintile</b>								
Lowest	33.5	29.1	13.7	49.7	33.5	24.4	14.0	362
Second	39.8	33.0	11.1	59.7	38.7	26.2	11.4	360
Middle	43.9	38.6	8.1	70.9	41.1	26.4	11.8	392
Fourth	33.6	27.6	5.6	63.3	25.9	19.9	5.2	452
Highest	37.0	22.2	5.0	68.8	15.3	25.2	9.2	527
<b>Total</b>	37.4	29.5	8.3	63.2	29.6	24.3	10.0	2,093

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

In addition to asking about attitudes, the 2003 NDHS also directly asked respondents whether or not they have ever discussed ways to prevent getting the virus that causes AIDS with their partners. Table 12.10 presents these data for women and men who are currently married or living with a partner. Nationally, 36 percent of married women and 58 percent of married men say that they have discussed prevention of AIDS with their partners. In all regions, percentages reporting AIDS prevention discussion with their partners are higher among men than among women.

Although discussion of AIDS with partners is far from universal, Nigerians are accepting of communication regarding AIDS. Nine in ten Nigerians report that discussion of AIDS in the media and other venues is acceptable (data not shown). This is true for women and men and across educational and regional characteristics. People overwhelmingly approve (over 90 percent) discussion of AIDS in the newspaper, on the radio, on television, in churches, in mosques, at home, and in schools.

Table 12.10 Discussion of HIV/AIDS with partner

Percent distribution of women and men who are currently married or living with a partner by whether they ever discussed HIV/AIDS prevention with their husband/partner, according to background characteristics, Nigeria 2003

Background characteristic	Women					Men						
	Ever discussed HIV/AIDS prevention	Never discussed HIV/AIDS prevention	Don't know/missing	Has not heard of AIDS	Total	Number of women	Ever discussed HIV/AIDS prevention	Never discussed HIV/AIDS prevention	Don't know/missing	Has not heard of AIDS	Total	Number of men
<b>Age</b>												
15-19	23.6	55.9	0.4	20.1	100.0	545	*	*	*	*	*	5
20-24	36.6	47.2	0.3	15.8	100.0	911	52.3	44.3	0.0	3.4	100.0	60
25-29	43.1	44.9	0.5	11.5	100.0	1,146	50.7	48.5	0.0	0.8	100.0	142
30-39	36.9	50.4	0.3	12.4	100.0	1,611	61.4	37.4	0.2	1.1	100.0	447
40-49	34.2	48.5	0.6	16.7	100.0	1,123	57.0	40.7	0.2	2.2	100.0	352
<b>Residence</b>												
Urban	50.2	44.9	0.8	4.1	100.0	1,633	68.1	31.6	0.2	0.0	100.0	327
Rural	30.1	50.6	0.3	19.1	100.0	3,703	52.5	45.1	0.1	2.4	100.0	679
<b>Region</b>												
North Central	38.6	43.2	0.0	18.2	100.0	754	60.2	35.2	0.0	4.6	100.0	139
North East	23.7	52.2	0.1	24.1	100.0	1,122	45.0	53.2	0.1	1.7	100.0	241
North West	26.0	59.4	0.9	13.7	100.0	1,880	52.8	46.8	0.2	0.2	100.0	305
South East	61.9	34.6	0.6	2.8	100.0	368	72.9	26.5	0.6	0.0	100.0	85
South South	51.7	39.0	0.1	9.2	100.0	664	63.2	32.5	0.0	4.2	100.0	115
South West	58.1	34.9	0.5	6.5	100.0	548	75.4	24.6	0.0	0.0	100.0	121
<b>Education</b>												
No education	21.1	56.7	0.5	21.8	100.0	2,877	41.5	55.5	0.0	3.1	100.0	284
Primary	42.4	47.1	0.6	9.9	100.0	1,175	55.3	41.9	0.2	2.5	100.0	286
Secondary	61.5	35.4	0.2	2.9	100.0	1,046	69.9	29.8	0.3	0.0	100.0	300
Higher	78.6	21.4	0.0	0.0	100.0	238	68.7	31.3	0.0	0.0	100.0	136
<b>Total</b>	<b>36.2</b>	<b>48.8</b>	<b>0.4</b>	<b>14.5</b>	<b>100.0</b>	<b>5,336</b>	<b>57.6</b>	<b>40.7</b>	<b>0.1</b>	<b>1.6</b>	<b>100.0</b>	<b>1,006</b>

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

## 12.7 HIGH-RISK SEX AND CONDOM USE

Engaging in sexual intercourse with someone other than a spouse or a partner with whom one is living is considered high-risk sexual activity in terms of transmitting an STI. If a person does have sex with a nonmarital, noncohabiting partner, the risk of contracting HIV can be reduced by using condoms. Table 12.11 shows the percentage of women and men who had sex with a partner other than with whom they are married or living, among all women and men who reported having sex at some time in the 12 months preceding the survey. Those who had engaged in sex with a nonmarital, noncohabiting partner were then asked whether they used a condom the last time they engaged in sex with such a partner.

Table 12.11 High-risk sex and condom use at last high-risk sex: women and men age 15-49

Among women and men reporting sexual activity in the past 12 months, percentage who had sex with a nonmarital, noncohabiting partner (high-risk sex) in the past 12 months, and among these women and men, percentage who say they used a condom the last time they had sex with a nonmarital, noncohabiting partner, by background characteristics, Nigeria 2003

Background characteristic	Women				Men			
	Percentage engaging in high-risk sex in the past 12 months <sup>1</sup>	Number of women sexually active in the past 12 months	Percentage who used condom at last high-risk sex <sup>2</sup>	Number of women who had high-risk sex in past 12 months	Percentage engaging in high-risk sex in the past 12 months <sup>1</sup>	Number of men sexually active in the past 12 months	Percentage who used condom at last high-risk sex <sup>2</sup>	Number of men who had high-risk sex in past 12 months
<b>Age</b>								
15-19	34.6	819	22.0	283	94.1	83	32.8	78
20-24	25.8	1,167	26.0	301	72.4	218	53.0	158
25-29	10.6	1,243	29.3	131	55.7	254	43.8	141
30-39	4.8	1,579	14.9	76	23.3	477	48.0	111
40-49	4.0	1,045	(8.3)	42	14.4	341	56.9	49
15-24	29.4	1,987	24.0	585	78.4	301	46.3	236
<b>Marital status</b>								
Never married	99.5	672	25.8	669	99.5	374	45.9	372
Married/living together	1.3	4,989	6.2	64	14.6	970	50.7	141
Divorced/separated/ widowed	52.1	193	17.5	101	(81.9)	29	(40.4)	23
<b>Residence</b>								
Urban	19.1	1,939	30.4	371	46.3	479	59.4	222
Rural	11.8	3,915	17.5	463	35.3	894	38.2	316
<b>Region</b>								
North Central	15.3	755	23.8	115	52.9	216	43.0	114
North East	4.3	1,122	5.7	48	31.3	286	35.2	90
North West	1.7	1,898	(24.3)	31	6.5	317	(29.6)	21
South East	30.3	486	21.9	147	44.5	105	75.6	47
South South	36.9	988	19.6	364	60.4	247	37.8	149
South West	21.1	605	40.9	128	58.0	201	63.0	116
<b>Education</b>								
No education	2.4	2,795	4.2	67	10.6	293	(23.0)	31
Primary	11.6	1,209	10.9	140	32.0	354	33.3	113
Secondary	34.1	1,504	25.5	513	56.6	527	48.6	299
Higher	32.9	346	39.4	114	47.5	198	66.0	94
<b>Wealth quintile</b>								
Lowest	8.0	1,151	11.9	92	33.6	247	18.7	83
Second	8.4	1,176	11.6	99	23.0	244	34.7	56
Middle	11.4	1,145	14.3	130	32.6	269	47.4	88
Fourth	19.4	1,120	24.2	218	55.4	256	48.3	142
Highest	23.4	1,262	34.0	296	47.2	357	63.6	168
Total	14.2	5,855	23.2	834	39.1	1,373	46.9	537

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

<sup>1</sup> Corresponds to UNAIDS Sexual Behaviour Indicator 1 "High-risk sex in the last year"

<sup>2</sup> Corresponds to UNAIDS Sexual Behaviour Indicator 2 "Condom use at last high-risk sex"

A larger proportion of men than women reported having had high-risk sex at some time in the past 12 months (39 percent of men versus 14 percent of women). Less than half of all men (47 percent) and less than one-quarter (23 percent) of women reported using a condom the last time they had sex with a nonmarital, noncohabiting partner. Fifteen percent of men who are currently married or cohabiting report having had sex with a nonmarital, noncohabiting partner in the past 12 months. The percentage of respondents who have had sex with a nonmarital, noncohabiting partner increases with increasing education for both women and men, as does the percentage who used a condom the last time they had sex with such a partner.

The prevalence of high-risk sex among sexually active young people is presented in Table 12.12, along with condom use at last high-risk sex. Overall, 29 percent of women and 78 percent of men age 15-24 engaged in high-risk sex in the 12 months preceding the survey. Among young people who had high-risk sex, approximately one-quarter of women and slightly less than half of men used a condom at last high-risk sex. The percentage of young women engaging in high-risk sex increases steadily with increasing education, as does reported use of condoms. There is an insufficient number of cases of men to allow for analysis by education.

Table 12.12 High-risk sex and condom use at last high-risk sex among young women and men by background characteristics

Among women and men age 15-24 reporting sexual activity in the past 12 months, percentage who had sexual relations with a nonmarital, noncohabiting partner (high-risk sex) in the past 12 months, and among these young women and men, percentage who say they used a condom the last time they had sex with a nonmarital, noncohabiting partner, by background characteristics, Nigeria 2003

Background characteristic	Women				Men			
	Percentage engaging in high-risk sex in the past 12 months	Number of women sexually active in the past 12 months	Percentage used condom at last high-risk sex <sup>1</sup>	Number of women 15-24 who had high-risk sex in the past 12 months	Percentage engaging in high-risk sex in the past 12 months	Number of men sexually active in the past 12 months	Percentage used condom at last high-risk sex <sup>1</sup>	Number of men 15-24 who had high-risk sex in the past 12 months
<b>Age</b>								
15-19	34.6	819	22.0	283	94.1	83	32.8	78
20-24	25.8	1,167	26.0	301	72.4	218	53.0	158
<b>Marital status</b>								
Never married	99.7	533	25.3	532	99.2	232	46.5	231
Ever married	3.7	1,454	(11.4)	53	7.4	68	*	5
<b>Residence</b>								
Urban	40.7	588	33.5	239	85.9	115	61.7	99
Rural	24.7	1,399	17.4	345	73.7	186	35.2	137
<b>Region</b>								
North Central	35.1	252	20.5	88	91.7	59	41.0	54
North East	8.1	389	(5.8)	31	(70.9)	46	(25.6)	32
North West	2.0	674	*	13	(19.5)	49	*	9
South East	70.0	153	24.6	107	(98.8)	22	(71.6)	22
South South	70.6	364	19.3	257	94.5	70	39.3	66
South West	56.7	154	47.6	88	93.7	55	66.3	52
<b>Education</b>								
No education	3.4	874	*	30	(16.4)	24	*	4
Primary	25.4	353	11.9	90	59.4	62	(28.5)	37
Secondary	59.8	687	25.1	411	89.8	192	45.8	173
Higher	75.4	73	44.1	55	*	23	*	22
<b>Wealth quintile</b>								
Lowest	16.9	384	14.0	65	64.9	68	(22.8)	44
Second	20.4	376	12.6	77	68.7	46	(29.2)	32
Middle	21.8	439	12.6	96	60.3	45	(47.9)	27
Fourth	36.1	422	24.0	152	93.9	69	47.5	65
Highest	53.3	366	37.5	195	93.7	72	67.7	68
Total	29.4	1,987	24.0	585	78.4	301	46.3	236

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.

<sup>1</sup> Corresponds to UNAIDS Young People's Sexual Behaviour Indicator 5 "Young people using a condom at last high-risk sex"

Substantial regional variation exists among young women who are sexually active. Most young women in the South East and the South South (seven in ten) who are sexually active have sex with non-cohabiting partners. Only 19 to 25 percent of these women used a condom the last time they had sex. Women in the North East and the North West who have been sexually active with a noncohabiting partner are in a small minority. Figure 12.1 shows the distribution of young people age 15-24 with regard to sexual activity with cohabiting and noncohabiting partners. Nationally, most young women who are sexually active have a partner with whom they are living, while most young men who are sexually active are not living with their partners. On the other hand, young men who are sexually active are a smaller population than young women who are sexually active.

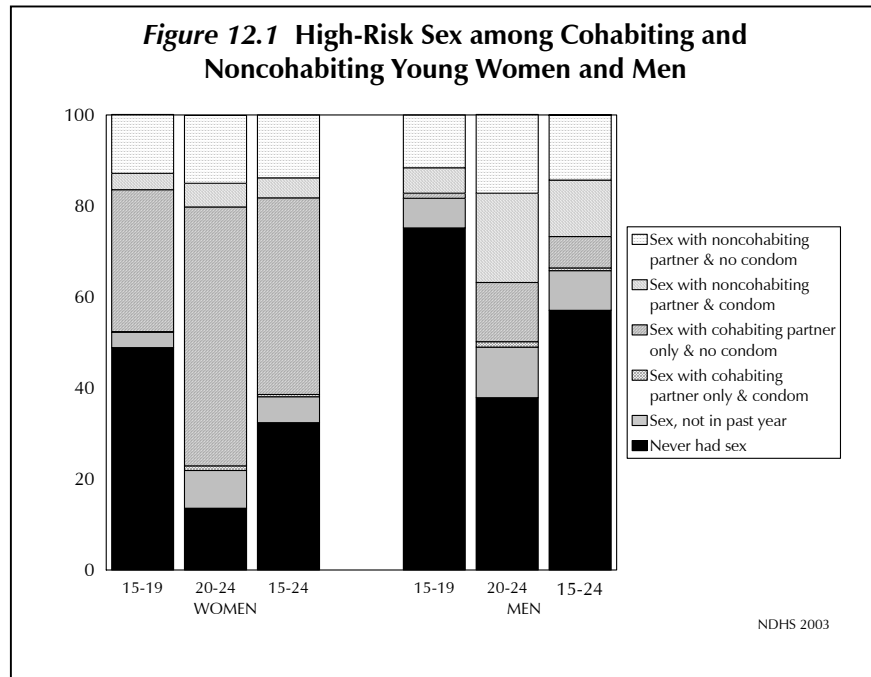


Table 12.13 shows that 3 percent of men report having had sex with a prostitute in the 12 months preceding the survey. Approximately half (48 percent) of the men who had sex with a prostitute used a condom (data not shown).

**Table 12.13 Paid sex in past year**

Percentage of men reporting sex with a prostitute in the past 12 months, by background characteristics, Nigeria 2003

Background characteristic	Percentage reporting sex with prostitute in past 12 months <sup>1</sup>	Number of men
<b>Age</b>		
15-19	1.8	453
20-24	3.9	426
25-29	3.3	328
30-39	3.0	519
40-49	2.5	367
15-24	2.8	880
<b>Marital status</b>		
Never married	2.7	1,048
Married/living together	2.4	1,006
Divorced/separated/widowed	(17.9)	40
<b>Residence</b>		
Urban	1.8	792
Rural	3.5	1,301
<b>Region</b>		
North Central	0.7	313
North East	6.3	377
North West	1.8	529
South East	2.5	192
South South	3.8	385
South West	1.7	296
<b>Education</b>		
No education	2.9	385
Primary	3.2	519
Secondary	3.0	932
Higher	1.6	257
<b>Wealth quintile</b>		
Lowest	6.5	362
Second	2.5	360
Middle	1.9	392
Fourth	2.2	452
Highest	2.0	527
Total	2.9	2,093

Note: Figures in parentheses are based on 25-49 un-weighted cases.  
<sup>1</sup> Corresponds to UNAIDS Sexual Behaviour Indicator 3 "Commercial sex in the last year"

## 12.8 SEXUAL BEHAVIOUR AMONG YOUNG PEOPLE

Promoting change in sexual behaviour is a key feature of many HIV/AIDS prevention programmes. Those who are not yet sexually active or those who have recently made their sexual debut are thought to be accepting of programmes focusing on behaviour change. Thus, the next several tables focus on young women and men age 15-24 and the sexual behaviours that affect their risk of exposure to HIV.

One of the strategies for reducing the risk of contracting an STI is for young persons to delay the age at which they become sexually active. Table 12.14 shows the percentage of young people who have had sex by exact ages 15 and 18, by background characteristics. One-fifth of women age 15-19 had sex before the age of 15, and half of women age 20-24 had sex by the time they were age 18. Proportions of

**Table 12.14 Age at first sex among young women and men**

Percentage of women and men age 15-24 who have had sex by exact age 15 and 18, by background characteristics, Nigeria 2003

Background characteristic	Women			Men		
	Percent who had sex by exact age		Number of women age 15-24	Percent who had sex by exact age		Number of men age 15-24
	15	18		15	18	
<b>Age</b>						
15-17	21.5	na	988	5.3	na	237
18-19	18.6	52.2	728	10.8	28.8	216
15-19	20.3	na	1,716	7.9	na	453
20-22	20.3	53.5	1,061	5.9	23.8	298
23-24	23.3	55.6	433	3.0	18.8	128
20-24	21.2	54.1	1,494	5.1	22.3	426
<b>Marital status</b>						
Never married	6.4	na	1,685	6.4	na	809
Ever married	36.5	na	1,525	8.3	na	70
<b>Residence</b>						
Urban	10.7	na	1,093	5.3	na	351
Rural	25.8	na	2,117	7.3	na	529
<b>Region</b>						
North Central	16.8	na	486	12.2	na	143
North East	31.0	na	543	3.6	na	118
North West	36.1	na	815	3.1	na	224
South East	4.3	na	332	7.5	na	82
South South	14.0	na	630	9.2	na	186
South West	4.3	na	405	4.1	na	127
<b>Education</b>						
No education	41.5	na	1,008	4.0	na	100
Primary	21.3	na	626	5.4	na	198
Secondary	7.7	na	1,442	7.8	na	536
Higher	0.3	na	134	1.6	na	46
<b>Wealth quintile</b>						
Lowest	35.2	na	537	9.4	na	166
Second	29.3	na	542	2.8	na	148
Middle	21.9	na	695	6.9	na	150
Fourth	17.1	na	707	7.8	na	224
Highest	6.0	na	729	5.1	na	192
Total	20.7	na	3,210	6.5	na	880

Note: Percentage who had sex by exact age 18 are not analyzed by background characteristics because respondents age 15-17 have not yet lived to age 18 and thus cannot contribute to the denominator.  
na = Not applicable

men who initiated sexual activity by these ages are significantly lower. Over one-third (37 percent) of ever-married women age 15-24 first had sex before the age of 15. Initiation into sex at such young ages is not nearly as common among the never-married. Among the never-married, just 6 percent of both men and women had sex by age 15. The percentage of women who had sex before age 15 declines with increasing education, from 42 percent among women with no education, to less than 1 percent among women with higher education.

The 2003 NDHS asked respondents whether or not they know of a place to obtain condoms. Table 12.15 presents statistics on whether or not young women and men age 15-24 know of at least one source, other than their family or friends. Overall, young women are less than half as likely as young men to know of a source for condoms, although there is a great deal of variation by background characteristics.



Table 12.15 Knowledge of a source for condoms among young women and men

Percentage of women and men age 15-24 who know at least one source for male condoms, Nigeria 2003

Background characteristic	Women		Men	
	Know a source for male condoms	Number of women age 15-24	Know a source for male condoms	Number of men age 15-24
<b>Age</b>				
15-19	19.0	1,716	49.9	453
20-24	29.8	1,494	66.9	426
15-24	24.0	3,210	58.1	880
<b>Marital status</b>				
Never married	33.4	1,685	59.6	809
Ever had sex	52.8	646	80.0	307
Never had sex	21.3	1,039	47.1	502
Ever married	13.7	1,525	41.6	70
<b>Residence</b>				
Urban	35.2	1,093	67.0	351
Rural	18.3	2,117	52.2	529
<b>Region</b>				
North Central	21.2	486	56.2	143
North East	10.5	543	52.9	118
North West	6.2	815	42.0	224
South East	33.9	332	77.9	82
South South	38.1	630	55.7	186
South West	51.3	405	84.4	127
<b>Education</b>				
No education	3.5	1,008	17.5	100
Primary	14.8	626	37.9	198
Secondary	38.7	1,442	71.1	536
Higher	64.0	134	81.7	46
<b>Wealth quintile</b>				
Lowest	6.7	537	35.1	166
Second	11.8	542	45.5	148
Middle	16.1	695	59.6	150
Fourth	30.0	707	61.8	224
Highest	47.5	729	82.5	192
Total	24.0	3,210	58.1	880

Knowledge of a source for condoms increases greatly with increasing education among both women and men. Very few young women with no education report knowing a source (4 percent), but this figure climbs to nearly two-thirds of young women with higher education knowing of a source (64 percent). Regional variation is also significant. Twice as many young men in the South West as in the North West know of a source (84 and 42 percent, respectively). Regional variation is even more dramatic among young women, ranging from 6 percent in the North West to 51 percent in the South West.

The percentage of young people who used a condom the first time they had sex is presented in Table 12.16, among those who have ever had sexual intercourse. Only 6 percent of women and 17 percent of men age 15-24 reported using a condom the first time they had sex. Among young, never-married men, one-fifth reported using a condom the first time they had sex, even though almost half reported doing so the last time they had sex (see Table 12.17). Young women and men with higher education are the most likely to have used a condom the first time they had sex, as are women and men in the South West.

Table 12.16 Condom use at first sex among young women and men

Among women and men age 15-24 who have ever had sex, percentage who used a condom the first time they ever had sex, by background characteristics Nigeria 2003

Background characteristic	Women		Men	
	Used a condom at first sex <sup>1</sup>	Number of women age 15-24 who have ever had sex	Used a condom at first sex <sup>1</sup>	Number of men age 15-24 who have ever had sex
<b>Age</b>				
15-19	6.5	877	10.6	112
20-24	6.4	1,291	19.6	265
<b>Marital status</b>				
Never married	17.6	646	20.2	307
Ever married	1.7	1,523	2.8	70
<b>Residence</b>				
Urban	12.1	654	27.3	139
Rural	4.0	1,514	10.9	239
<b>Region</b>				
North Central	7.1	301	12.4	74
North East	0.5	411	8.2	56
North West	0.6	690	6.4	56
South East	16.9	169	27.5	36
South South	8.0	407	11.5	89
South West	26.5	191	39.9	66
<b>Education</b>				
No education	0.3	909	(0.0)	32
Primary	3.0	400	8.7	78
Secondary	11.8	775	17.0	242
Higher	39.3	85	(62.1)	26
<b>Wealth quintile</b>				
Lowest	2.0	417	7.7	84
Second	1.5	405	8.3	52
Middle	2.4	474	10.5	61
Fourth	6.8	451	18.3	87
Highest	19.8	421	33.0	94
Total	6.4	2,169	16.9	378

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

<sup>1</sup> Corresponds to UNAIDS Young People's Sexual Behaviour Indicator 6 "Condom use at first sex"

Table 12.17 presents the percentage of never-married young women and men who had sex in the 12 months preceding the survey, as well as the percentage who used a condom the last time they had sex. Three out of ten never-married respondents age 15-24 had sex in the past 12 months (32 percent of women and 29 percent of men). About half of the men reported using a condom during last sexual intercourse, and one-quarter of the women reported doing so. There are no urban-rural differences among young persons as to whether or not they have had premarital sex, but urban women and men are about twice as likely to have used a condom the last time they had sex.

Table 12.17 Prevalence of premarital sex in the past year and use of a condom during premarital sex among young women and men

Among never-married women and men age 15-24, percentage who had sex in the past 12 months, and, among those who had premarital sex in the past 12 months, percentage who used a condom at last sex, by background characteristics, Nigeria 2003

Background characteristic	Never-married women				Never-married men			
	Had sex in past 12 months <sup>1</sup>	Number of never-married women 15-24	Used condom at last sex <sup>2</sup>	Number of women 15-24 sexually active in the past 12 months	Had sex in past 12 months <sup>1</sup>	Number of never-married men 15-24	Used condom at last sex <sup>2</sup>	Number of men 15-24 sexually active in the past 12 months
<b>Age</b>								
15-19	23.3	1,145	23.0	267	17.4	448	32.8	78
20-24	49.4	540	27.0	267	42.8	361	53.7	154
<b>Residence</b>								
Urban	31.1	708	35.9	220	29.4	332	63.6	98
Rural	32.0	977	17.4	313	28.2	477	34.3	135
<b>Region</b>								
North Central	29.0	282	21.2	82	38.7	138	41.5	53
North East	15.0	162	(6.6)	24	29.6	103	(27.2)	30
North West	5.4	136	*	7	4.9	184	*	9
South East	37.1	282	24.1	104	26.8	82	(71.6)	22
South South	46.8	497	19.2	233	36.6	182	39.0	67
South West	25.3	326	50.5	83	42.3	121	65.8	51
<b>Education</b>								
No education	16.9	119	*	20	2.9	78	*	2
Primary	24.3	329	11.1	80	20.8	171	(24.2)	35
Secondary	33.9	1,124	25.7	381	33.5	515	46.6	172
Higher	46.0	113	46.4	52	48.9	46	*	22
<b>Wealth quintile</b>								
Lowest	28.9	188	14.1	54	30.6	142	(23.0)	43
Second	31.7	221	13.8	70	23.9	134	(29.2)	32
Middle	26.5	325	10.8	86	20.1	132	(46.5)	26
Fourth	33.8	405	24.5	137	28.8	217	47.4	62
Highest	34.1	545	39.4	186	36.8	186	69.2	68
Total	31.6	1,685	25.0	533	28.7	809	46.7	232

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.

<sup>1</sup> Corresponds to UNAIDS Young People's Sexual Behaviour Indicator 2 "Young people having premarital sex"

<sup>2</sup> Corresponds to UNAIDS Young People's Sexual Behaviour Indicator 3 "Young people using a condom during premarital sex"

Age-mixing in sexual relationships is a major factor in the spread of HIV/AIDS. If a younger, uninfected partner has sex with an older, infected partner, this can introduce the virus into a younger, uninfected cohort. Table 12.18 shows the percentage of teenage women who had a partner ten or more years their senior. One in five women age 15-17 who have had high-risk sexual intercourse did so with someone ten or more years their senior.

**Table 12.18 Age mixing in sexual relationships**

Among women age 15-19 who had nonmarital sex in the past 12 months, percentage who had nonmarital sex with a man 10 or more years older than themselves, by background characteristics, Nigeria 2003

Background characteristic	Percentage who had nonmarital sex with a man 10+ years older <sup>1</sup>	Number of women age 15-19 who had nonmarital sex in the past 12 months
<b>Age</b>		
15-17	21.3	122
18-19	4.2	161
<b>Marital status</b>		
Never married	10.3	265
Ever married	*	18
<b>Residence</b>		
Urban	14.7	110
Rural	9.6	173
<b>Region</b>		
North Central	(25.5)	45
North East	*	13
North West	*	5
South East	12.8	55
South South	8.7	133
South West	(4.2)	33
<b>Education</b>		
No education	*	14
Primary	(12.2)	48
Secondary	12.2	211
Higher	*	11
<b>Wealth quintile</b>		
Lowest	(10.1)	29
Second	(3.3)	42
Middle	(10.8)	46
Fourth	19.0	79
Highest	9.8	86
Total	11.6	283

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.

<sup>1</sup> Corresponds to UNAIDS Young People's Sexual Behaviour Indicator 7 "Age-mixing in sexual relationships" (among the last three partners in the past 12 months)

Those who are sexually active can reduce their risk of exposure to HIV by limiting the number of partners with whom they engage in sexual contact. Table 12.19 shows the percentage of women and men age 15-24 who have had sex with more than one partner in the past 12 months. The percentage of young people with multiple partners is fairly low. Overall, 2 percent of women and 8 percent of men age 15-24 have had sex with more than one person in the past 12 months. Differentials by region are more marked: 7 percent of women in the South South and 16 percent of men in the North East have had more than one partner.

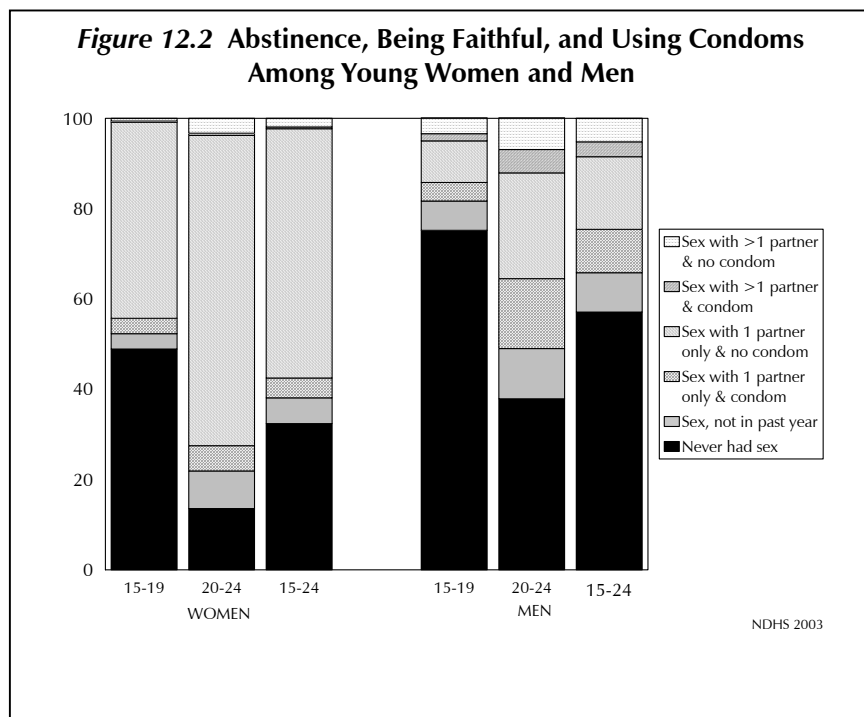
Table 12.19 Multiple sex partnerships among young women and men

Among women and men age 15-24, percentage who have had sex with more than one partner in the past 12 months, by background characteristics, Nigeria 2003

Background characteristic	Women		Men	
	Percentage who had 2+ partners in the past 12 months <sup>1</sup>	Number of women age 15-24	Percentage who had 2+ partners in the past 12 months <sup>1</sup>	Number of men age 15-24
<b>Age</b>				
15-19	0.9	1,716	4.9	453
20-24	3.8	1,494	12.2	426
<b>Marital status</b>				
Never married	2.9	1,685	8.8	809
Ever married	1.5	1,525	4.4	70
<b>Residence</b>				
Urban	2.5	1,093	7.2	351
Rural	2.1	2,117	9.3	529
<b>Region</b>				
North Central	1.1	486	9.0	143
North East	1.2	543	15.8	118
North West	0.6	815	1.8	224
South East	1.5	332	6.7	82
South South	7.2	630	9.9	186
South West	1.1	405	11.6	127
<b>Education</b>				
No education	0.9	1,008	1.3	100
Primary	1.7	626	5.3	198
Secondary	3.0	1,442	10.7	536
Higher	6.7	134	11.1	46
<b>Wealth quintile</b>				
Lowest	1.9	537	9.5	166
Second	1.5	542	10.3	148
Middle	2.0	695	6.4	150
Fourth	2.9	707	6.5	224
Highest	2.6	729	9.8	192
Total	2.2	3,210	8.4	880

<sup>1</sup> Corresponds to UNAIDS Young People's Sexual Behaviour Indicator 4 "Young people having multiple partners in last year"

Figure 12.2 shows the distribution of young people age 15-24 by the number of partners they had in the past 12 months and by whether or not they used a condom. Seven percent of men age 20-24 had sex with more than one partner and did not use a condom the last time they had sex; this is true for only 3 percent of women age 20-24. Two-thirds of women age 20-24 did not use a condom the last time they had sex, but they had sex with only one partner in the past 12 months. Nearly 40 percent of men age 20-24 reported that they had never had sex, and an additional 11 percent had had sex, but not in the past 12 months.



## 12.9 SEXUALLY TRANSMITTED INFECTIONS

It is important for people experiencing symptoms of STIs to be able to recognize them and seek appropriate treatment. People who do not know the symptoms may fail to recognize that they need treatment and, consequently, may not seek help. All 2003 NDHS respondents were asked whether they had ever heard about infections other than HIV that can be transmitted through sexual contact. Those who had heard of an STI were then asked to state what symptoms a man or a woman with an STI (other than HIV) might have.

Table 12.20.1 shows that 55 percent of women have never heard of STIs. One-fifth of all women could identify a symptom a man might have, and one-fifth could identify a symptom a woman might have. Knowledge of STIs among men is higher. Most men have heard of an STI (71 percent), although not all who have heard of STIs could identify a symptom a man or woman with an STI might experience. Thirty-five percent of all men could identify a symptom a man might experience, and 18 percent could identify a symptom a woman might experience (Table 12.20.2). Knowledge of symptoms rises with increasing education and increasing household economic status (higher wealth quintiles) among both women and men.

All 2003 NDHS respondents who had ever had sex were asked whether they had an STI in the past 12 months. They were also asked whether they had experienced any abnormal genital discharge or a genital sore or ulcer in the past 12 months. These data are likely to underestimate the true prevalence of STIs for a number of reasons. For example, if symptoms are not obvious or prolonged, they may not be recognized as an STI. Furthermore, even if a respondent knows that she or he has an STI, the respondent may be reluctant to report it, because of embarrassment or presumed stigma associated with such infections.

Table 12.20.1 Knowledge of symptoms of STIs: women

Percentage of women with knowledge of symptoms associated with sexually transmitted infections (STIs) in a man and in a woman, by background characteristics, Nigeria 2003

Background characteristic	Knowledge of symptoms of STIs in a man					Knowledge of symptoms of STIs in a woman				Number of women
	No knowledge of STIs	No symptoms mentioned	One symptom mentioned	Two or more symptoms mentioned	Missing	No symptoms mentioned	One symptom mentioned	Two or more symptoms mentioned	Missing	
<b>Age</b>										
15-19	70.8	13.1	7.3	8.7	0.0	14.9	5.8	8.5	0.0	1,716
20-24	53.4	18.0	11.1	17.5	0.1	19.6	8.9	18.1	0.1	1,494
25-29	46.1	16.3	12.4	25.1	0.1	15.9	11.7	26.2	0.1	1,382
30-39	51.6	14.0	12.5	21.9	0.0	13.8	12.0	22.6	0.0	1,757
40-49	51.5	13.0	11.6	23.9	0.0	14.4	9.0	25.2	0.0	1,271
<b>Marital status</b>										
Never married	52.1	19.5	12.5	15.9	0.0	22.2	9.5	16.1	0.0	1,926
Ever had sex	32.2	27.9	17.3	22.6	0.0	31.5	12.5	23.7	0.0	838
Never had sex	67.4	13.0	8.8	10.8	0.0	15.0	7.3	10.3	0.0	1,087
Married or living together	57.2	13.1	10.1	19.7	0.0	13.3	9.2	20.3	0.0	5,336
Divorced/separated/widowed	44.1	16.3	14.6	25.0	0.0	14.9	12.2	28.8	0.0	358
<b>Residence</b>										
Urban	45.8	17.4	13.6	23.1	0.0	18.8	12.1	23.3	0.0	2,629
Rural	60.3	13.5	9.5	16.8	0.0	14.0	8.0	17.7	0.0	4,991
<b>Region</b>										
North Central	55.4	16.6	9.3	18.6	0.0	17.8	8.3	18.4	0.0	1,121
North East	71.1	6.9	3.9	18.1	0.0	5.9	3.7	19.2	0.0	1,368
North West	71.4	6.5	6.6	15.4	0.1	6.1	5.7	16.8	0.1	2,095
South East	38.0	28.7	13.4	19.8	0.0	25.8	12.0	24.2	0.0	737
South South	35.0	22.8	19.2	23.0	0.0	27.7	12.9	24.5	0.0	1,342
South West	39.0	20.5	18.5	22.1	0.0	23.4	20.1	17.5	0.0	958
<b>Education</b>										
No education	74.3	7.1	5.5	13.0	0.1	6.7	5.1	13.8	0.1	3,171
Primary	53.4	16.6	11.1	18.9	0.0	16.6	10.3	19.7	0.0	1,628
Secondary	39.9	22.2	16.1	21.8	0.0	25.2	13.0	21.9	0.0	2,370
Higher	8.4	23.7	21.2	46.7	0.0	25.1	18.0	48.4	0.0	451
<b>Wealth quintile</b>										
Lowest	69.4	9.7	8.2	12.7	0.0	8.9	7.6	14.1	0.0	1,414
Second	66.2	12.1	6.3	15.3	0.1	12.2	6.1	15.4	0.1	1,439
Middle	62.6	12.4	8.5	16.4	0.0	13.8	6.9	16.7	0.0	1,513
Fourth	51.6	14.7	12.7	21.1	0.0	15.3	11.0	22.1	0.0	1,526
Highest	31.5	23.6	17.3	27.6	0.0	26.0	14.4	28.1	0.0	1,728
Total	55.3	14.8	10.9	19.0	0.0	15.7	9.4	19.6	0.0	7,620

Table 12.20.2 Knowledge of symptoms of STIs: men

Percentage of men with knowledge of symptoms associated with sexually transmitted infections (STIs) in a man and in a woman, by background characteristics, Nigeria 2003

Background characteristic	Knowledge of symptoms of STIs in a man				Knowledge of symptoms of STIs in a woman			Number of men
	No knowledge of STIs	No symptoms mentioned	One symptom mentioned	Two or more symptoms mentioned	No symptoms mentioned	One symptom mentioned	Two or more symptoms mentioned	
<b>Age</b>								
15-19	54.2	16.2	16.4	13.2	29.8	9.2	6.8	453
20-24	32.5	19.5	17.2	30.8	42.9	7.5	17.1	426
25-29	19.4	17.9	23.7	39.0	52.5	10.5	17.6	328
30-39	17.1	14.3	18.9	49.6	43.3	13.9	25.8	519
40-49	17.9	18.2	18.9	44.9	47.2	11.3	23.5	367
<b>Marital status</b>								
Never married	35.8	18.0	17.9	28.2	41.0	9.1	14.1	1,048
Ever had sex	15.8	18.9	22.1	43.3	51.3	12.5	20.4	489
Never had sex	53.3	17.3	14.3	15.0	31.9	6.1	8.6	559
Married or living together	22.2	16.3	19.6	42.0	43.6	11.9	22.4	1,006
Divorced/separated/widowed	(10.0)	(10.0)	(20.7)	(59.4)	(50.9)	(17.0)	(22.1)	40
<b>Residence</b>								
Urban	26.5	18.0	21.0	34.4	46.7	11.1	15.6	792
Rural	30.1	16.4	17.4	36.0	39.8	10.3	19.8	1,301
<b>Region</b>								
North Central	21.9	12.3	20.0	45.7	41.5	12.1	24.5	313
North East	41.6	6.2	16.1	36.0	24.9	10.3	23.2	377
North West	38.2	16.9	19.1	25.8	37.7	9.3	14.8	529
South East	14.2	21.5	17.2	47.1	45.7	3.9	36.2	192
South South	24.0	25.6	13.7	36.7	56.2	9.9	9.9	385
South West	18.3	21.9	28.0	31.8	54.1	17.0	10.5	296
<b>Education</b>								
No education	45.6	15.0	15.5	23.9	34.4	8.9	11.0	385
Primary	32.9	14.7	18.7	33.7	37.4	11.6	18.1	519
Secondary	24.8	18.2	19.9	37.1	45.9	9.8	19.4	932
Higher	9.4	20.6	19.9	50.2	51.7	13.9	25.0	257
<b>Wealth quintile</b>								
Lowest	40.3	16.5	16.8	26.3	38.0	9.3	12.4	362
Second	37.5	14.6	16.8	31.1	33.7	13.4	15.3	360
Middle	30.6	13.2	22.1	34.1	41.8	9.2	18.4	392
Fourth	27.5	15.1	16.3	41.1	40.9	9.5	22.1	452
Highest	14.6	23.6	21.1	40.8	53.2	11.5	20.8	527
Total	28.8	17.0	18.8	35.4	42.4	10.6	18.2	2,093

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

Overall, 1 percent of women and 3 percent of men reported having had an STI in the 12 months preceding the survey (Table 12.21). The percentage who reported having either an STI or one of the two STI symptoms is slightly higher: 5 percent of both women and men. Never-married women and men reported higher levels than the national average. Eight percent of never-married women and 7 percent of never-married men report having had an STI or symptom.



Table 12.21 Self-reporting of sexually transmitted infection (STI) and STI symptoms

Among women and men who ever had sex, percentage self-reporting an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Nigeria 2003

Background characteristic	Women					Men				
	Percentage with an STI	Percentage with abnormal genital discharge	Percentage with genital sore/ulcer	Percentage with STI/dischage/genital sore/ulcer	Number of women who ever had sex	Percentage with an STI	Percentage with abnormal genital discharge	Percentage with genital sore/ulcer	Percentage with STI/dischage/genital sore/ulcer	Number of men who ever had sex
<b>Age</b>										
15-19	0.1	2.4	2.1	3.9	877	4.8	5.1	0.0	5.6	112
20-24	1.5	4.3	4.2	7.0	1,291	2.8	3.2	1.1	3.5	265
25-29	1.7	3.1	3.3	5.5	1,344	6.6	7.4	3.9	9.5	281
30-39	0.9	2.2	2.6	3.6	1,748	3.0	2.2	0.6	4.2	510
40-49	0.8	1.4	1.9	2.7	1,269	0.8	0.9	0.0	1.5	366
<b>Marital status</b>										
Never married	2.8	4.6	4.0	8.3	838	5.8	5.8	2.4	7.1	489
Married/living together	0.8	2.3	2.7	4.0	5,335	2.0	1.9	0.5	3.2	1,006
Divorced/separated/widowed	1.0	3.1	3.1	4.5	357	(3.4)	(4.7)	(1.3)	(4.7)	40
<b>Residence</b>										
Urban	0.6	2.1	1.9	3.5	2,172	4.2	2.5	0.7	5.0	548
Rural	1.3	2.9	3.3	5.1	4,358	2.7	3.6	1.4	4.2	987
<b>Region</b>										
North Central	1.3	4.8	4.5	6.5	921	2.2	1.8	1.0	3.8	241
North East	0.2	1.9	1.9	2.8	1,234	4.7	4.5	1.0	4.8	306
North West	0.3	1.6	2.5	3.5	1,969	1.3	4.7	0.7	4.9	334
South East	4.3	2.4	3.8	6.7	562	7.7	1.2	1.3	8.5	145
South South	1.9	4.0	3.7	6.7	1,111	4.3	4.5	2.4	4.9	278
South West	0.4	2.1	1.6	3.0	733	0.9	0.4	0.3	1.2	230
<b>Education</b>										
No education	0.5	2.1	2.4	3.4	3,070	2.6	4.1	1.3	4.3	310
Primary	0.8	1.9	3.4	4.2	1,390	2.4	3.3	2.1	4.4	392
Secondary	2.1	4.1	3.6	6.8	1,682	4.4	3.4	0.8	5.5	614
Higher	1.8	3.8	2.0	4.9	388	2.2	1.1	0.0	2.2	219
<b>Wealth quintile</b>										
Lowest	0.4	2.5	3.0	4.1	1,292	3.7	4.6	1.7	4.8	279
Second	0.7	2.4	2.8	4.0	1,297	1.9	3.4	0.8	3.7	257
Middle	0.8	3.0	3.1	4.5	1,278	2.5	4.2	1.4	4.6	291
Fourth	1.3	1.7	2.3	4.2	1,259	3.8	2.7	1.7	5.0	293
Highest	2.0	3.5	3.1	5.9	1,404	3.8	1.8	0.3	4.4	415
Total	1.0	2.7	2.9	4.5	6,530	3.2	3.2	1.1	4.5	1,535

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

Treatment and prevention behaviours of those who have experienced STIs are important factors in controlling the spread of STIs. Respondents who reported having an STI or abnormal genital discharge, genital sores, or ulcers in the past 12 months were asked whether they sought treatment. The results are presented in Table 12.22. Two out of three women did seek treatment, as did four out of five men; however, not everyone approached a health professional. Only 40 percent of women and 30 percent of men with an STI or symptom sought assistance from a clinic, hospital, or health professional.

Table 12.22 Women and men seeking treatment for STIs

Percentage of women and men reporting an STI or symptoms of an STI in the past 12 months who sought care, by source of advice or treatment, Nigeria 2003

Source of advice or treatment	Women	Men
Clinic/hospital/health professional <sup>1</sup>	40.4	30.6
Traditional healer	15.3	43.2
Advice or medicine from shop/pharmacy	31.3	54.7
Advice from friends/relatives	22.3	42.0
Advice or treatment from any source	67.6	82.7
No advice or treatment	32.4	17.3
Number with STI and/or symptoms of STI	297	69

Note: Symptoms of an STI are an abnormal genital discharge, a genital sore, or a genital ulcer.

<sup>1</sup> Corresponds to UNAIDS STI Service Indicator 4 "Men and women seeking treatment for STIs"

## 12.10 ORPHANHOOD

Repercussions of HIV infection are not limited to the persons directly infected with the virus. Children of infected parents will eventually become orphans in need of new caretakers. When a household takes in a child who has been orphaned, there are more people over whom the resources of the household have to be spread. Table 12.23 presents data on the prevalence of orphanhood in Nigeria. Overall, fewer than 1 percent of children have lost both parents; however, 6 percent of children under age 15 have lost at least one parent. Eleven percent of children in the South East have lost one or both parents—the highest prevalence in the country. Nationwide, 11 percent of children under age 15 are living with neither their mother nor their father; prevalence climbs to 18 percent among children age 10-14.

Table 12.23 Orphanhood and children's living arrangements

Percent distribution of de jure children under age 15 by survival status of parents and children's living arrangements, according to background characteristics, Nigeria 2003

Background characteristic	Both parents dead	Mother dead	Father dead	Both parents alive	Missing information on father/mother	Total	Mother, father or both dead <sup>1</sup>	Not living with either parent	Living with mother	Living with father	Living with both parents	Total	Number of children
<b>Age</b>													
0-1	0.0	0.1	0.5	99.1	0.4	100.0	0.6	1.1	12.2	1.0	85.6	100.0	2,479
2-4	0.2	0.7	1.5	96.9	0.7	100.0	2.5	6.8	10.5	3.0	79.7	100.0	3,421
5-9	0.6	2.3	3.7	92.5	1.0	100.0	6.6	12.0	9.0	6.8	72.2	100.0	5,262
10-14	1.2	3.9	6.7	85.8	2.4	100.0	11.8	18.3	11.2	9.7	60.8	100.0	4,415
0-14	0.6	2.0	3.6	92.6	1.2	100.0	6.2	10.9	10.5	5.9	72.7	100.0	15,577
<b>Sex</b>													
Male	0.7	2.3	3.6	92.3	1.2	100.0	6.6	10.4	10.4	6.8	72.4	100.0	7,928
Female	0.5	1.8	3.6	92.9	1.2	100.0	5.8	11.4	10.5	4.9	73.1	100.0	7,649
<b>Residence</b>													
Urban	0.6	2.2	4.3	92.3	0.7	100.0	7.1	13.3	12.5	6.0	68.2	100.0	4,981
Rural	0.6	2.0	3.3	92.7	1.5	100.0	5.8	9.8	9.5	5.8	74.9	100.0	10,596
<b>Region</b>													
North Central	0.5	1.8	4.8	91.9	1.1	100.0	7.1	11.1	12.8	5.6	70.4	100.0	2,432
North East	0.6	1.7	2.5	94.4	0.7	100.0	4.8	9.8	5.9	7.4	77.0	100.0	3,330
North West	0.6	1.5	2.1	94.7	1.1	100.0	4.2	7.5	5.8	4.7	82.0	100.0	4,803
South East	1.2	2.4	7.1	88.2	1.1	100.0	10.7	15.0	14.5	2.6	67.9	100.0	1,100
South South	0.7	3.8	5.1	88.1	2.3	100.0	9.6	16.1	18.1	7.9	57.9	100.0	2,375
South West	0.3	1.5	3.9	93.3	1.0	100.0	5.7	12.8	16.4	5.9	64.9	100.0	1,537
<b>Wealth quintile</b>													
Lowest	0.6	2.1	2.8	93.1	1.4	100.0	5.5	8.8	8.0	4.8	78.4	100.0	3,338
Second	0.7	1.6	2.6	93.9	1.2	100.0	5.0	11.5	8.6	5.7	74.2	100.0	3,301
Middle	0.5	2.0	5.2	91.0	1.3	100.0	7.7	10.7	13.1	6.9	69.4	100.0	3,146
Fourth	0.8	1.6	4.7	91.8	1.1	100.0	7.1	11.8	13.1	5.4	69.7	100.0	3,066
Highest	0.3	2.9	2.6	93.2	1.0	100.0	5.8	12.3	9.8	6.7	71.3	100.0	2,727
Total	0.6	2.0	3.6	92.6	1.2	100.0	6.2	10.9	10.5	5.9	72.7	100.0	15,577

<sup>1</sup> Corresponds to UNAIDS Indicator 14.4 "Prevalence of orphanhood—mother, father, or both dead"

Table 12.24 presents data on school attendance among children age 10-14. Nearly three-quarters of children age 10-14 whose parents are both alive and who are living with at least one of their parents are currently attending school (73 percent). This varies regionally, from just over half of the children in the North East and North West attending school, to over 90 percent in the three south regions. Children with one parent who has died, be it a mother or father, are no worse off with regard to school attendance. There are too few children who have lost both parents to provide a reliable estimate of children age 10-14 attending school. The estimate presented in the table is based on very few cases and should be used with caution.

Table 12.24 Schooling of children 10-14 by orphanhood and living arrangements

Percentage of de jure children age 10-14 who are currently attending school, by orphanhood, living arrangements, and background characteristics, Nigeria 2003

Background characteristic	Both parents alive											
	Living with at least one parent		Not living with either parent		Mother dead		Father dead		Both parents dead		Mother, father, or both dead	
	Percent attending school	Number	Percent attending school	Number	Percent attending school	Number	Percent attending school	Number	Percent attending school	Number	Percent attending school	Number
<b>Age</b>												
Male	78.6	1,647	80.9	254	80.3	98	81.1	135	(52.8)	31	76.5	265
Female	68.0	1,584	74.3	305	80.8	72	81.9	162	*	23	76.9	257
<b>Residence</b>												
Urban	84.1	1,096	80.4	236	88.6	66	88.5	109	*	15	85.1	190
Rural	67.9	2,135	75.0	322	75.4	104	77.5	189	(44.2)	39	72.0	332
<b>Region</b>												
North Central	88.5	531	81.0	80	*	16	88.1	63	*	8	87.1	88
North East	51.3	630	44.7	102	(43.3)	37	47.4	35	*	9	38.4	81
North West	54.3	942	59.7	93	(70.1)	37	65.7	41	*	15	59.0	93
South East	92.5	234	87.8	80	*	13	97.0	49	*	5	96.0	67
South South	94.9	544	95.5	127	(99.0)	55	84.6	72	*	13	88.8	140
South West	95.5	351	97.1	78	*	12	93.3	39	*	4	92.4	54
<b>Wealth quintile</b>												
Lowest	50.8	672	66.8	76	(55.7)	32	65.8	50	*	11	56.9	93
Second	63.4	677	57.6	109	*	26	70.3	43	*	13	65.0	82
Middle	71.1	654	68.2	91	(68.4)	29	82.5	80	*	11	75.0	120
Fourth	90.4	645	87.5	121	(90.4)	33	88.2	86	*	15	87.9	134
Highest	94.8	585	93.0	162	(98.9)	50	97.9	39	*	3	93.3	92
Total	73.4	3,231	77.3	558	80.5	170	81.5	298	(49.5)	54	76.7	522

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. There are too few cases of "double orphans" to calculate the UNAIDS Indicator for ratio of orphans to non-orphans who are in school.

## FEMALE CIRCUMCISION

Female genital cutting (FGC), also known as female circumcision in Nigeria, is a common practice in many societies in the northern half of sub-Saharan Africa. Nearly universal in a few countries, it is practiced by various groups in at least 25 African countries, in Yemen, and in immigrant African populations in Europe and North America. In a few societies, the procedure is routinely carried out when a girl is a few weeks or a few months old (e.g. Eritrea, Yemen), while in most others, it occurs later in childhood or adolescence. In the case of the latter, FGC is typically part of a ritual initiation into womanhood that includes a period of seclusion and education about the rights and duties of a wife.

The 2003 Nigeria Demographic and Health Survey (2003 NDHS) collected data on the practice of female circumcision in Nigeria from all women age 15-49. The 1999 NDHS collected data on female circumcision only from currently married women. In this chapter, topics discussed include knowledge, prevalence, and type; age at circumcision; person who performed the circumcision; and attitudes towards the practice.

### 13.1 KNOWLEDGE AND PREVALENCE OF FEMALE CIRCUMCISION

Table 13.1 presents data on women's knowledge of female circumcision. About half (53 percent) of Nigerian women age 15-49 have heard of the practice. There are marked variations in knowledge of female circumcision by residence, region, education, and ethnicity. About two-thirds of urban respondents have heard of female circumcision, compared with less than half of women in rural areas (69 versus 45 percent). In general, women in the south are more than twice as likely as women in the north to have heard of the practice. These variations by region and residence are a reflection of ethnic differentials. The Igbo and Yoruba, who are primarily resident in the South East and South West, respectively, have greater knowledge of female circumcision than the ethnic groups primarily resident in the north.

Table 13.1 also shows the prevalence of female circumcision by background characteristics, which follows the same patterns as knowledge of circumcision. The proportion of women who were circumcised at the time of the survey was greatest in the southern regions, among the Yoruba and Igbo, and among urban residents. The high prevalence of female circumcision among the Yoruba (61 percent) and Igbo (45 percent) helps to explain regional and urban-rural differentials, since the Yoruba and Igbo traditionally reside in the South West and South East, which are more urban than the north. More than twice as many of the oldest women as the youngest women are circumcised (28 versus 13 percent), suggesting that there has been a decline in the practice. Caldwell et al. (2000) have reported a decline in the prevalence of female circumcision among the Yoruba.

### 13.2 FLESH REMOVAL AND INFIBULATION

Questions directed at determining the type of female circumcision were asked of women who reported they had been circumcised. Table 13.1 indicates that the type of circumcision could not be determined for half of the women. However, among those women who could identify the type of procedure, circumcision that involved cutting and removal of flesh is most commonly reported (44 percent). Four percent of women reported that their vagina was sewn closed (infibulation) during their circumcision, which is the most radical procedure. It is worth noting that among the Yoruba, who have the largest proportion of women circumcised, less than 1 percent of women are infibulated. Infibulation is most prevalent in the South South region (8 percent).

Table 13.1 Knowledge and prevalence of female circumcision

Percentage of women who have heard of female circumcision, percentage of women circumcised, and the percent distribution of circumcised women by type of circumcision, according to background characteristics, Nigeria 2003

Background characteristic	Percentage of women who heard of female circumcision	Percentage of women circumcised	Number of women	Type of circumcision				Total	Number of women
				Cut, no flesh removed	Cut, flesh removed	Sewn closed	Not determined		
<b>Age</b>									
15-19	43.1	12.9	1,716	2.2	37.8	5.1	55.0	100.0	221
20-24	52.8	17.0	1,494	1.8	43.1	2.9	52.2	100.0	253
25-29	57.5	20.8	1,382	1.8	40.2	2.2	55.8	100.0	288
30-34	55.0	19.4	941	1.1	43.6	7.6	47.7	100.0	183
35-39	60.8	22.2	816	2.4	44.3	4.9	48.4	100.0	181
40-44	53.6	22.2	688	1.2	49.0	1.9	47.9	100.0	153
45-49	59.6	28.4	583	3.9	51.0	3.6	41.6	100.0	165
<b>Residence</b>									
Urban	68.7	28.3	2,629	1.5	37.6	4.0	56.9	100.0	744
Rural	45.0	14.0	4,991	2.5	49.6	3.9	44.0	100.0	701
<b>Region</b>									
North Central	36.0	9.6	1,121	1.2	64.6	2.5	31.7	100.0	107
North East	40.1	1.3	1,368	*	*	*	*	*	18
North West	25.1	0.4	2,095	*	*	*	*	*	9
South East	87.7	40.8	737	0.3	12.2	2.7	84.8	100.0	300
South South	82.5	34.7	1,342	3.0	66.0	7.5	23.5	100.0	466
South West	85.7	56.9	958	2.2	36.3	1.3	60.3	100.0	545
<b>Ethnic group</b>									
Fulani	19.4	0.6	463	*	*	*	*	*	3
Hausa	28.5	0.4	2,055	*	*	*	*	*	8
Igbo	86.5	45.1	1,037	1.3	28.3	3.1	67.3	100.0	467
Kanuri	58.5	0.5	232	*	*	*	*	*	1
Tiv	27.9	0.9	170	*	*	*	*	*	1
Yoruba	88.2	60.7	865	2.1	38.3	0.9	58.7	100.0	525
Other	54.8	15.7	2,797	2.5	66.1	7.8	23.6	100.0	439
Total	53.2	19.0	7,620	2.0	43.5	3.9	50.6	100.0	1,445

Note: Total includes 1 case with data missing on circumcision. An asterisk indicates that a figure is based on fewer than 25 un-weighted cases and has been suppressed.

### 13.3 AGE AT CIRCUMCISION

The percent distribution of women by age at circumcision is presented in Table 13.2. Female circumcision in Nigeria occurs mostly in infancy (i.e., before the first birthday). Three-quarters of the women who underwent circumcision were circumcised by age one. Twenty-one percent, however, were circumcised at age five or older. There are marked variations in the proportions of women circumcised in infancy by residence and ethnicity. For instance, almost nine in ten Igbo and Yoruba were circumcised during infancy compared with less than half of those in other ethnic groups (45 percent).

Infibulation, the most severe form of circumcision, is more likely to be carried out on women circumcised at a later age than on the very young. The table shows that 37 percent of those cut before the age of one had been infibulated, while 49 percent of those circumcised after the age of four were infibulated. It should be noted that the total number of respondents infibulated was 57.

Table 13.2 Age at circumcision

Percent distribution of circumcised women by age at circumcision, according to background characteristics, Nigeria 2003

Background characteristic	Age at circumcision in years				Total	Number of women
	<1	1-4	5+	Don't know/missing		
<b>Age</b>						
15-19	78.4	1.7	14.2	5.7	100.0	221
20-24	77.2	1.1	18.7	3.1	100.0	253
25-29	79.5	0.2	17.7	2.5	100.0	288
30-34	64.3	0.3	27.4	8.1	100.0	183
35-39	71.6	3.3	24.4	0.7	100.0	181
40-44	72.4	1.5	24.3	1.8	100.0	153
45-49	73.5	0.6	21.1	4.8	100.0	165
<b>Residence</b>						
Urban	79.2	0.9	16.8	3.1	100.0	744
Rural	69.6	1.5	24.4	4.5	100.0	701
<b>Region</b>						
North Central	51.6	1.7	42.1	4.6	100.0	107
North East	*	*	*	*	*	18
North West	*	*	*	*	*	9
South East	94.1	0.1	4.9	0.9	100.0	300
South South	55.2	2.1	38.0	4.7	100.0	466
South West	86.4	0.7	9.1	3.8	100.0	545
<b>Ethnic group</b>						
Igbo	88.9	0.3	9.4	1.4	100.0	467
Yoruba	87.4	1.2	7.1	4.4	100.0	525
Other	45.0	2.0	47.4	5.5	100.0	453
<b>Type of circumcision</b>						
Cut, no flesh removed	(69.7)	(0.0)	(30.3)	(0.0)	(100.0)	29
Cut, flesh removed	60.6	1.9	35.2	2.3	100.0	628
Sewn closed	37.4	5.0	49.2	8.4	100.0	57
Not determined	89.6	0.3	5.2	4.8	100.0	732
<b>Total</b>	<b>74.6</b>	<b>1.2</b>	<b>20.5</b>	<b>3.8</b>	<b>100.0</b>	<b>1,445</b>

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.

## 13.4 CIRCUMCISION OF DAUGHTERS

Women interviewed in the 2003 NDHS who had living daughters were asked if any of their daughters had been circumcised, and if not, whether they intended to have a daughter circumcised. Table 13.3 shows that, of women who have at least one daughter, 10 percent had circumcised a daughter, and an additional 3 percent intend to have a daughter circumcised. The proportion of women who have at least one circumcised daughter increases with age. Prevalence varies by residence and ethnicity, with women residing in urban areas, those in the south, and Yorubas and Igbos being the most likely to have circumcised daughters or intend to have their daughters circumcised.

Table 13.3 shows the percent distribution of most recently circumcised daughters by type of circumcision. The results show that circumcision involving the cutting and removal of flesh is the most common in Nigeria, accounting for two-thirds of all circumcisions. Five percent of circumcised daughters had no flesh removed, and 4 percent were infibulated.

Table 13.3 Daughter's circumcision experience and type of circumcision

Among women with at least one living daughter, percentage with at least one circumcised daughter, percentage who intend to have their daughter circumcised, and percent distribution by type of circumcision among most recently circumcised daughters, according to background characteristics, Nigeria 2003

Background characteristic	Percentage of women with at least one daughter circumcised	Percentage of women who intend to have daughter circumcised	Number of women with at least one daughter	Among circumcised daughters, type of circumcision				Total	Number of women
				Cut, no flesh removed	Cut, flesh removed	Sewn closed	Not determined		
<b>Age</b>									
15-19	0.5	5.0	183	*	*	*	*	*	1
20-24	4.4	3.9	538	(1.5)	(63.7)	(2.5)	(32.3)	(100.0)	23
25-29	6.9	2.3	898	12.6	54.1	5.4	27.9	100.0	62
30-34	6.4	4.4	715	4.1	71.5	2.0	22.5	100.0	45
35-39	11.3	3.5	707	3.7	69.1	4.0	23.2	100.0	80
40-44	12.9	2.7	582	2.4	77.0	3.7	16.9	100.0	75
45-49	23.8	1.4	506	4.3	64.6	3.1	28.0	100.0	120
<b>Residence</b>									
Urban	15.0	3.1	1,294	2.9	68.0	3.4	25.7	100.0	194
Rural	7.5	3.2	2,834	6.7	65.9	3.7	23.7	100.0	213
<b>Region</b>									
North Central	6.6	3.3	606	1.1	59.8	0.0	39.1	100.0	40
North East	0.2	0.4	856	*	*	*	*	*	2
North West	0.9	0.9	1,320	*	*	*	*	*	12
South East	25.7	4.9	324	7.3	42.1	9.5	41.1	100.0	83
South South	17.2	10.6	621	1.7	81.0	6.1	11.2	100.0	107
South West	40.8	3.0	401	5.2	73.0	0.0	21.9	100.0	164
<b>Education</b>									
No education	5.6	1.6	2,158	7.4	58.1	3.9	30.6	100.0	121
Primary	14.8	4.2	1,000	0.6	73.7	3.2	22.6	100.0	148
Secondary	14.9	5.7	786	8.6	65.1	4.3	22.0	100.0	117
Higher	11.8	4.4	185	(0.0)	(79.8)	(0.0)	(20.2)	(100.0)	22
<b>Ethnic group</b>									
Igbo	25.8	4.5	447	5.3	52.5	9.5	32.7	100.0	115
Yoruba	46.3	2.6	371	4.9	70.6	0.0	24.5	100.0	172
Other	3.6	3.0	3,311	4.5	75.5	2.9	17.1	100.0	120
<b>Wealth quintile</b>									
Lowest	6.8	3.1	903	6.7	71.5	3.1	18.7	100.0	61
Second	6.2	2.6	874	1.9	72.0	3.4	22.7	100.0	54
Middle	8.2	1.9	822	5.1	64.9	7.7	22.2	100.0	67
Fourth	11.1	4.0	770	6.1	68.9	3.0	22.0	100.0	85
Highest	18.4	4.2	759	4.4	62.7	2.1	30.8	100.0	140
Total	9.9	3.1	4,129	4.9	66.9	3.6	24.6	100.0	407

Note: Figures in parentheses are based on 26-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.



Table 13.4 indicates that almost all of the most recently circumcised daughters (85 percent) were circumcised before their first birthday, and 4 percent were circumcised between ages 1-4 years. Traditional circumcisers carried out 61 percent of the circumcisions. Circumcision is also commonly performed by nurses and midwives (24 percent) and traditional birth attendants (10 percent).

Table 13.4 Aspects of daughter's circumcision	
Percent distribution of most recently circumcised daughter by the age of the daughter at the time she was circumcised, and the person performing the circumcision, Nigeria 2003	
Aspects	Percent
<b>Age of daughter when she was circumcised (in years)</b>	
0	85.0
1-4	4.1
5-6	1.8
7-8	2.0
9-10	0.5
11-12	0.9
13+	3.9
Don't know/missing	1.8
<b>Person who performed the circumcision</b>	
Traditional circumciser	60.6
Traditional birth attendant	10.0
Other traditional	1.0
Doctor	2.0
Nurse/midwife	24.3
Other health professional	0.4
Don't know/missing	1.8
Total	100.0
Number	407

### 13.5 ATTITUDES TOWARD FEMALE CIRCUMCISION

Women and men who had heard of female circumcision were asked if they thought the practice should be continued or discontinued. Table 13.5.1 indicates that among the Nigerian women who had heard of female circumcision, two-thirds believe that the practice should be discontinued, while 21 percent believe the practice should be continued. Approximately one in ten of this group of women expressed conditional approval or was unsure of her opinion. Continuation of female circumcision finds greater support among southerners than northerners and among those who are circumcised than those un-circumcised. Even so, less than half of circumcised women want the practice to be continued. Women were also asked about their perception of men's attitudes toward female circumcision. Half of women believe that men want the practice discontinued. Nonetheless, one-fifth believe that men want female circumcision to continue.

Table 13.5.1 Attitudes toward female circumcision: women

Percent distribution of all women who have heard of female circumcision by opinion on whether female circumcision should be continued and by opinion on whether men think female circumcision should be continued, according to background characteristics, Nigeria 2003

Background characteristic	Attitude toward female circumcision					Believes men think that female circumcision should be:					Number of women
	Should be continued	Should be discontinued	Depends/don't know	Missing	Total	Continued	Discontinued	Depends/don't know	Missing	Total	
<b>Age</b>											
15-19	23.4	60.0	15.2	1.4	100.0	20.8	42.7	35.5	1.0	100.0	739
20-24	21.3	66.2	10.6	1.9	100.0	19.9	49.1	29.0	2.0	100.0	789
25-29	17.0	70.1	12.2	0.7	100.0	14.9	51.5	32.8	0.7	100.0	794
30-34	15.8	73.7	9.9	0.5	100.0	15.8	53.1	30.6	0.5	100.0	518
35-39	24.9	66.7	8.4	0.0	100.0	21.1	51.2	27.7	0.0	100.0	496
40-44	20.0	64.9	14.8	0.4	100.0	18.6	51.5	29.6	0.3	100.0	369
45-49	24.9	62.9	11.2	1.0	100.0	19.5	49.4	30.1	1.0	100.0	347
<b>Residence</b>											
Urban	22.5	64.7	11.9	0.9	100.0	18.7	49.4	31.0	0.9	100.0	1,805
Rural	19.4	67.9	11.8	1.0	100.0	18.5	49.4	31.2	0.9	100.0	2,248
<b>Region</b>											
North Central	13.2	64.2	19.1	3.6	100.0	12.1	42.0	42.3	3.6	100.0	403
North East	7.3	78.6	13.5	0.6	100.0	5.9	55.5	37.9	0.7	100.0	548
North West	13.5	70.5	13.1	2.9	100.0	11.5	55.7	30.7	2.1	100.0	527
South East	23.9	67.4	8.6	0.0	100.0	20.4	56.8	22.8	0.0	100.0	646
South South	18.9	73.7	7.2	0.2	100.0	20.0	52.6	26.9	0.5	100.0	1,107
South West	38.3	46.3	15.1	0.3	100.0	31.3	34.9	33.6	0.3	100.0	821
<b>Education</b>											
No education	19.1	64.7	14.7	1.6	100.0	15.5	47.8	35.2	1.5	100.0	1,023
Primary	23.1	64.5	11.6	0.9	100.0	18.9	47.8	32.2	1.0	100.0	949
Secondary	23.2	65.4	10.9	0.6	100.0	22.6	48.9	28.1	0.5	100.0	1,666
Higher	10.4	79.7	9.1	0.8	100.0	9.2	59.3	30.6	0.9	100.0	415
<b>Circumcision status</b>											
Not circumcised	9.3	76.3	12.9	1.4	100.0	8.3	57.1	33.3	1.3	100.0	2,607
Circumcised	41.5	48.6	9.8	0.1	100.0	37.0	35.7	27.1	0.2	100.0	1,445
<b>Total</b>	<b>20.8</b>	<b>66.4</b>	<b>11.8</b>	<b>0.9</b>	<b>100.0</b>	<b>18.6</b>	<b>49.4</b>	<b>31.1</b>	<b>0.9</b>	<b>100.0</b>	<b>4,052</b>

Men who had heard of female circumcision were asked the same attitude questions. Table 13.5.2 shows that among men who had heard of the practice, almost two-thirds are against continuation of female circumcision, while about one-fifth favour continuation. Similar to women, men residing in urban areas and those in the south are the most likely to support the continuation of the practice. Once again, differentials by residence are largely due to ethnicity. Almost half of men believe women want the practice discontinued, while only 14 percent believe that women want female circumcision to continue.

Table 13.5.2 Attitudes toward female circumcision: men

Percent distribution of all men who have heard of female circumcision by opinion on whether female circumcision should be continued and by opinion on whether women think female circumcision should be continued, according to background characteristics, Nigeria 2003

Background characteristic	Attitude toward female circumcision				Total	Believes women think that female circumcision should be:				Total	Number of men
	Should be continued	Should be discontinued	Depends/don't know	Missing		Continued	Discontinued	Depends/don't know	Missing		
<b>Age</b>											
15-19	20.2	54.0	25.0	0.8	100.0	17.1	40.2	42.0	0.8	100.0	127
20-24	19.0	62.1	18.4	0.5	100.0	15.8	50.1	33.0	1.0	100.0	223
25-29	22.6	59.9	17.6	0.0	100.0	16.1	46.5	37.4	0.0	100.0	211
30-34	17.0	67.4	15.6	0.0	100.0	8.9	58.9	32.1	0.0	100.0	229
35-39	22.1	61.3	16.6	0.0	100.0	15.4	54.9	29.7	0.0	100.0	163
40-44	10.2	75.8	14.0	0.0	100.0	8.0	55.9	36.1	0.0	100.0	166
45-49	24.8	62.6	12.6	0.0	100.0	15.2	49.2	35.6	0.0	100.0	117
50-54	19.8	57.7	22.5	0.0	100.0	16.7	53.5	29.9	0.0	100.0	103
55-59	21.4	66.3	12.3	0.0	100.0	15.3	45.8	38.9	0.0	100.0	89
<b>Residence</b>											
Urban	23.1	59.8	17.0	0.2	100.0	13.0	49.9	37.0	0.2	100.0	586
Rural	16.7	65.9	17.3	0.1	100.0	14.5	52.2	33.0	0.3	100.0	840
<b>Region</b>											
North Central	17.4	75.6	6.9	0.0	100.0	12.6	68.1	19.3	0.0	100.0	154
North East	8.7	73.7	17.3	0.3	100.0	9.4	50.8	39.1	0.7	100.0	307
North West	14.5	64.3	21.2	0.0	100.0	11.7	53.6	34.7	0.0	100.0	276
South East	28.4	45.5	26.2	0.0	100.0	12.2	42.4	45.4	0.0	100.0	156
South South	24.1	64.1	11.4	0.4	100.0	20.4	51.6	27.6	0.4	100.0	279
South West	27.8	52.7	19.5	0.0	100.0	16.4	44.0	39.6	0.0	100.0	254
<b>Education</b>											
No education	15.2	63.7	21.0	0.0	100.0	15.2	46.5	38.3	0.0	100.0	280
Primary	24.6	57.6	17.8	0.0	100.0	17.4	44.8	37.8	0.0	100.0	362
Secondary	20.1	61.2	18.4	0.4	100.0	12.8	51.4	35.2	0.6	100.0	549
Higher	14.4	77.0	8.6	0.0	100.0	9.7	66.3	24.0	0.0	100.0	235
Total	19.3	63.4	17.1	0.1	100.0	13.9	51.2	34.6	0.2	100.0	1,426

### 13.6 REASONS FOR SUPPORTING FEMALE CIRCUMCISION

In the 2003 NDHS, women and men who said they thought female circumcision should continue were asked about the benefits the girls themselves get if they undergo this procedure. Chastity before marriage is the reason most commonly cited by both women and men in Nigeria. More than one-third of the women (36 percent) and 45 percent of men cited the need to prevent premarital sex as their reason for supporting female circumcision (Table 13.6). Maintaining virginity before marriage has been given as a benefit of female circumcision in other African countries as well, but except for Niger, it has always been the third or fourth most frequently given reason (Yoder et al., 2004).

An additional 35 percent of women and 30 percent of men said that a circumcised female would have better marriage prospects. Whereas almost one-quarter of men cite greater sexual pleasure for men as a perceived benefit, this is the least commonly cited reason among women (5 percent). One-quarter of women and one-fifth of men support female circumcision due to a belief that it aids safe delivery. This misconception will require adequate public education to correct.

Table 13.6 Perceived benefits of undergoing female circumcision

Among women and men who say they think female circumcision should be continued, percentage who cite specific reasons, according to urban-rural residence, Nigeria 2003

Reason	Women			Men		
	Residence			Residence		
	Urban	Rural	Total	Urban	Rural	Total
<b>Reason for supporting female circumcision</b>						
Cleanliness/hygiene	5.1	8.4	6.8	5.5	14.4	10.0
Social acceptance	34.0	21.9	27.7	9.1	22.7	16.0
Better marriage prospects	26.8	42.0	34.6	28.3	31.9	30.1
Preserve virginity/prevent premarital sex	49.0	23.4	35.8	48.3	41.8	45.0
More sexual pleasure for the man	7.1	3.5	5.3	24.7	21.7	23.2
Religious approval	10.4	12.2	11.3	11.2	6.2	8.7
Helps delivery	24.6	25.8	25.2	20.2	20.9	20.5
Other	9.6	21.3	15.7	15.7	5.9	10.7
Number	407	436	843	135	141	276

### 13.7 REASONS FOR NOT SUPPORTING FEMALE CIRCUMCISION

Women and men who said they thought female circumcision should be discontinued were asked about the benefits the girls themselves get if they do not become circumcised. Table 13.7 shows that sexual gratification was cited as a benefit by the majority of the women and men who do not support the continuation of female circumcision. One-third of the women cited more sexual pleasure for the woman and an additional one-fourth cited more sexual pleasure for the man. Among men, however, 48 percent cited more sexual pleasure for the man, and an additional 34 percent cited increased sexual pleasure for the woman. Religion is the reason least frequently cited by both women and men for not supporting female circumcision, suggesting that female circumcision is not perceived as a religious practice. It has been observed that female circumcision is a cultural rather than a religious practice (Toubia, 1995; Caldwell et al., 2000).

Table 13.7 Reasons for not supporting female circumcision

Among women and men who say they think female circumcision should be discontinued, percentage who cite specific reasons, according to urban-rural residence, Nigeria 2003

Reason	Women			Men		
	Residence			Residence		
	Urban	Rural	Total	Urban	Rural	Total
<b>Reason for not supporting female circumcision</b>						
Fewer medical problems	33.0	34.2	33.7	25.8	35.6	31.8
Avoiding pain	18.8	21.7	20.5	27.2	22.3	24.2
More sexual pleasure for her	38.9	32.5	35.3	41.9	28.8	33.9
More sexual pleasure for the man	25.1	24.0	24.5	53.0	45.0	48.1
Follows religion	2.3	3.1	2.8	3.6	5.1	4.5
Number	1,168	1,525	2,693	350	554	904

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### A.1 INTRODUCTION

The principal objective of the 2003 NDHS is to provide current and reliable data on fertility and family planning behaviour, child mortality, children's nutritional status, the utilization of maternal and child health services, and knowledge and attitudes towards HIV/AIDS. A related objective is to provide as many of these key indicators as possible for urban and rural areas separately, as well as for each of Nigeria's six geopolitical zones (see Table A.1).

The population covered by the 2003 NDHS is defined as the universe of all women age 15-49 and all men age 15-59 in Nigeria. A probability sample of households was selected and all women age 15-49 identified in the households were eligible to be interviewed. In addition, in a subsample of one-third of the households selected for the survey, all men age 15-59 were eligible to be interviewed.

### A.2 SAMPLE FRAME

The sample frame for this survey was the list of enumeration areas (EAs) developed for the 1991 Population Census. Administratively, at the time the survey was planned, Nigeria was divided into 36 states and the Federal Capital Territory (FCT) of Abuja. Each state was subdivided into local government area (LGA) units and each LGA was divided into localities. In addition to these administrative units, for implementation of the 1991 Population Census, each locality was subdivided into enumeration areas (EAs). The list of approximately 212,080 EAs, with household and population information (from the 1991 census) for each EA, was evaluated as a potential sampling frame for the 2003 NDHS. The EAs are grouped by states, by LGAs within a state, and by localities within an LGA, stratified separately by urban and rural areas. Any locality with less than 20,000 population constitutes a rural area. Also available from the 1991 census were maps showing the location of the EAs. These maps needed to be updated in the field before the final household selection. After a careful evaluation, the EA list was used as the sample frame.

### A.3 SAMPLE ALLOCATION

The primary sampling unit (PSU), or cluster, for the 2003 NDHS is defined as one or more EAs from the 1991 census frame. A minimum requirement of 50 households per cluster was imposed on the design; in the case of less than 50 households, a contiguous EA was added. The number of clusters in each state was not allocated in proportion to the state's population because of the need to obtain estimates for each of the six zones. Since Nigeria is a country where the majority of the population resides in rural areas, the number of clusters allocated to the urban areas in five out of the six zones was increased in order to obtain reasonable urban estimates.

The target of the 2003 NDHS sample was to obtain completed interviews with about 8,250 women. Based on the level of nonresponse found in the 1999 Nigeria DHS survey, a target of 7,935 households was set. When the sample was implemented, three clusters could not be visited because of communal clashes, so 7,864 households were selected, in which all women age 15-49 were eligible to be interviewed. To obtain estimates of fertility and child mortality with a reasonable level of precision, a minimum of 1,200 completed interviews with women was desired in each zone. In each state, the number of households was not distributed proportionally between urban and rural areas. Also, in six designated states, a minimum of 350 completed interviews were targeted to provide selected indicators.

Table A.1 Allocation of the sample

Number of expected women's interviews and number of clusters covered, by state, Nigeria 2003

Region/ state	Expected number of women's interviews			Number of clusters selected		
	Urban	Rural	Total	Urban	Rural	Total
<b>North Central</b>	530	755	1,285	26	30	56
Plateau	54	147	201	3	6	9
Benue	89	261	350	4	10	14
Nasarawa	30	86	116	1	3	4
Kogi	126	87	213	6	3	9
Kwara	134	15	149	7	1	8
Niger	84	140	224	4	6	10
FCT	13	18	32	1	1	2
<b>North East</b>	500	811	1,311	25	32	57
Taraba	32	121	153	2	5	7
Adamawa	80	134	214	4	5	9
Gombe	44	106	151	2	4	6
Borno	185	67	253	9	3	12
Bauchi	90	310	400	5	12	17
Yobe	68	72	140	3	3	6
<b>North West</b>	500	1,233	1,733	27	49	76
Jigawa	14	186	200	1	7	8
Kano	252	150	402	13	6	19
Kebbi	22	124	146	1	5	6
Kaduna	93	307	400	5	12	17
Katsina	53	214	267	3	9	12
Zamfara	33	115	149	2	5	7
Sokoto	33	137	170	2	5	7
<b>South East</b>	500	747	1,247	25	30	55
Ebonyi	104	63	167	5	3	8
Anambra	140	210	350	7	8	15
Enugu	151	89	240	8	4	12
Abia	86	123	209	4	5	9
Imo	19	262	281	1	10	11
<b>South South</b>	500	774	1,274	25	31	56
Bayelsa	6	90	97	0	4	4
Cross River	59	113	172	3	5	8
Akwa Ibom	23	201	223	1	8	9
Rivers	127	223	350	6	9	15
Delta	118	119	237	7	4	11
Edo	167	28	195	8	1	9
<b>South West</b>	750	650	1,400	40	25	65
Lagos	363	76	439	20	1	21
Oyo	138	144	281	7	6	13
Osun	57	124	180	3	5	8
Ogun	75	117	192	4	5	9
Ekiti	54	72	125	3	3	6
Ondo	64	118	182	3	5	8
<b>Total</b>	<b>3,280</b>	<b>4,970</b>	<b>8,250</b>	<b>165</b>	<b>200</b>	<b>365</b>

#### A.4 SAMPLE SELECTION

The 2003 NDHS sample was selected using a stratified, two-stage cluster design. A total of 365 clusters were selected, 165 in urban and 200 in rural areas. Table A.1 shows the distribution of clusters selected for the 2003 NDHS. Once the number of households was allocated to each state by urban and rural areas, the numbers of clusters was calculated based on an average sample take of 20 completed



women’s interviews (in 19 selected households) in urban areas, and 25 completed interviews (in 24 selected households) in rural areas. In each urban or rural area in a given state, clusters were selected systematically with equal probability. The selection was done using the following formula:

$$P_{1i} = (a / A)$$

where

*a*: is the number of clusters to be selected in the given combination of residence area and state,

*A*: is the total number of clusters in the given combination of residence area and state.

In each selected cluster, a complete household listing operation was carried out and households were selected to achieve a fixed sample take per cluster. Since the 2003 NDHS sample is unbalanced (disproportional) by urban-rural residence and state, it requires sampling weights to provide estimates at every domain of study.

In a given state, if *c* is the fixed number of households selected out of the total households (*L<sub>i</sub>*)—found in the 2003 listing process—for the *i<sup>th</sup>* cluster, then the household probability in the selected *i<sup>th</sup>* cluster can be expressed as

$$P_{2i} = (c / L_i)$$

The final household overall probability in the *i<sup>th</sup>* cluster could be calculated as

$$f_i = P_{1i} * P_{2i}$$

and the sampling design weight for the *i<sup>th</sup>* cluster is given as

$$1/f_i = 1 / (P_{1i} * P_{2i})$$

## A.5 SAMPLE FOR MALE SURVEY

In every third household selected, all men age 15-59 listed in the household were eligible to be interviewed. Based on data from the 1999 NDHS, this was expected to produce a total of about 2,800 successfully completed male interviews in the 2003 NDHS.

## A.6 RESPONSE RATES

Tables A.2 and A.3 present information on the results of the household and individual interviews. Household interviews were completed for 99 percent of the occupied households. A total of 7,985 eligible women were found in these households, and 95 percent of them were successfully interviewed. The overall response rate for women was 94 percent. A total of 2,572 eligible men from every third household were identified for the individual interviews; 91 percent were successfully interviewed. The overall response rate for men was 90 percent. The principal reason for nonresponse among eligible women and men was the failure to find them at home despite repeated visits to the household. The refusal rate was low.

There was no difference by urban-rural residence in overall response rates for eligible women and men. By region, the overall response rates for eligible women varied little, with the exception of South South, which had the lowest response rate for women (88 percent). The lowest overall response rate for men was in the South South and South East (83 percent each).

**Table A.2 Sample implementation: women**

Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women, and overall response rates, according to urban-rural residence and region, Nigeria 2003

Result	Residence		Region						Total
	Urban	Rural	North Central	North East	North West	South East	South South	South West	
<b>Selected households</b>									
Completed (C)	92.7	91.3	95.4	95.9	93.3	86.6	87.1	91.9	91.9
Household present but no competent respondent at home (HP)	0.5	0.6	0.4	0.2	0.7	0.3	0.9	0.8	0.6
Refused (R)	0.9	0.3	0.2	0.2	0.4	1.0	0.9	0.4	0.5
Dwelling not found (DNF)	0.1	0.2	0.1	0.0	0.1	0.0	0.7	0.3	0.2
Household absent (HA)	3.3	3.9	1.7	2.0	3.6	4.6	6.3	4.0	3.7
Dwelling vacant/address not a dwelling (DV)	2.3	3.1	2.0	1.4	1.7	6.7	3.2	2.3	2.8
Dwelling destroyed (DD)	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.1	0.2
Other (O)	0.1	0.3	0.0	0.0	0.1	0.6	0.4	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	3,163	4,701	1,214	1,242	1,689	1,195	1,159	1,365	7,864
<b>Household response rate (HRR)<sup>1</sup></b>	98.4	98.8	99.2	99.5	98.8	98.6	97.1	98.4	98.6
<b>Eligible women</b>									
Completed (EWC)	96.1	95.0	95.8	94.7	97.2	95.3	90.4	97.8	95.4
Not at home (EWNH)	1.8	2.5	2.3	2.3	1.3	2.2	5.4	0.9	2.3
Postponed (EWP)	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.1
Refused (EWR)	0.9	0.8	0.6	1.3	0.2	1.2	1.4	0.7	0.8
Partly completed (EWPC)	0.3	0.1	0.1	0.3	0.1	0.1	0.3	0.3	0.2
Incapacitated (EWI)	0.6	0.7	0.7	0.8	0.6	0.7	0.6	0.3	0.6
Other (EWO)	0.3	0.9	0.5	0.5	0.6	0.4	1.8	0.1	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	3,181	4,804	1,311	1,492	1,843	1,134	1,038	1,167	7,985
<b>Eligible women response rate (EWRR)<sup>2</sup></b>	96.1	95.0	95.8	94.7	97.2	95.3	90.4	97.8	95.4
<b>Overall response rate (ORR)<sup>3</sup></b>	94.6	93.8	95.1	94.2	96.0	94.0	87.8	96.2	94.1

<sup>1</sup> Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + R + DNF}$$

<sup>2</sup> Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{100 * EWC}{EWC + EWNH + EWP + EWR + EWPC + EWI + EWO}$$

<sup>3</sup> The overall response rate (ORR) is calculated as: ORR = HRR \* EWRR/100

**Table A.3 Sample implementation: men**

Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible men, and overall response rates, according to urban-rural residence and region Nigeria 2003

Result	Residence		Region						Total
	Urban	Rural	North Central	North East	North West	South East	South South	South West	
<b>Selected households</b>									
Completed (C)	92.7	91.3	96.5	97.0	92.8	85.9	85.8	92.3	91.9
Household present but no competent respondent at home (HP)	0.5	0.6	0.5	0.2	0.9	0.5	0.8	0.2	0.5
Refused (R)	1.1	0.3	0.0	0.2	0.0	1.5	1.1	0.9	0.6
Dwelling not found (DNF)	0.1	0.1	0.0	0.0	0.0	0.0	0.5	0.2	0.1
Household absent (HA)	3.4	4.0	1.3	1.7	3.8	4.1	6.9	4.7	3.7
Dwelling vacant/address not a dwelling (DV)	1.9	3.1	1.3	0.7	2.3	6.9	3.7	1.1	2.6
Dwelling destroyed (DD)	0.1	0.4	0.5	0.0	0.2	0.3	0.8	0.0	0.3
Other (O)	0.2	0.3	0.0	0.0	0.0	0.8	0.5	0.5	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	1,003	1,566	396	406	554	391	379	443	2,569
<b>Household response rate (HRR)<sup>1</sup></b>	98.2	99.0	99.5	99.5	99.0	97.7	97.3	98.6	98.7
<b>Eligible men</b>									
Completed (EMC)	91.9	90.7	97.2	88.9	93.3	84.9	85.8	94.3	91.2
Not at home (EMNH)	3.7	5.3	1.6	2.9	3.9	7.1	10.7	3.5	4.6
Postponed (EMP)	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Refused (EMR)	1.2	0.5	0.0	1.5	0.9	2.2	0.3	0.0	0.8
Partly completed (EMPC)	0.4	0.3	0.5	0.0	0.3	1.3	0.0	0.0	0.3
Incapacitated (EMI)	0.9	0.5	0.7	1.3	0.2	1.3	0.5	0.2	0.7
Other (EMO)	1.9	2.7	0.0	5.5	1.2	3.2	2.7	2.0	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	1,073	1,499	428	476	586	312	365	405	2,572
<b>Eligible men response rate (EMRR)<sup>2</sup></b>	91.9	90.7	97.2	88.9	93.3	84.9	85.8	94.3	91.2
<b>Overall response rate (ORR)<sup>3</sup></b>	90.2	89.8	96.7	88.4	92.4	83.0	83.4	93.0	90.0

<sup>1</sup> Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + R + DNF}$$

<sup>2</sup> Using the number of eligible men falling into specific response categories, the eligible man response rate (EMRR) is calculated as:

$$\frac{100 * EMC}{EMC + EMNH + EMP + EMR + EMPC + EMI + EMO}$$

<sup>3</sup> The overall response rate (ORR) is calculated as: ORR = HRR \* EMRR/100

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors, and (2) sampling errors. Nonsampling 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 2003 Nigeria Demographic and Health Survey (NDHS) to minimize this type of error, nonsampling 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 2003 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.

A 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 2003 NDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2003 NDHS is the ISSA Sampling Error Module. This module used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. 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:

$$SE^2(r) = var(r) = \frac{1-f}{x^2} \sum_{h=1}^H \left[ \frac{m_h}{m_{h-1}} \left( \sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

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  $h^{\text{th}}$  stratum,  
 $y_{hi}$  is the sum of the weighted values of variable  $y$  in the  $i^{\text{th}}$  cluster in the  $h^{\text{th}}$  stratum,  
 $x_{hi}$  is the sum of the weighted number of cases in the  $i^{\text{th}}$  cluster in the  $h^{\text{th}}$  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* clusters in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2003 NDHS, there were 362 non-empty clusters. Hence, 361 replications were created. The variance of a rate  $r$  is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^k (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where  $r$  is the estimate computed from the full sample of 362 clusters,  
 $r_{(i)}$  is the estimate computed from the reduced sample of 361 clusters ( $i^{\text{th}}$  cluster excluded),  
 and  
 $k$  is the total number of clusters.

In addition to the standard error, ISSA computes the design effect (DEFT) for each estimate, which 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. ISSA also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2003 NDHS are calculated for selected variables considered to be of primary interest for woman's survey and for man's surveys, respectively. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the 6 regions. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 to B.10 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits ( $R \pm 2SE$ ), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to childbearing.

The confidence interval (e.g., as calculated for *children ever born to women aged 40-49*) can be interpreted as follows: the overall average from the national sample is 6.808 and its standard error is 0.134. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e.,  $6.808 \pm 2 \times 0.134$ . There is a high probability (95 percent) that the *true* average number of children ever born to all women aged 40 to 49 is between 6.540 and 7.077.

Sampling errors are analyzed for the national woman sample and for two separate groups of estimates: (1) means and proportions, and (2) complex demographic rates. The relative standard errors (SE/R) for the means and proportions range between 1.1 percent and 32.7 percent with an average of 6.36 percent; the highest relative standard errors are for estimates of very low values (e.g., *currently using*

*female sterilization*). If estimates of very low values (less than 10 percent) were removed, then the average drops to 4.2 percent. So in general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. The relative standard error for the total fertility rate is small, 2.5 percent. However, for the mortality rates, the average relative standard error is much higher, 6.04 percent.

There are differentials in the relative standard error for the estimates of sub-populations. For example, for the variable *want no more children*, the relative standard errors as a percent of the estimated mean for the whole country, and for the urban areas are 4.9 percent and 6.1 percent, respectively.

For the total sample, the value of the design effect (DEFT), averaged over all variables, is 1.78 which means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.78 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Nigeria 2003

Variable	Estimate	Base population
WOMEN		
Urban residence	Proportion	All women
Literate	Proportion	All women
No education	Proportion	All women
Secondary education or higher	Proportion	All women
Net attendance ratio for primary school	Ratio	Children 6-11 years
Never married	Proportion	All women
Currently married/in union	Proportion	All women
Married before age 20	Proportion	All women age 20-49
Currently pregnant	Proportion	All women
Children ever born	Mean	All women
Children surviving	Mean	All women
Children ever born to women age 40-49	Mean	Women age 40-49
Total fertility rate (3 years)	Proportion	All women
Knows any contraceptive method	Proportion	Currently married women
Ever using any contraceptive method	Proportion	Currently married women
Currently using any contraceptive method	Proportion	Currently married women
Currently using a modern method	Proportion	Currently married women
Currently using pill	Proportion	Currently married women
Currently using IUD	Proportion	Currently married women
Currently using condom	Proportion	Currently married women
Currently using female sterilization	Proportion	Currently married women
Currently using periodic abstinence	Proportion	Currently married women
Obtained method from public sector source	Proportion	Current users of modern methods
Wanting no more children	Proportion	Currently married women
Wanting to delay birth at least 2 years	Proportion	Currently married women
Ideal family size	Mean	All women
Neonatal mortality (0-4 years)	Rate	Children exposed to the risk of mortality
Postneonatal mortality (0-4 years)	Rate	Children exposed to the risk of mortality
Infant mortality rate (0-4 years)	Rate	Children exposed to the risk of mortality
Infant mortality rate (5-9 years)	Rate	Children exposed to the risk of mortality
Infant mortality rate (10-14 years)	Rate	Children exposed to the risk of mortality
Child mortality (0-4 years)	Rate	Children exposed to the risk of mortality
Under-five mortality (0-4 years)	Rate	Children exposed to the risk of mortality
Mothers received tetanus injection for last birth	Proportion	Women with at least one live birth in five years before the survey
Mothers received medical assistance at delivery	Proportion	Births in past 5 years <sup>1</sup>
Had diarrhoea in two weeks before survey	Proportion	Children age 0-59 months
Treated with oral rehydration salts (ORS)	Proportion	Children with diarrhoea in two weeks before the survey
Taken to a health provider	Proportion	Children with diarrhoea in two weeks before the survey
Vaccination card seen	Proportion	Children age 12-23 months
Receiving vaccinations:	Proportion	Children age 12-23 months
BCG		
DPT (3 doses)		
Polio (3 doses)		
Measles		
Fully immunized		
Height-for-age (below -2SD)	Proportion	Children age 0-59 months
Weight-for-height (below -2SD)	Proportion	Children age 0-59 months
Weight-for-age (below -2SD)	Proportion	Children age 0-59 months
BMI < 18.5	Proportion	All women
Circumcised	Proportion	All women
Has heard of HIV/AIDS	Proportion	All women
Knows about condoms	Proportion	All women
Knows about limiting partners	Proportion	All women
MEN		
Urban residence	Proportion	All men
Literate	Proportion	All men
No education	Proportion	All men
Secondary education or higher	Proportion	All men
Never married	Proportion	All men
Currently married/in union	Proportion	All men
Knows any contraceptive method	Proportion	All men
Ideal family size	Mean	All men
Has heard of HIV/AIDS	Proportion	All men age 15-49
Knows about condoms	Proportion	All men age 15-49
Knows about limiting partners	Proportion	All men age 15-49

<sup>1</sup> Births occurring 1-59 months before interview

Table B.2 Sampling errors for national sample, Nigeria 2003

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.345	0.018	7620	7620	3.325	0.052	0.309	0.381
Literate	0.482	0.017	7620	7620	3.017	0.036	0.447	0.516
No education	0.416	0.017	7620	7620	2.970	0.040	0.383	0.450
Secondary education or higher	0.370	0.016	7620	7620	2.861	0.043	0.339	0.402
Net attendance ratio for primary school	0.601	0.016	5896	6111	2.044	0.027	0.568	0.634
Never married	0.253	0.010	7620	7620	2.002	0.039	0.233	0.273
Currently married/in union	0.700	0.011	7620	7620	2.014	0.015	0.679	0.721
Married before age 20	0.663	0.012	5871	5904	2.019	0.019	0.638	0.688
Currently pregnant	0.114	0.005	7620	7620	1.385	0.044	0.104	0.124
Children ever born	3.094	0.056	7620	7620	1.517	0.018	2.983	3.206
Children surviving	2.381	0.038	7620	7620	1.346	0.016	2.306	2.457
Children ever born to women age 40-49	6.808	0.134	1313	1271	1.508	0.020	6.540	7.077
Total fertility rate (3 years)	5.655	0.142	na	21194	1.696	0.025	5.372	5.939
Knows any contraceptive method	0.784	0.011	5157	5336	1.976	0.014	0.762	0.807
Ever using contraceptive method	0.307	0.013	5157	5336	2.076	0.043	0.281	0.334
Currently using any contraceptive method	0.126	0.007	5157	5336	1.451	0.053	0.112	0.139
Currently using a modern method	0.082	0.005	5157	5336	1.184	0.055	0.073	0.092
Currently using pill	0.018	0.002	5157	5336	1.247	0.128	0.013	0.023
Currently using IUD	0.007	0.001	5157	5336	1.023	0.165	0.005	0.010
Currently using condom	0.019	0.003	5157	5336	1.495	0.148	0.014	0.025
Currently using female sterilization	0.002	0.001	5157	5336	1.056	0.327	0.001	0.003
Currently using periodic abstinence	0.021	0.003	5157	5336	1.544	0.147	0.015	0.027
Obtained method from public sector source	0.228	0.022	616	597	1.287	0.095	0.185	0.272
Wanting no more children	0.183	0.009	5157	5336	1.658	0.049	0.165	0.201
Wanting to delay birth at least 2 years	0.338	0.010	5157	5336	1.569	0.031	0.318	0.359
Ideal family size	6.668	0.088	6783	6795	2.324	0.013	6.491	6.844
Neonatal mortality (0-4 years)	48.370	3.527	6101	6310	1.191	0.073	41.317	55.423
Postneonatal mortality (0-4 years)	51.587	4.234	6135	6343	1.430	0.082	43.119	60.054
Infant mortality (0-4 years)	99.956	6.202	6135	6343	1.481	0.062	87.552	112.360
Infant mortality (5-9 years)	119.858	5.482	5442	5574	1.123	0.046	108.894	130.822
Infant Mortality (10-14 years)	113.346	6.144	4436	4515	1.141	0.054	101.058	125.634
Child mortality (0-4 years)	111.693	6.819	6309	6530	1.404	0.061	98.056	125.331
Under-five mortality (0-4 years)	200.485	8.942	6343	6563	1.554	0.045	182.601	218.370
Mothers received tetanus injection for last birth	0.508	0.018	3775	3911	2.284	0.036	0.471	0.544
Mothers received medical assistance at delivery	0.362	0.019	6029	6219	2.464	0.053	0.324	0.401
Had diarrhoea in two weeks before survey	0.188	0.011	5186	5345	1.869	0.056	0.167	0.209
Treated with oral rehydration salts (ORS)	0.182	0.016	929	1006	1.173	0.086	0.151	0.213
Taken to a health provider	0.215	0.027	929	1006	1.916	0.128	0.160	0.270
Vaccination card seen	0.213	0.019	1015	999	1.407	0.087	0.176	0.250
Received BCG	0.483	0.025	1015	999	1.564	0.052	0.433	0.533
Received DPT (3 doses)	0.214	0.022	1015	999	1.696	0.104	0.169	0.258
Received polio (3 doses)	0.294	0.023	1015	999	1.576	0.078	0.249	0.340
Received measles	0.359	0.025	1015	999	1.636	0.070	0.309	0.409
Fully immunized	0.129	0.017	1015	999	1.629	0.135	0.094	0.164
Height-for-age (below -2SD)	0.383	0.011	4610	4789	1.501	0.030	0.360	0.406
Weight-for-height (below -2SD)	0.092	0.006	4610	4789	1.326	0.062	0.081	0.104
Weight-for-age (below -2SD)	0.287	0.013	4610	4789	1.774	0.044	0.262	0.312
BMI <18.5	0.152	0.008	6426	6362	1.736	0.051	0.136	0.167
Circumcised	0.190	0.014	7620	7620	3.012	0.071	0.163	0.217
Has heard of HIV/AIDS	0.863	0.010	7620	7620	2.488	0.011	0.844	0.883
Knows about condoms	0.446	0.011	7620	7620	1.938	0.025	0.424	0.468
Knows about limiting partners	0.599	0.013	7620	7620	2.241	0.021	0.574	0.624
MEN								
Urban residence	0.372	0.021	2346	2346	2.078	0.056	0.330	0.413
Literate	0.725	0.014	2346	2346	1.486	0.019	0.697	0.752
No education	0.216	0.014	2346	2346	1.598	0.063	0.189	0.243
Secondary education or higher	0.527	0.019	2346	2346	1.801	0.035	0.490	0.564
Never married	0.447	0.017	2346	2346	1.628	0.037	0.413	0.480
Currently married/in union	0.531	0.017	2346	2346	1.606	0.031	0.498	0.564
Knows any contraceptive method	0.902	0.011	2346	2346	1.843	0.013	0.879	0.924
Ideal family size	8.590	0.291	1992	1982	1.624	0.034	8.008	9.171
Has heard of HIV/AIDS	0.970	0.005	2086	2093	1.457	0.006	0.960	0.981
Knows about condoms	0.634	0.019	2086	2093	1.824	0.030	0.595	0.672
Knows about limiting partners	0.802	0.013	2086	2093	1.520	0.017	0.775	0.828

na = Not applicable



Table B.3 Sampling errors for urban sample, Nigeria 2003

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	1.000	0.000	3057	2629	na	0.000	1.000	1.000
Literate	0.675	0.023	3057	2629	2.679	0.034	0.630	0.721
No education	0.249	0.021	3057	2629	2.718	0.085	0.206	0.291
Secondary education or higher	0.556	0.025	3057	2629	2.795	0.045	0.505	0.606
Net attendance ratio for primary school	0.695	0.019	2241	1956	1.549	0.028	0.657	0.734
Never married	0.321	0.015	3057	2629	1.759	0.046	0.291	0.351
Currently married/in union	0.621	0.017	3057	2629	1.974	0.028	0.587	0.656
Married before age 20	0.524	0.019	2368	2049	1.861	0.036	0.485	0.562
Currently pregnant	0.094	0.006	3057	2629	1.212	0.068	0.081	0.107
Children ever born	2.658	0.077	3057	2629	1.419	0.029	2.504	2.812
Children surviving	2.185	0.056	3057	2629	1.283	0.026	2.073	2.297
Children ever born to women age 40-49	6.248	0.176	507	418	1.327	0.028	5.896	6.599
Total fertility rate (3 years)	4.861	0.202	na	7369	1.651	0.042	4.456	5.266
Knows any contraceptive method	0.910	0.010	1870	1633	1.561	0.011	0.890	0.931
Ever using contraceptive method	0.449	0.023	1870	1633	2.017	0.052	0.402	0.495
Currently using any contraceptive method	0.202	0.014	1870	1633	1.501	0.069	0.174	0.230
Currently using a modern method	0.139	0.010	1870	1633	1.265	0.073	0.119	0.160
Currently using pill	0.033	0.005	1870	1633	1.228	0.153	0.023	0.043
Currently using IUD	0.019	0.004	1870	1633	1.161	0.192	0.012	0.026
Currently using condom	0.040	0.008	1870	1633	1.678	0.190	0.025	0.055
Currently using female sterilization	0.003	0.001	1870	1633	0.970	0.392	0.001	0.006
Currently using periodic abstinence	0.029	0.005	1870	1633	1.169	0.155	0.020	0.039
Obtained method from public sector source	0.207	0.027	354	322	1.262	0.131	0.153	0.262
Wanting no more children	0.218	0.013	1870	1633	1.389	0.061	0.192	0.245
Wanting to delay birth at least 2 years	0.323	0.017	1870	1633	1.604	0.054	0.288	0.357
Ideal family size	6.023	0.148	2746	2409	2.699	0.025	5.727	6.320
Neonatal mortality (10 years)	36.679	4.256	4017	3393	1.305	0.116	28.167	45.191
Postneonatal mortality (10 years)	44.109	4.752	4023	3397	1.352	0.108	34.605	53.612
Infant mortality (10 years)	80.788	7.678	4023	3397	1.576	0.095	65.432	96.144
Child mortality (10 years)	78.464	7.803	4073	3437	1.383	0.099	62.859	94.069
Under five mortality (10 years)	152.913	11.956	4079	3441	1.770	0.078	129.000	176.826
Mothers received tetanus injection for last birth	0.734	0.026	1350	1144	2.176	0.036	0.681	0.787
Mothers received medical assistance at delivery	0.588	0.035	2118	1795	2.529	0.060	0.518	0.658
Had diarrhoea in two weeks before survey	0.145	0.020	1902	1620	2.226	0.137	0.105	0.185
Treated with oral rehydration salts (ORS)	0.229	0.027	281	235	0.968	0.119	0.174	0.283
Taken to a health provider	0.303	0.089	281	235	2.798	0.293	0.125	0.481
Vaccination card seen	0.356	0.032	395	312	1.266	0.090	0.292	0.421
Received BCG	0.701	0.043	395	312	1.760	0.062	0.614	0.788
Received DPT (3 doses)	0.402	0.036	395	312	1.377	0.089	0.331	0.474
Received polio (3 doses)	0.420	0.047	395	312	1.801	0.112	0.326	0.514
Received measles	0.521	0.047	395	312	1.749	0.089	0.428	0.614
Fully immunized	0.251	0.035	395	312	1.527	0.140	0.181	0.322
Height-for-age (below -2SD)	0.288	0.020	1748	1553	1.665	0.068	0.249	0.327
Weight-for-height (below -2SD)	0.083	0.009	1748	1553	1.379	0.111	0.064	0.101
Weight-for-age (below -2SD)	0.222	0.022	1748	1553	2.020	0.100	0.178	0.267
BMI <18.5	0.131	0.010	2642	2258	1.552	0.078	0.111	0.152
Circumcised	0.283	0.017	3057	2629	2.085	0.060	0.249	0.317
Has heard of HIV/AIDS	0.947	0.005	3057	2629	1.269	0.005	0.937	0.957
Knows about condoms	0.575	0.014	3057	2629	1.546	0.024	0.548	0.603
Knows about limiting partners	0.730	0.014	3057	2629	1.740	0.019	0.702	0.758
MEN								
Urban residence	1.000	0.000	986	872	na	0.000	1.000	1.000
Literate	0.868	0.012	986	872	1.145	0.014	0.843	0.893
No education	0.112	0.013	986	872	1.319	0.118	0.085	0.139
Secondary education or higher	0.658	0.027	986	872	1.766	0.041	0.604	0.711
Never married	0.510	0.024	986	872	1.526	0.048	0.461	0.558
Currently married/in union	0.460	0.024	986	872	1.515	0.052	0.412	0.508
Knows any contraceptive method	0.949	0.010	986	872	1.443	0.011	0.929	0.969
Ideal family size	6.567	0.301	817	729	1.557	0.046	5.964	7.170
Has heard of HIV/AIDS	0.990	0.004	887	792	1.118	0.004	0.982	0.997
Knows about condoms	0.706	0.022	887	792	1.420	0.031	0.663	0.750
Knows about limiting partners	0.831	0.017	887	792	1.352	0.020	0.797	0.865

na = Not applicable

Table B.4 Sampling errors for rural sample, Nigeria 2003

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Un-weighted (N)	Weighted (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.000	0.000	4563	4991	na	na	0.000	0.000
Literate	0.380	0.022	4563	4991	3.096	0.059	0.335	0.424
No education	0.504	0.022	4563	4991	2.986	0.044	0.460	0.548
Secondary education or higher	0.273	0.018	4563	4991	2.690	0.065	0.237	0.308
Net attendance ratio for primary school	0.557	0.023	3655	4155	2.184	0.040	0.512	0.602
Never married	0.217	0.013	4563	4991	2.092	0.059	0.191	0.242
Currently married/in union	0.742	0.013	4563	4991	1.966	0.017	0.716	0.767
Married before age 20	0.737	0.015	3503	3855	2.026	0.020	0.706	0.767
Currently pregnant	0.124	0.007	4563	4991	1.426	0.056	0.110	0.138
Children ever born	3.324	0.073	4563	4991	1.501	0.022	3.177	3.470
Children surviving	2.485	0.050	4563	4991	1.367	0.020	2.386	2.584
Children ever born to women age 40-49	7.083	0.176	806	853	1.513	0.025	6.731	7.435
Total fertility rate (3 years)	6.075	0.182	na	13887	1.670	0.030	5.710	6.439
Knows any contraceptive method	0.729	0.015	3287	3703	1.894	0.020	0.700	0.758
Ever using contraceptive method	0.245	0.015	3287	3703	2.058	0.063	0.214	0.276
Currently using any contraceptive method	0.092	0.007	3287	3703	1.457	0.080	0.077	0.107
Currently using a modern method	0.057	0.005	3287	3703	1.166	0.082	0.048	0.067
Currently using pill	0.011	0.002	3287	3703	1.342	0.218	0.006	0.016
Currently using IUD	0.002	0.001	3287	3703	0.952	0.351	0.001	0.004
Currently using condom	0.010	0.002	3287	3703	1.159	0.197	0.006	0.015
Currently using female sterilization	0.001	0.001	3287	3703	1.149	0.522	0.000	0.003
Currently using periodic abstinence	0.017	0.004	3287	3703	1.765	0.234	0.009	0.025
Obtained method from public sector source	0.253	0.036	262	275	1.323	0.141	0.181	0.324
Wanting no more children	0.167	0.011	3287	3703	1.727	0.067	0.145	0.190
Wanting to delay birth at least 2 years	0.345	0.013	3287	3703	1.548	0.037	0.320	0.371
Ideal family size	7.021	0.108	4037	4387	2.139	0.015	6.805	7.237
Neonatal mortality (10 years)	59.979	3.944	7499	8463	1.205	0.066	52.091	67.866
Postneonatal mortality (10 years)	60.758	4.105	7520	8487	1.350	0.068	52.549	68.967
Infant mortality (10 years)	120.736	5.790	7520	8487	1.324	0.048	109.157	132.316
Child mortality (10 years)	138.678	8.578	7672	8674	1.704	0.062	121.521	155.835
Under five mortality (10 years)	242.671	9.006	7693	8699	1.496	0.037	224.659	260.683
Mothers received tetanus injection for last birth	0.414	0.022	2425	2766	2.200	0.052	0.371	0.457
Mothers received medical assistance at delivery	0.271	0.020	3911	4424	2.288	0.075	0.230	0.311
Had diarrhoea in two weeks before survey	0.207	0.012	3284	3726	1.686	0.059	0.182	0.231
Treated with oral rehydration salts (ORS)	0.168	0.018	648	771	1.179	0.107	0.132	0.204
Taken to a health provider	0.188	0.020	648	771	1.240	0.106	0.148	0.227
Vaccination card seen	0.148	0.020	620	687	1.386	0.137	0.107	0.188
Received BCG	0.384	0.030	620	687	1.517	0.078	0.324	0.444
Received DPT (3 doses)	0.128	0.027	620	687	1.950	0.209	0.075	0.181
Received polio (3 doses)	0.237	0.024	620	687	1.376	0.100	0.190	0.285
Received measles	0.285	0.028	620	687	1.555	0.100	0.228	0.342
Fully immunized	0.074	0.018	620	687	1.742	0.247	0.037	0.110
Height-for-age (below -2SD)	0.429	0.014	2862	3236	1.445	0.033	0.401	0.457
Weight-for-height (below -2SD)	0.097	0.007	2862	3236	1.275	0.073	0.083	0.111
Weight-for-age (below -2SD)	0.318	0.015	2862	3236	1.621	0.047	0.288	0.347
BMI <18.5	0.163	0.011	3784	4105	1.804	0.067	0.141	0.184
Circumcised	0.140	0.019	4563	4991	3.613	0.132	0.103	0.178
Has heard of HIV/AIDS	0.819	0.015	4563	4991	2.593	0.018	0.789	0.848
Knows about condoms	0.378	0.015	4563	4991	2.109	0.040	0.348	0.409
Knows about limiting partners	0.530	0.018	4563	4991	2.404	0.034	0.494	0.565
MEN								
Urban residence	0.000	0.000	1360	1474	na	na	0.000	0.000
Literate	0.640	0.020	1360	1474	1.515	0.031	0.600	0.679
No education	0.278	0.020	1360	1474	1.622	0.071	0.238	0.317
Secondary education or higher	0.450	0.025	1360	1474	1.870	0.056	0.399	0.500
Never married	0.410	0.023	1360	1474	1.709	0.056	0.364	0.455
Currently married/in union	0.573	0.023	1360	1474	1.690	0.040	0.527	0.618
Knows any contraceptive method	0.874	0.017	1360	1474	1.881	0.019	0.840	0.908
Ideal family size	9.767	0.414	1175	1253	1.591	0.042	8.940	10.594
Has heard of HIV/AIDS	0.959	0.008	1199	1301	1.455	0.009	0.942	0.975
Knows about condoms	0.590	0.029	1199	1301	2.007	0.048	0.533	0.647
Knows about limiting partners	0.784	0.019	1199	1301	1.591	0.024	0.746	0.822

na = Not applicable

Table B.5 Sampling errors for North Central sample, Nigeria 2003

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.251	0.030	1256	1121	2.484	0.121	0.190	0.312
Literate	0.434	0.040	1256	1121	2.879	0.093	0.353	0.515
No education	0.359	0.034	1256	1121	2.537	0.096	0.291	0.428
Secondary education or higher	0.341	0.031	1256	1121	2.349	0.092	0.278	0.404
Net attendance ratio for primary school	0.702	0.033	1067	978	1.951	0.046	0.637	0.767
Never married	0.280	0.027	1256	1121	2.154	0.098	0.225	0.334
Currently married/in union	0.673	0.025	1256	1121	1.874	0.037	0.623	0.723
Married before age 20	0.635	0.023	996	879	1.503	0.036	0.590	0.681
Currently pregnant	0.094	0.012	1256	1121	1.466	0.128	0.070	0.119
Children ever born	2.976	0.111	1256	1121	1.264	0.037	2.754	3.198
Children surviving	2.404	0.077	1256	1121	1.111	0.032	2.250	2.559
Children ever born to women age 40-49	7.354	0.338	202	169	1.690	0.046	6.677	8.030
Total fertility rate (3 years)	5.704	0.335	na	3146	1.445	0.059	5.035	6.374
Knows any contraceptive method	0.774	0.032	848	754	2.198	0.041	0.711	0.837
Ever using contraceptive method	0.324	0.032	848	754	1.958	0.097	0.261	0.387
Currently using any contraceptive method	0.133	0.015	848	754	1.276	0.112	0.103	0.163
Currently using a modern method	0.103	0.012	848	754	1.133	0.115	0.080	0.127
Currently using pill	0.022	0.005	848	754	1.062	0.245	0.011	0.032
Currently using IUD	0.001	0.001	848	754	0.747	0.713	0.000	0.003
Currently using condom	0.015	0.005	848	754	1.121	0.316	0.005	0.024
Currently using female sterilization	0.008	0.003	848	754	0.955	0.371	0.002	0.014
Currently using periodic abstinence	0.019	0.007	848	754	1.429	0.349	0.006	0.033
Obtained method from public sector source	0.330	0.068	121	97	1.588	0.206	0.194	0.467
Wanting no more children	0.241	0.020	848	754	1.392	0.085	0.200	0.282
Wanting to delay birth at least 2 years	0.358	0.019	848	754	1.168	0.054	0.320	0.397
Ideal family size	6.194	0.197	1184	1060	2.273	0.032	5.800	6.589
Neonatal mortality (10 years)	53.260	8.562	1898	1680	1.398	0.161	36.136	70.384
Postneonatal mortality (10 years)	49.379	7.317	1899	1680	1.332	0.148	34.745	64.013
Infant mortality (10 years)	102.638	10.125	1899	1680	1.235	0.099	82.389	122.887
Child mortality (10 years)	69.698	10.853	1916	1699	1.500	0.156	47.992	91.403
Under five mortality (10 years)	165.18	13.746	1917	1699	1.335	0.083	137.691	192.674
Mothers received tetanus injection for last birth	0.626	0.037	645	575	1.967	0.060	0.551	0.701
Mothers received medical assistance at delivery	0.501	0.033	1015	897	1.648	0.066	0.435	0.567
Had diarrhoea in two weeks before survey	0.149	0.022	895	781	1.712	0.145	0.106	0.192
Treated with oral rehydration salts (ORS)	0.223	0.059	138	116	1.432	0.262	0.106	0.340
Taken to a health provider	0.397	0.039	138	116	0.846	0.098	0.319	0.476
Vaccination card seen	0.229	0.046	181	149	1.384	0.199	0.138	0.321
Received BCG	0.634	0.057	181	149	1.485	0.090	0.520	0.748
Received DPT (3 doses)	0.238	0.048	181	149	1.366	0.200	0.143	0.334
Received polio (3 doses)	0.368	0.049	181	149	1.288	0.134	0.269	0.467
Received measles	0.446	0.067	181	149	1.675	0.150	0.312	0.580
Fully immunized	0.124	0.033	181	149	1.274	0.264	0.059	0.189
Height-for-age (below -2SD)	0.314	0.027	850	758	1.625	0.087	0.260	0.369
Weight-for-height (below -2SD)	0.055	0.009	850	758	1.130	0.163	0.037	0.073
Weight-for-age (below -2SD)	0.196	0.021	850	758	1.481	0.108	0.154	0.238
BMI < 18.5	0.066	0.009	1069	944	1.229	0.142	0.047	0.085
Circumcised	0.096	0.035	1256	1121	4.165	0.361	0.027	0.165
Has heard of HIV/AIDS	0.845	0.037	1256	1121	3.611	0.044	0.771	0.919
Knows about condoms	0.347	0.027	1256	1121	1.985	0.077	0.293	0.400
Knows about limiting partners	0.556	0.041	1256	1121	2.946	0.074	0.474	0.639
MEN								
Urban residence	0.278	0.041	416	348	1.853	0.147	0.197	0.360
Literate	0.752	0.032	416	348	1.496	0.042	0.689	0.816
No education	0.134	0.027	416	348	1.600	0.199	0.081	0.188
Secondary education or higher	0.631	0.037	416	348	1.553	0.058	0.558	0.705
Never married	0.495	0.042	416	348	1.693	0.084	0.412	0.579
Currently married/in union	0.499	0.041	416	348	1.682	0.083	0.417	0.582
Knows any contraceptive method	0.930	0.018	416	348	1.418	0.019	0.895	0.966
Ideal family size	8.042	0.498	407	339	1.342	0.062	7.045	9.039
Has heard of HIV/AIDS	0.971	0.010	374	313	1.125	0.010	0.951	0.990
Knows about condoms	0.681	0.029	374	313	1.205	0.043	0.623	0.739
Knows about limiting partners	0.838	0.024	374	313	1.273	0.029	0.789	0.886

na = Not applicable

Table B.6 Sampling errors for North East sample, Nigeria 2003

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.275	0.025	1413	1368	2.094	0.090	0.225	0.325
Literate	0.256	0.030	1413	1368	2.590	0.118	0.196	0.316
No education	0.678	0.032	1413	1368	2.552	0.047	0.615	0.742
Secondary education or higher	0.157	0.021	1413	1368	2.201	0.136	0.114	0.199
Net attendance ratio for primary school	0.444	0.040	1301	1278	2.018	0.089	0.365	0.523
Never married	0.124	0.017	1413	1368	1.949	0.138	0.090	0.158
Currently married/in union	0.821	0.020	1413	1368	1.941	0.024	0.781	0.860
Married before age 20	0.855	0.016	1108	1074	1.477	0.018	0.823	0.886
Currently pregnant	0.142	0.013	1413	1368	1.379	0.090	0.117	0.168
Children ever born	3.927	0.125	1413	1368	1.368	0.032	3.677	4.178
Children surviving	2.859	0.108	1413	1368	1.616	0.038	2.644	3.075
Children ever born to women age 40-49	7.412	0.364	247	241	1.587	0.049	6.683	8.140
Total fertility rate (3 years)	7.027	0.299	na	3808	1.985	0.043	6.428	7.626
Knows any contraceptive method	0.635	0.022	1133	1122	1.535	0.035	0.591	0.679
Ever using contraceptive method	0.123	0.013	1133	1122	1.307	0.104	0.098	0.149
Currently using any contraceptive method	0.042	0.006	1133	1122	1.038	0.147	0.030	0.055
Currently using a modern method	0.030	0.004	1133	1122	0.851	0.143	0.022	0.039
Currently using pill	0.007	0.003	1133	1122	1.246	0.434	0.001	0.014
Currently using IUD	0.002	0.001	1133	1122	1.100	0.757	0.000	0.005
Currently using condom	0.002	0.001	1133	1122	1.014	0.654	0.000	0.005
Currently using female sterilization	0.000	0.000	1133	1122	0.551	1.018	0.000	0.001
Currently using periodic abstinence	0.006	0.003	1133	1122	1.316	0.486	0.000	0.013
Obtained method from public sector source	0.535	0.107	32	29	1.189	0.199	0.322	0.748
Wanting no more children	0.163	0.020	1133	1122	1.794	0.121	0.123	0.202
Wanting to delay birth at least 2 years	0.344	0.024	1133	1122	1.692	0.069	0.296	0.391
Ideal family size	7.817	0.178	1107	1060	1.651	0.023	7.462	8.173
Neonatal mortality (10 years)	60.637	7.661	2842	2802	1.417	0.126	45.316	75.959
Postneonatal mortality (10 years)	64.856	5.691	2850	2809	1.108	0.088	53.474	76.238
Infant mortality (10 years)	125.493	8.204	2850	2809	1.201	0.065	109.086	141.900
Child mortality (10 years)	153.707	10.692	2915	2884	1.274	0.070	132.322	175.092
Under five mortality (10 years)	259.911	11.454	2923	2891	1.177	0.044	237.002	282.820
Mothers received tetanus injection for last birth	0.431	0.036	867	862	2.178	0.084	0.358	0.503
Mothers received medical assistance at delivery	0.220	0.027	1487	1472	2.100	0.123	0.166	0.275
Had diarrhoea in two weeks before survey	0.351	0.018	1239	1225	1.331	0.052	0.314	0.387
Treated with oral rehydration salts (ORS)	0.138	0.020	403	430	1.162	0.148	0.097	0.179
Taken to a health provider	0.076	0.017	403	430	1.298	0.228	0.041	0.111
Vaccination card seen	0.171	0.037	236	219	1.435	0.219	0.096	0.246
Received BCG	0.311	0.048	236	219	1.525	0.154	0.215	0.407
Received DPT (3 doses)	0.091	0.026	236	219	1.361	0.287	0.039	0.143
Received polio (3 doses)	0.248	0.044	236	219	1.521	0.178	0.160	0.336
Received measles	0.225	0.035	236	219	1.242	0.155	0.156	0.295
Fully immunized	0.060	0.018	236	219	1.171	0.310	0.023	0.096
Height-for-age (below -2SD)	0.430	0.022	1099	1089	1.375	0.052	0.386	0.475
Weight-for-height (below -2SD)	0.079	0.011	1099	1089	1.298	0.133	0.058	0.100
Weight-for-age (below -2SD)	0.331	0.023	1099	1089	1.449	0.069	0.285	0.376
BMI <18.5	0.230	0.021	1120	1095	1.687	0.092	0.188	0.273
Circumcised	0.013	0.003	1413	1368	1.069	0.250	0.006	0.019
Has heard of HIV/AIDS	0.757	0.018	1413	1368	1.547	0.023	0.722	0.793
Knows about condoms	0.347	0.032	1413	1368	2.496	0.091	0.284	0.410
Knows about limiting partners	0.506	0.021	1413	1368	1.557	0.041	0.465	0.548
MEN								
Urban residence	0.286	0.031	423	421	1.426	0.110	0.223	0.349
Literate	0.599	0.031	423	421	1.284	0.051	0.538	0.661
No education	0.419	0.041	423	421	1.727	0.099	0.336	0.502
Secondary education or higher	0.357	0.044	423	421	1.902	0.124	0.268	0.446
Never married	0.300	0.048	423	421	2.147	0.160	0.204	0.395
Currently married/in union	0.672	0.048	423	421	2.116	0.072	0.575	0.769
Knows any contraceptive method	0.780	0.042	423	421	2.103	0.054	0.695	0.865
Ideal family size	12.484	1.173	297	284	1.831	0.094	10.138	14.830
Has heard of HIV/AIDS	0.973	0.008	376	377	0.954	0.008	0.957	0.989
Knows about condoms	0.475	0.055	376	377	2.131	0.116	0.365	0.585
Knows about limiting partners	0.802	0.026	376	377	1.254	0.032	0.750	0.853

na = Not applicable

Table B.7 Sampling errors for North West sample, Nigeria 2003

Variable	Value (R)	Standard error (SE)	Number of cases		Design effect (DEFT)	Relative error (SE/R)	Confidence limits	
			Un-weighted (N)	Weighted (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.278	0.029	1791	2095	2.699	0.103	0.221	0.335
Literate	0.209	0.017	1791	2095	1.779	0.082	0.175	0.243
No education	0.750	0.017	1791	2095	1.645	0.022	0.717	0.784
Secondary education or higher	0.131	0.011	1791	2095	1.370	0.083	0.109	0.153
Net attendance ratio for primary school	0.417	0.034	1459	1834	2.131	0.082	0.349	0.485
Never married	0.069	0.008	1791	2095	1.375	0.119	0.053	0.086
Currently married/in union	0.897	0.011	1791	2095	1.494	0.012	0.876	0.919
Married before age 20	0.908	0.009	1406	1675	1.180	0.010	0.889	0.926
Currently pregnant	0.162	0.009	1791	2095	1.028	0.055	0.144	0.180
Children ever born	3.778	0.096	1791	2095	1.235	0.025	3.586	3.970
Children surviving	2.699	0.066	1791	2095	1.178	0.024	2.567	2.830
Children ever born to women age 40-49	6.734	0.238	315	372	1.152	0.035	6.258	7.209
Total fertility rate (3 years)	6.687	0.254	na	5907	1.471	0.038	6.179	7.196
Knows any contraceptive method	0.751	0.020	1556	1880	1.812	0.026	0.711	0.791
Ever using contraceptive method	0.151	0.011	1556	1880	1.156	0.069	0.130	0.172
Currently using any contraceptive method	0.049	0.007	1556	1880	1.224	0.136	0.036	0.063
Currently using a modern method	0.033	0.005	1556	1880	1.048	0.144	0.024	0.043
Currently using pill	0.006	0.002	1556	1880	1.228	0.405	0.001	0.011
Currently using IUD	0.001	0.001	1556	1880	0.775	0.594	0.000	0.002
Currently using condom	0.001	0.000	1556	1880	0.733	0.732	0.000	0.002
Currently using female sterilization	0.001	0.001	1556	1880	1.039	1.007	0.000	0.002
Currently using periodic abstinence	0.002	0.002	1556	1880	1.467	0.752	0.000	0.006
Obtained method from public sector source	0.477	0.102	40	38	1.276	0.214	0.272	0.681
Wanting no more children	0.065	0.009	1556	1880	1.436	0.138	0.047	0.083
Wanting to delay birth at least 2 years	0.360	0.020	1556	1880	1.635	0.055	0.321	0.400
Ideal family size	8.563	0.106	1522	1793	1.283	0.012	8.351	8.776
Neonatal mortality (10 years)	55.259	4.247	3462	4150	0.990	0.077	46.765	63.753
Postneonatal mortality (10 years)	58.608	6.380	3472	4162	1.410	0.109	45.849	71.367
Infant mortality (10 years)	113.867	8.167	3472	4162	1.250	0.072	97.533	130.201
Child mortality (10 years)	175.610	12.271	3569	4280	1.437	0.070	151.068	200.152
Under five mortality (10 years)	269.481	13.639	3579	4292	1.471	0.051	242.203	296.758
Mothers received tetanus injection for last birth	0.262	0.022	1125	1341	1.698	0.084	0.218	0.306
Mothers received medical assistance at delivery	0.130	0.016	1821	2161	1.623	0.120	0.099	0.162
Had diarrhoea in two weeks before survey	0.189	0.019	1529	1818	1.775	0.099	0.152	0.226
Treated with oral rehydration salts (ORS)	0.205	0.025	265	343	0.962	0.121	0.155	0.255
Taken to a health provider	0.298	0.062	265	343	2.069	0.210	0.173	0.423
Vaccination card seen	0.096	0.015	311	356	0.874	0.154	0.066	0.126
Received BCG	0.275	0.029	311	356	1.131	0.106	0.217	0.333
Received DPT (3 doses)	0.058	0.013	311	356	0.990	0.230	0.031	0.084
Received polio (3 doses)	0.164	0.025	311	356	1.179	0.153	0.113	0.214
Received measles	0.156	0.027	311	356	1.282	0.171	0.103	0.210
Fully immunized	0.037	0.012	311	356	1.094	0.319	0.013	0.061
Height-for-age (below -2SD)	0.553	0.022	1188	1452	1.419	0.039	0.510	0.596
Weight-for-height (below -2SD)	0.125	0.013	1188	1452	1.287	0.100	0.100	0.150
Weight-for-age (below -2SD)	0.429	0.023	1188	1452	1.555	0.054	0.382	0.475
BMI <18.5	0.197	0.016	1404	1630	1.499	0.081	0.166	0.229
Circumcised	0.004	0.002	1791	2095	1.122	0.399	0.001	0.008
Has heard of HIV/AIDS	0.866	0.019	1791	2095	2.316	0.022	0.828	0.903
Knows about condoms	0.488	0.018	1791	2095	1.499	0.036	0.452	0.523
Knows about limiting partners	0.598	0.022	1791	2095	1.910	0.037	0.554	0.642
MEN								
Urban residence	0.350	0.038	547	602	1.860	0.108	0.274	0.426
Literate	0.557	0.027	547	602	1.282	0.049	0.503	0.612
No education	0.415	0.030	547	602	1.429	0.073	0.354	0.475
Secondary education or higher	0.322	0.029	547	602	1.437	0.089	0.264	0.379
Never married	0.355	0.031	547	602	1.535	0.088	0.293	0.418
Currently married/in union	0.618	0.032	547	602	1.515	0.051	0.555	0.681
Knows any contraceptive method	0.940	0.013	547	602	1.313	0.014	0.913	0.967
Ideal family size	12.755	0.703	362	417	1.388	0.055	11.349	14.160
Has heard of HIV/AIDS	0.993	0.003	477	529	0.887	0.003	0.986	1.000
Knows about condoms	0.698	0.036	477	529	1.699	0.051	0.627	0.770
Knows about limiting partners	0.831	0.025	477	529	1.456	0.030	0.781	0.881

na = Not applicable

Table B.8 Sampling errors for South East sample, Nigeria 2003

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.404	0.103	1081	737	6.890	0.255	0.198	0.610
Literate	0.856	0.021	1081	737	2.009	0.025	0.813	0.899
No education	0.077	0.015	1081	737	1.850	0.194	0.047	0.107
Secondary education or higher	0.675	0.039	1081	737	2.758	0.058	0.596	0.754
Net attendance ratio for primary school	0.802	0.037	670	437	2.251	0.046	0.729	0.875
Never married	0.462	0.023	1081	737	1.485	0.049	0.417	0.507
Currently married/in union	0.499	0.025	1081	737	1.666	0.051	0.449	0.550
Married before age 20	0.345	0.027	803	557	1.606	0.078	0.291	0.398
Currently pregnant	0.068	0.005	1081	737	0.706	0.080	0.057	0.079
Children ever born	2.241	0.075	1081	737	0.820	0.034	2.090	2.392
Children surviving	1.934	0.074	1081	737	0.962	0.038	1.786	2.082
Children ever born to women age 40-49	6.572	0.503	219	128	2.562	0.077	5.566	7.579
Total fertility rate (3 years)	4.106	0.368	na	2108	1.771	0.090	3.371	4.841
Knows any contraceptive method	0.871	0.031	509	368	2.073	0.035	0.810	0.933
Ever using contraceptive method	0.559	0.057	509	368	2.574	0.101	0.445	0.672
Currently using any contraceptive method	0.225	0.028	509	368	1.493	0.123	0.169	0.280
Currently using a modern method	0.130	0.019	509	368	1.305	0.150	0.091	0.169
Currently using pill	0.015	0.007	509	368	1.361	0.496	0.000	0.029
Currently using IUD	0.007	0.004	509	368	1.067	0.550	0.000	0.015
Currently using condom	0.089	0.020	509	368	1.551	0.221	0.050	0.128
Currently using female sterilization	0.001	0.001	509	368	0.635	0.763	0.000	0.003
Currently using periodic abstinence	0.033	0.011	509	368	1.379	0.333	0.011	0.054
Obtained method from public sector source	0.174	0.049	90	78	1.220	0.282	0.076	0.272
Wanting no more children	0.316	0.032	509	368	1.545	0.101	0.252	0.379
Wanting to delay birth at least 2 years	0.223	0.034	509	368	1.825	0.151	0.156	0.291
Ideal family size	5.314	0.154	999	693	2.812	0.029	5.005	5.623
Neonatal mortality (10 years)	33.975	13.372	1086	706	2.042	0.394	7.231	60.719
Postneonatal mortality (10 years)	31.652	10.193	1088	707	1.704	0.322	11.266	52.037
Infant mortality (10 years)	65.626	21.848	1088	707	2.375	0.333	21.931	109.321
Child mortality (10 years)	39.771	10.797	1096	710	1.652	0.271	18.176	61.365
Under five mortality (10 years)	102.787	28.906	1098	711	2.660	0.281	44.975	160.599
Mothers received tetanus injection for last birth	0.897	0.035	329	222	2.061	0.039	0.828	0.967
Mothers received medical assistance at delivery	0.876	0.043	524	371	2.310	0.049	0.791	0.962
Had diarrhoea in two weeks before survey	0.086	0.026	466	347	2.073	0.301	0.034	0.139
Treated with oral rehydration salts (ORS)	0.174	0.064	45	30	1.124	0.370	0.045	0.302
Taken to a health provider	0.249	0.108	45	30	1.670	0.433	0.034	0.464
Vaccination card seen	0.431	0.081	91	74	1.697	0.188	0.269	0.592
Received BCG	0.834	0.050	91	74	1.402	0.060	0.733	0.934
Received DPT (3 doses)	0.585	0.067	91	74	1.407	0.114	0.452	0.719
Received polio (3 doses)	0.574	0.105	91	74	2.208	0.183	0.364	0.784
Received measles	0.641	0.097	91	74	2.109	0.152	0.447	0.836
Fully immunized	0.446	0.068	91	74	1.429	0.153	0.309	0.582
Height-for-age (below -2SD)	0.197	0.015	439	338	0.811	0.074	0.168	0.226
Weight-for-height (below -2SD)	0.049	0.013	439	338	1.299	0.254	0.024	0.074
Weight-for-age (below -2SD)	0.085	0.029	439	338	2.170	0.343	0.027	0.143
BMI <18.5	0.082	0.021	985	648	2.418	0.263	0.039	0.124
Circumcised	0.408	0.030	1081	737	2.021	0.074	0.347	0.468
Has heard of HIV/AIDS	0.955	0.013	1081	737	2.121	0.014	0.928	0.982
Knows about condoms	0.436	0.024	1081	737	1.619	0.056	0.387	0.485
Knows about limiting partners	0.773	0.027	1081	737	2.085	0.034	0.720	0.826
MEN								
Urban residence	0.462	0.113	265	207	3.682	0.244	0.236	0.688
Literate	0.929	0.024	265	207	1.503	0.026	0.881	0.976
No education	0.025	0.011	265	207	1.105	0.422	0.004	0.047
Secondary education or higher	0.714	0.058	265	207	2.103	0.082	0.597	0.831
Never married	0.517	0.050	265	207	1.618	0.096	0.418	0.617
Currently married/in union	0.478	0.050	265	207	1.637	0.105	0.378	0.579
Knows any contraceptive method	0.955	0.020	265	207	1.561	0.021	0.915	0.995
Ideal family size	5.309	0.288	259	205	1.751	0.054	4.733	5.885
Has heard of HIV/AIDS	0.993	0.005	233	192	0.967	0.005	0.982	1.000
Knows about condoms	0.794	0.050	233	192	1.898	0.063	0.694	0.895
Knows about limiting partners	0.851	0.017	233	192	0.723	0.020	0.818	0.885

na = Not applicable

Table B.9 Sampling errors for South South sample, Nigeria 2003

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.291	0.055	938	1342	3.733	0.190	0.180	0.402
Literate	0.750	0.031	938	1342	2.216	0.042	0.687	0.813
No education	0.081	0.022	938	1342	2.418	0.267	0.038	0.124
Secondary education or higher	0.617	0.039	938	1342	2.433	0.063	0.539	0.694
Net attendance ratio for primary school	0.822	0.023	704	969	1.538	0.029	0.775	0.868
Never married	0.431	0.024	938	1342	1.453	0.055	0.384	0.478
Currently married/in union	0.495	0.024	938	1342	1.447	0.048	0.447	0.542
Married before age 20	0.481	0.029	693	980	1.520	0.060	0.424	0.539
Currently pregnant	0.090	0.013	938	1342	1.438	0.149	0.063	0.117
Children ever born	2.513	0.164	938	1342	1.634	0.065	2.184	2.841
Children surviving	2.064	0.113	938	1342	1.395	0.055	1.838	2.290
Children ever born to women age 40-49	6.894	0.315	153	214	1.466	0.046	6.264	7.524
Total fertility rate (3 years)	4.630	0.274	na	3698	1.084	0.059	4.083	5.178
Knows any contraceptive method	0.942	0.020	467	664	1.822	0.021	0.902	0.981
Ever using contraceptive method	0.613	0.031	467	664	1.380	0.051	0.551	0.675
Currently using any contraceptive method	0.254	0.028	467	664	1.381	0.110	0.199	0.310
Currently using a modern method	0.138	0.021	467	664	1.294	0.150	0.097	0.179
Currently using pill	0.040	0.012	467	664	1.330	0.300	0.016	0.065
Currently using IUD	0.007	0.006	467	664	1.391	0.747	0.000	0.018
Currently using condom	0.024	0.008	467	664	1.142	0.336	0.008	0.040
Currently using female sterilization	0.004	0.004	467	664	1.169	0.824	0.000	0.011
Currently using periodic abstinence	0.073	0.017	467	664	1.397	0.231	0.039	0.106
Obtained method from public sector source	0.126	0.027	141	186	0.967	0.215	0.072	0.180
Wanting no more children	0.316	0.022	467	664	1.027	0.070	0.272	0.360
Wanting to delay birth at least 2 years	0.304	0.030	467	664	1.429	0.100	0.243	0.365
Ideal family size	5.538	0.152	901	1290	2.068	0.027	5.234	5.841
Neonatal mortality (10 years)	52.656	10.561	1072	1542	1.156	0.201	31.534	73.778
Postneonatal mortality (10 years)	67.568	9.922	1075	1548	1.256	0.147	47.725	87.412
Infant mortality (10 years)	120.224	18.027	1075	1548	1.580	0.150	84.170	156.279
Child mortality (10 years)	63.423	5.753	1084	1556	0.761	0.091	51.917	74.928
Under five mortality (10 years)	176.022	17.272	1087	1562	1.373	0.098	141.479	210.566
Mothers received tetanus injection for last birth	0.710	0.043	380	544	1.859	0.061	0.623	0.797
Mothers received medical assistance at delivery	0.559	0.058	560	789	2.185	0.104	0.442	0.676
Had diarrhoea in two weeks before survey	0.080	0.016	484	684	1.215	0.201	0.048	0.113
Treated with oral rehydration salts (ORS)	0.277	0.072	37	55	0.909	0.261	0.132	0.421
Taken to a health provider	0.268	0.071	37	55	0.973	0.267	0.125	0.410
Vaccination card seen	0.379	0.077	92	120	1.418	0.202	0.226	0.532
Received BCG	0.761	0.059	92	120	1.268	0.078	0.643	0.880
Received DPT (3 doses)	0.325	0.084	92	120	1.624	0.257	0.158	0.492
Received polio (3 doses)	0.400	0.069	92	120	1.281	0.173	0.262	0.538
Received measles	0.669	0.071	92	120	1.353	0.107	0.526	0.811
Fully immunized	0.208	0.054	92	120	1.224	0.262	0.099	0.317
Height-for-age (below -2SD)	0.209	0.023	464	643	1.259	0.112	0.163	0.256
Weight-for-height (below -2SD)	0.111	0.020	464	643	1.315	0.182	0.071	0.152
Weight-for-age (below -2SD)	0.180	0.027	464	643	1.426	0.149	0.127	0.234
BMI <18.5	0.111	0.013	811	1173	1.201	0.119	0.084	0.137
Circumcised	0.347	0.049	938	1342	3.169	0.142	0.248	0.446
Has heard of HIV/AIDS	0.903	0.023	938	1342	2.408	0.026	0.857	0.950
Knows about condoms	0.488	0.029	938	1342	1.784	0.060	0.430	0.546
Knows about limiting partners	0.580	0.031	938	1342	1.933	0.054	0.518	0.643
MEN								
Urban residence	0.264	0.057	313	445	2.282	0.216	0.150	0.377
Literate	0.805	0.033	313	445	1.478	0.041	0.738	0.871
No education	0.030	0.011	313	445	1.130	0.363	0.008	0.052
Secondary education or higher	0.656	0.047	313	445	1.735	0.071	0.563	0.749
Never married	0.600	0.033	313	445	1.189	0.055	0.534	0.666
Currently married/in union	0.386	0.032	313	445	1.168	0.083	0.322	0.450
Knows any contraceptive method	0.861	0.032	313	445	1.635	0.037	0.797	0.925
Ideal family size	6.692	0.411	305	432	1.366	0.061	5.871	7.514
Has heard of HIV/AIDS	0.921	0.023	276	385	1.394	0.025	0.875	0.966
Knows about condoms	0.504	0.054	276	385	1.781	0.107	0.397	0.611
Knows about limiting partners	0.682	0.047	276	385	1.657	0.068	0.589	0.775

na = Not applicable

Table B.10 Errors for biomarkers in South West sample, Nigeria 2003

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
WOMEN								
Urban residence	0.732	0.035	1141	958	2.668	0.048	0.662	0.802
Literate	0.791	0.017	1141	958	1.419	0.022	0.757	0.825
No education	0.108	0.013	1141	958	1.381	0.117	0.083	0.134
Secondary education or higher	0.652	0.025	1141	958	1.766	0.038	0.602	0.702
Net attendance ratio for primary school	0.828	0.017	695	615	1.120	0.021	0.793	0.862
Never married	0.396	0.015	1141	958	1.050	0.038	0.366	0.427
Currently married/in union	0.571	0.018	1141	958	1.236	0.032	0.535	0.608
Married before age 20	0.342	0.022	865	740	1.351	0.064	0.298	0.385
Currently pregnant	0.060	0.009	1141	958	1.252	0.146	0.043	0.078
Children ever born	2.019	0.076	1141	958	1.073	0.038	1.868	2.171
Children surviving	1.768	0.062	1141	958	1.023	0.035	1.643	1.892
Children ever born to women age 40-49	5.459	0.190	177	147	1.118	0.035	5.079	5.840
Total fertility rate (3 years)	4.122	0.234	na	2631	1.318	0.057	3.654	4.591
Knows any contraceptive method	0.970	0.009	644	548	1.406	0.010	0.951	0.989
Ever using contraceptive method	0.657	0.018	644	548	0.981	0.028	0.620	0.694
Currently using any contraceptive method	0.327	0.023	644	548	1.238	0.070	0.282	0.373
Currently using a modern method	0.231	0.021	644	548	1.263	0.091	0.189	0.273
Currently using pill	0.052	0.012	644	548	1.371	0.231	0.028	0.076
Currently using IUD	0.049	0.009	644	548	1.047	0.182	0.031	0.067
Currently using condom	0.074	0.011	644	548	1.054	0.147	0.052	0.096
Currently using female sterilization	0.000	0.000	644	548	na	na	0.000	0.000
Currently using periodic abstinence	0.044	0.009	644	548	1.139	0.208	0.026	0.063
Obtained method from public sector source	0.199	0.038	192	170	1.302	0.189	0.124	0.275
Wanting no more children	0.299	0.020	644	548	1.097	0.066	0.259	0.338
Wanting to delay birth at least 2 years	0.343	0.023	644	548	1.215	0.066	0.297	0.388
Ideal family size	4.757	0.066	1070	901	1.337	0.014	4.626	4.889
Neonatal mortality (10 years)	39.077	7.515	1156	976	1.122	0.192	24.048	54.107
Postneonatal mortality (10 years)	30.112	5.561	1159	979	1.060	0.185	18.991	41.234
Infant mortality (10 years)	69.190	9.048	1159	979	1.092	0.131	51.094	87.285
Child mortality (10 years)	46.690	9.827	1165	983	1.339	0.210	27.037	66.344
Under five mortality (10 years)	112.650	14.172	1168	985	1.297	0.126	84.305	140.994
Mothers received tetanus injection for last birth	0.864	0.022	429	367	1.353	0.026	0.820	0.909
Mothers received medical assistance at delivery	0.816	0.019	622	529	0.982	0.023	0.778	0.853
Had diarrhoea in two weeks before survey	0.064	0.012	573	489	1.185	0.193	0.039	0.089
Treated with oral rehydration salts (ORS)	0.233	0.070	41	31	0.944	0.302	0.092	0.374
Taken to a health provider	0.389	0.094	41	31	1.127	0.242	0.201	0.577
Vaccination card seen	0.364	0.056	104	81	1.124	0.155	0.251	0.476
Received BCG	0.850	0.046	104	81	1.173	0.054	0.759	0.942
Received DPT (3 doses)	0.678	0.055	104	81	1.095	0.080	0.569	0.788
Received polio (3 doses)	0.448	0.064	104	81	1.226	0.142	0.321	0.575
Received measles	0.731	0.048	104	81	1.007	0.066	0.635	0.828
Fully immunized	0.325	0.060	104	81	1.226	0.184	0.205	0.444
Height-for-age (below -2SD)	0.246	0.016	570	510	0.793	0.064	0.214	0.277
Weight-for-height (below -2SD)	0.086	0.012	570	510	0.996	0.138	0.062	0.110
Weight-for-age (below -2SD)	0.191	0.021	570	510	1.177	0.109	0.149	0.233
BMI <18.5	0.167	0.020	1037	872	1.760	0.122	0.126	0.207
Circumcised	0.569	0.025	1141	958	1.715	0.044	0.518	0.619
Has heard of HIV/AIDS	0.903	0.013	1141	958	1.507	0.015	0.876	0.929
Knows about condoms	0.563	0.025	1141	958	1.674	0.044	0.514	0.613
Knows about limiting partners	0.674	0.019	1141	958	1.394	0.029	0.636	0.713
MEN								
Urban residence	0.717	0.043	382	322	1.867	0.060	0.631	0.803
Literate	0.930	0.014	382	322	1.057	0.015	0.903	0.958
No education	0.048	0.013	382	322	1.149	0.263	0.023	0.073
Secondary education or higher	0.721	0.024	382	322	1.060	0.034	0.672	0.770
Never married	0.501	0.039	382	322	1.526	0.078	0.423	0.579
Currently married/in union	0.451	0.036	382	322	1.407	0.080	0.379	0.522
Knows any contraceptive method	0.980	0.009	382	322	1.238	0.009	0.962	0.998
Ideal family size	4.766	0.163	362	305	1.568	0.034	4.439	5.092
Has heard of HIV/AIDS	0.977	0.009	350	296	1.091	0.009	0.959	0.994
Knows about condoms	0.735	0.028	350	296	1.175	0.038	0.679	0.790
Knows about limiting partners	0.834	0.023	350	296	1.149	0.027	0.789	0.880

na = Not applicable



Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Nigeria 2003

Age	Male		Female		Age	Male		Female	
	Number	Percentage	Number	Percentage		Number	Percentage	Number	Percentage
0	703	4.0	678	3.8	37	101	0.6	121	0.7
1	553	3.2	516	2.9	38	107	0.6	186	1.0
2	568	3.3	592	3.3	39	68	0.4	88	0.5
3	626	3.6	583	3.3	40	400	2.3	391	2.2
4	523	3.0	498	2.8	41	61	0.4	62	0.4
5	486	2.8	487	2.7	42	134	0.8	143	0.8
6	554	3.2	553	3.1	43	80	0.5	84	0.5
7	594	3.4	536	3.0	44	49	0.3	56	0.3
8	593	3.4	520	2.9	45	294	1.7	240	1.4
9	433	2.5	431	2.4	46	71	0.4	72	0.4
10	546	3.1	544	3.1	47	89	0.5	63	0.4
11	334	1.9	369	2.1	48	109	0.6	133	0.8
12	480	2.8	523	3.0	49	50	0.3	76	0.4
13	453	2.6	428	2.4	50	310	1.8	208	1.2
14	331	1.9	312	1.8	51	23	0.1	103	0.6
15	433	2.5	414	2.3	52	99	0.6	170	1.0
16	287	1.6	305	1.7	53	62	0.4	92	0.5
17	335	1.9	342	1.9	54	56	0.3	80	0.5
18	421	2.4	476	2.7	55	144	0.8	192	1.1
19	260	1.5	295	1.7	56	59	0.3	68	0.4
20	526	3.0	634	3.6	57	45	0.3	45	0.3
21	198	1.1	210	1.2	58	83	0.5	68	0.4
22	320	1.8	334	1.9	59	41	0.2	30	0.2
23	242	1.4	247	1.4	60	229	1.3	218	1.2
24	188	1.1	183	1.0	61	24	0.1	021	0.1
25	453	2.6	588	3.3	62	78	0.4	41	0.2
26	176	1.0	240	1.4	63	40	0.2	34	0.2
27	211	1.2	211	1.2	64	40	0.2	26	0.1
28	237	1.4	294	1.7	65	163	0.9	113	0.6
29	118	0.7	149	0.8	66	18	0.1	13	0.1
30	497	2.8	513	2.9	67	36	0.2	17	0.1
31	102	0.6	110	0.6	68	48	0.3	39	0.2
32	174	1.0	171	1.0	69	13	0.1	16	0.1
33	128	0.7	139	0.8	70+	482	2.8	396	2.2
34	128	0.7	99	0.6	Don't know/ missing	20	0.1	10	0.1
35	408	2.3	359	2.0					
36	111	0.6	114	0.6					
					Total	17,459	100.0	17,714	100.0

**Table C.2.1 Age distribution of eligible and interviewed women**

De facto household population of women age 10-54, interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by five-year age groups, Nigeria 2003

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percent	
10-14	2,176	na	na	na
15-19	1,832	1,730	22.4	94.4
20-24	1,609	1,540	19.9	95.7
25-29	1,481	1,416	18.3	95.6
30-34	1,031	979	12.6	94.9
25-39	867	825	10.7	95.1
40-44	736	701	9.1	95.2
45-49	584	549	7.1	94.0
50-54	653	na	na	na
15-49	8,141	7,740	100.0	95.1

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 schedule.  
na = Not applicable

**Table C.2.2 Age distribution of eligible and interviewed men**

De facto household population of men aged 10-64, interviewed men aged 15-59 and percent of eligible men who were interviewed (weighted), Nigeria 2003

Age group	Household population of men age 10-64	Interviewed men age 15-59		Percentage of eligible men interviewed
		Number	Percent	
10-14	741	na	na	na
15-19	517	457	19.4	88.5
20-24	474	431	18.3	91.0
25-29	346	326	13.8	94.2
30-34	305	291	12.3	95.5
25-39	239	221	9.4	92.7
40-44	233	210	8.9	89.9
45-49	188	173	7.3	92.1
50-54	164	135	5.7	82.4
55-59	125	117	4.9	93.0
60-64	134	na	na	na
15-59	2,591	2,362	100.0	91.2

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 schedule.  
na = Not applicable

**Table C.3 Completeness of reporting**

Percentage of observations missing information for selected demographic and health questions (weighted), Nigeria 2003

Subject	Reference group	Percentage with missing information	Number of cases
<b>Birth date</b>	Births in the 15 years preceding the survey		
Month only		8.19	16,330
Month and year		0.26	16,330
Age at death	Deceased children born in the 15 years preceding the survey	0.97	3,359
Age/date at first union <sup>1</sup>	Ever-married women age 15-49	0.77	5,694
Respondent's education	All women age 15-49	0.14	7,620
Diarrhoea in last 2 weeks	Living children age 0-59 months	2.18	5,345
<b>Anthropometry</b>	Living children age 0-59 months (from the household questionnaire)		
Height		6.54	5,842
Weight		6.15	5,842
Height or weight		6.54	5,842

<sup>1</sup> Both year and age missing

**Table C.4 Births by calendar years**

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio, by calendar year and survival status of children (weighted), Nigeria 2003

Year	Number of births			Percentage with complete birth date <sup>1</sup>			Sex ratio at birth <sup>2</sup>			Calendar year ratio <sup>3</sup>		
	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
2003	604	37	641	99.6	100.0	99.6	119.2	89.2	117.2	na	na	na
2002	1,257	148	1,405	97.4	89.1	96.5	93.0	127.3	96.1	na	na	na
2001	1,011	144	1,155	97.5	86.1	96.1	104.1	143.2	108.3	85.7	77.8	84.6
2000	1,101	222	1,323	95.1	85.3	93.5	107.1	96.4	105.2	110.2	123.6	112.3
1999	987	215	1,202	94.2	89.2	93.3	103.2	125.3	106.8	98.5	93.6	97.6
1998	904	238	1,142	95.8	90.3	94.6	111.6	113.6	112.0	98.5	95.2	97.8
1997	848	285	1,133	93.9	77.4	89.8	88.2	88.5	88.3	92.4	117.5	97.6
1996	933	247	1,180	90.7	87.2	89.9	99.3	118.3	103.0	108.8	82.9	102.1
1995	866	310	1,177	90.1	81.5	87.8	108.0	106.1	107.5	99.3	128.7	105.7
1994	811	236	1,047	92.3	76.9	88.8	103.3	110.7	104.9	97.7	86.5	94.9
1999-2003	4,960	767	5,726	96.6	88.0	95.4	103.3	117.4	105.1	na	na	na
1994-1998	4,362	1,316	5,678	92.5	82.5	90.2	101.8	106.2	102.8	na	na	na
1989-1993	3,353	1,152	4,505	91.4	80.5	88.6	101.0	100.5	100.8	na	na	na
1984-1988	2,600	972	3,573	90.7	79.9	87.7	102.5	125.5	108.3	na	na	na
< 1984	2,871	1,225	4,096	89.4	81.9	87.1	110.5	138.6	118.1	na	na	na
All	18,147	5,431	23,578	92.7	82.2	90.3	103.5	116.4	106.3	na	na	na

na = Not applicable

<sup>1</sup> Both year and month of birth given

<sup>2</sup>  $(B_m/B_f)*100$ , where  $B_m$  and  $B_f$  are the numbers of male and female births, respectively

<sup>3</sup>  $[2B_x/(B_{x-1}+B_{x+1})]*100$ , where  $B_x$  is the number births in calendar year  $x$

**Table C.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 preceding the survey (weighted), Nigeria 2003

Age at death (days)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
< 1	49	71	45	36	200
1	78	82	51	34	245
2	21	26	17	13	77
3	26	26	19	14	85
4	15	11	9	10	45
5	10	13	23	18	63
6	16	12	9	4	41
7	6	13	16	10	45
8	6	8	4	1	19
9	5	8	6	7	26
10	2	3	4	8	17
11	2	7	1	0	10
12	8	6	4	1	18
13	0	0	2	0	2
14	19	9	12	12	51
15	5	10	0	4	19
16	0	7	1	1	10
17	0	0	1	2	3
18	7	1	1	0	9
20	2	4	6	1	12
21	12	10	6	5	33
22	0	0	1	0	1
23	0	0	0	1	1
24	1	1	1	0	3
25	0	0	2	0	2
26	0	1	1	0	2
27	0	2	0	0	2
28	0	2	0	0	3
29	1	4	0	0	4
30	0	6	2	2	10
31 +	4	10	5	2	22
Total 0-30	289	342	245	182	1,057
Percent early neonatal <sup>1</sup>	74.1	70.4	70.9	70.4	71.5

<sup>1</sup> 0-6 days/0-30 days

**Table C.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 preceding the survey, Nigeria 2003

Age at death (months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
< 1 <sup>a</sup>	289	342	245	182	1,057
1	29	38	31	12	109
2	24	41	16	19	101
3	31	36	26	36	129
4	12	30	22	15	80
5	34	35	16	11	96
6	15	15	36	13	79
7	28	36	29	25	117
8	28	31	16	24	99
9	28	27	22	14	90
10	25	21	22	16	83
11	14	37	12	18	81
12	26	37	28	35	126
13	18	13	21	21	73
14	14	22	14	8	58
15	7	16	12	13	48
16	15	8	8	2	33
17	8	15	24	7	54
18	22	19	24	23	87
19	3	20	11	1	35
20	4	9	7	6	26
21	5	3	1	1	11
22	1	13	1	3	18
23	5	13	7	5	30
24+	9	9	16	9	43
Missing	0	0	0	1	1
1 year	49	75	47	56	227
Total 0-11	555	689	493	385	2,121
Percent neonatal <sup>1</sup>	52.1	49.6	49.6	47.4	49.8

<sup>a</sup> Includes deaths under one month reported in days

<sup>1</sup> Under one month/under one year

# 2003 NIGERIA DEMOGRAPHIC AND HEALTH SURVEY PERSONNEL

# Appendix D

## 2003 NDHS Implementation Committee

Mr. Wetcos Mutahir	Director Research and Planning
Mr. Samuel A. Ogunlade	Project Director
Mr. Joshua A. Adekunle	Deputy Director Data Analysis
Mr. Mudasiru A. Thomas	Deputy Director Surveys
Dr. Ismaila L. Sulaiman	Deputy Director Census
Mr. Emmanuel E. Attah	Deputy Director Planning
Dr. Helen N. Avong	Assistant Director Research
Mr. Bolaji B. Akinsulie	Chief Research Officer
Mrs. Adenike O. Ogunlewe	Assistant Chief Research Officer
Mr. Chidi B. Arukwe	Assistant Chief Population Statistician
Mrs. Patience U. Mbagwu	Assistant Chief Population Statistician
Mr. Inuwa B. Jalingo	Project Coordinator

## ORC Macro Staff

Ms. Holly Newby	Country Manager
Ms. Anne R. Cross	Regional Coordinator
Dr. Alfredo Aliaga	Sampling Specialist
Mr. Albert Themme	Data Processing Specialist
Ms. Elizabeth Britton	Data Processing Monitoring
Dr. K. Fern Greenwell	Training and Fieldwork Monitoring
Ms. Arlinda Zhuzhuni	Fieldwork Monitoring
Ms. Laurie Liskin	Communications Advisor
Dr. Sidney Moore	Editor
Ms. Kaye Mitchell	Document Production
Ms. Katherine Senzee	Cover Design
Dr. Kia Reinis	Report Writing

## Report Writing Staff

Mr. J. A. Adekunle, National Population Commission	Mr. B. B. Akinsulie, National Population Commission
Mrs. A. O. Ogunlewe, National Population Commission	Dr. C.T. Oluwadare, State University Ado-Ekiti
Mr. S. A. Ogunlade, National Population Commission	Dr. Pam Ishaya, University of Jos
Mr. C. B. Arukwe, National Population Commission	Prof. Uche Isiugo-Abanihe, University of Ibadan
Mr. E. E. Attah, National Population Commission	Prof. A.A. Adewuyi, Obafemi Awolowo University, Ile-Ife
Mr. A. D. Fasiku, National Population Commission	Prof. J.G. Ottong, University of Calabar
Dr. I. L. Sulaiman, National Population Commission	Dr. M.E. Mosanya, Federal Ministry of Health
Mrs. P. U. Mbagwu, National Population Commission	Mr. G.E. Asuquo, The Policy Project
Dr. H. N. Avong, National Population Commission	Dr. G.E.N. Osubor, BASICS II
Mr. I. B. Jalingo, National Population Commission	

## Secretarial Staff

A. A. Akeju  
I. Onuorah  
J. Oladapo  
F. O. Oladele  
F. Akpan

## Translators

S. M. Suleiman (Hausa)  
I. Mohammed (Hausa)  
C. Okeke (Igbo)  
A. Tijani (Yoruba)

## **Pretest Field Staff**

S. A. Ogunlade, Monitoring/Coordination

### *Igbo Language Group*

P. U. Mbagwu  
N. L. Ezenwa  
J. E. Okwudarue  
S. M. O. Unogu  
A. B. Afegbua

### *Hausa Language Group*

H. N. Avong  
I. B. Jalingo  
S. Abubakar  
J. Tauhid  
F. Akilu  
B. Ibrahim

### *Yoruba Language Group*

A. A. Owolabi  
E. E. Idoko  
F. A. Ajetunmobi  
F. O. Alao  
A. B. Sadiku

### *English Language Group*

M. A. Thomas  
E. O. Oyetunji  
B. B. Akinsulie  
A. O. Ogunlewe  
E. O. Olanipekun

## **Survey Field Staff**

### *General Monitoring/Coordination*

W. Mutahir  
S. A. Ogunlade

## **North Central Region**

### *Supervisors*

S. A. Bamidele  
B. D. Chirwa

### *Editors*

F. B. Akilu  
J. Ojابه

### *Interviewers*

S. Adama  
A. Shaibu  
I. A. Bello  
A. E. Tsaku  
H. Moshood  
F. Yakubu  
P. O. Onoja  
K. T. Tihamiyu

### *Trainers/Zonal Coordinators*

J. A. Adekunle  
C. B. Arukwe

### *Reserve Interviewer*

H. Kpojime

### *Quality Control Interviewer*

P. Uza

### *Drivers*

M. Audu  
M. Olajide

### *Mapping and Listing Supervisors*

C. Okereke  
M. A. Adigun

### *Listers*

P. Yohana  
T. S. Kywuta  
O. Y. Ohieky  
A. Ndaali  
G. S. Faturashe  
I. Odenigbo

### *Mappers*

P. Panzi,  
A. T. Ojo  
P. O. Ogbogo  
A. Ogbo  
S. Abubakar  
A. M. Mohammed  
S. A. Yahaya

## North East Region

<i>Supervisors</i> T. Jibrin A. Sa'ad	<i>Trainer/Zonal Coordinator</i> I. B. Jalingo	<i>Mapping and Listing Supervisors</i> H. S. Ibrahim J. S. Ejiko
<i>Editors</i> H. Bulama M. Jonathan	<i>Reserve Interviewer</i> I. Mohammed	<i>Listers</i> S. A. Yurma N. F. Wonakpalukai M. Yahaya H. I. Ibrahim Y. Hamidu S. Z. Chara O. S. Apeji
<i>Interviewers</i> G. L. Musa B. D. Bajo G. G. Gula S. Kwarau B. Mustapha A. Esthon T. Jonatan E. Reuben A. B. Kowa U. G. Abubakar	<i>Quality Control Interviewer</i> A. Baraza	<i>Mappers</i> S. Bello T. B. Hudu C. I. Mishikir J. Maigari B. Umar M.D. Iyawa
	<i>Drivers</i> S. Bello I. Audu T. Akpan	

## North West Region

<i>Supervisors</i> I. M. K. Gusau N. B. Ungogo	<i>Reserve Interviewer</i> A. Mani	<i>Trainers/Zonal Coordinators</i> I.L. Sulaiman H. N. Avong
<i>Editors</i> H. Yusuf H. Akande	<i>Quality Control Interviewer</i> U. T. Lamar	<i>Listers</i> A. S. D. Maiyama A. Y. Isa T. A. Suleiman I. A. Dogo U. A. Madawaki T. O. Osifo D. Ibrahim
<i>Interviewers</i> H. Ibrahim A. Mahmoud M. Ibrahim Z. Muhammed A. Muhammed L. I. Argungu L. Bala B. Garba M. Aliyu S. Audu S. Umar	<i>Drivers</i> A. Isah A. Farouk I. Ihejirika	<i>Mappers</i> Y. Kachala H. Gulumbe J. Musa F. B. Kaita L. U. Tsoho M. Mohammed G. D. Akpan A. Usman C. C. Okeke
	<i>Supervisors</i> J. Ezeoke W. Ittah	



## South East Region

*Supervisors*  
A. A. Okafor  
O. Ezekiel

*Trainers/Zonal Coordinators*  
M. A. Thomas  
P. U. Mbagwu

*Mapping and Listing Supervisors*  
M. Chike  
L. O. Akinsibo

*Editors*  
G. Anih  
J. C. Nwaogazi

*Reserve Interviewer*  
C. Ubani

*Listers*  
E. A. Ugwueje  
P. A. Eke  
G. Anya  
B. C. Mweke  
M. Nnajeze

*Interviewers*  
M. Nnajeze  
N. Ndu  
U. Okonkwo  
L. Iroanya  
N. Ezeali  
M. R. Nnaji  
G. Okochi  
V. Nwakwe  
L. Onuegbu  
S. U. Anyanwu

*Quality Control Interviewer*  
J. I. Anikwe

*Drivers*  
M. Anukwa  
A. M. Vincent

*Mappers*  
F. N. Jiakponnan  
S. U. Anyanwu  
S. Ebele  
J. O. Ulasi  
E. Aki

## South South Region

*Supervisors*  
E. Esara  
A. Ineife

*Trainer/Zonal Coordinator*  
E. E. Attah

*Mapping and Listing Supervisors*  
B. Ojesekehoba  
A.J.U. Ekpenyoung

*Editors*  
M. Okon  
P. Isiguzo

*Reserve Interviewer*  
J. Isibor

*Listers*  
J. Amah  
F. O. Oladele  
E. E. Bassey  
S. J. Olaoye  
J. O. Omoruyi  
E. Miegbemo  
D. Tadafe

*Interviewers*  
B. Nwineh  
N. B. Adams  
J. Atibi  
V. U. Nath-George  
I. E. Uffort  
R. Igoni  
E. Iko  
L. Ikem  
P. Madojemu  
C. Olaye

*Quality Control Interviewer*  
S. J. Igoh

*Drivers*  
T. Nkamanse  
G. Evbadoloyi

*Mappers*  
J.B. Ogunmola  
A. Ama-Ebi  
O. O. Ofem  
E. A. Edem  
S. I. Ekeoba  
U. I. Akpakpa  
P.O. Lotobi

### **South West Region**

*Supervisors*  
F. A. David  
S. Aduloju

*Trainers/Zonal Coordinators*  
B. B. Akinsulie  
A. O. Ogunlewe

*Mapping and Listing Supervisors*  
L. O. Anifowose  
O. K. Bakare

*Editors*  
M. Agboola  
T. M. Adeboye

*Reserve Interviewer*  
P. E. Okiei

*Listers*  
A. M. Orogade  
R. O. Adebola  
O. E. Ayeni  
R. A. Kuye  
A. George  
H. O. Kolade

*Interviewers*  
V. O. Ojo  
I. A. Olasode  
E. F. Adeola  
R. Olumeyan  
N. Shotade  
A. Akinrinmade  
B. Odusanya  
J. Ogunleye  
K. Oteju  
A. O. Fadele

*Quality Control Interviewer*  
F. Ajetonmobi

*Drivers*  
T. Alidu  
A. Kumuyi  
S. Aghahowa  
I. Adegbola

*Mappers*  
D. S. Opaleke  
O. S. Adeleye  
D. S. Ogunsola  
O. T. Obafemi  
E. A. Adejobi  
S. O. Adu

### **Data Processing Staff**

#### *Data Processing Supervisors*

A. Fatilewa  
G. O. Ibe

*Demographer*  
A. A. Owolabi

#### *Questionnaire Administrator*

E. F. Elias

*Office Editors*  
H. A. Aminu  
O. T. Ojogun  
F. O. Oladele

#### *Data Processing Operators*

A. A. Adamu  
H. O. Amakwe  
A. A. Akeju  
E. P. Umoffia  
J. A. Okoisor  
B. T. Esan  
A. Telimoye  
O. P. C. Essien  
V. Mordi  
E. Obua  
E. Nwandu  
C. Egbu





**NIGERIA DEMOGRAPHIC AND HEALTH SURVEY 2003  
HOUSEHOLD QUESTIONNAIRE**

NATIONAL POPULATION COMMISSION

IDENTIFICATION			
STATE NAME _____			
LOCAL GOVT. AREA _____			
LOCALITY NAME _____			
ENUMERATION AREA _____			
URBAN /RURAL (URBAN = 1, RURAL = 2) _____			
CLUSTER NUMBER.....			
BUILDING NUMBER.....			
HOUSEHOLD NAME/NUMBER _____			
MEN'S INTERVIEW (YES=1, NO=2).....			
LARGE TOWN/MEDIUM TOWN/SMALL TOWN/VILLAGE (LARGE TOWN = 1, MEDIUM TOWN = 2, SMALL TOWN = 3, VILLAGE = 4)			

INTERVIEWER VISITS				
	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY _____ MONTH _____ YEAR _____
INTERVIEWER'S NAME	_____	_____	_____	NAME _____
RESULT*	_____	_____	_____	RESULT _____
NEXT VISIT: DATE	_____	_____		TOTAL NO. OF VISITS _____
TIME	_____	_____		

<p><b>*RESULT CODES:</b></p> <p>1 COMPLETED</p> <p>2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT</p> <p>3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME</p> <p>4 POSTPONED</p> <p>5 REFUSED</p> <p>6 DWELLING VACANT OR ADDRESS NOT A DWELLING</p> <p>7 DWELLING DESTROYED</p> <p>8 DWELLING NOT FOUND</p> <p>9 OTHER _____ (SPECIFY)</p>	<p>TOTAL PERSONS IN HOUSEHOLD _____</p> <p>TOTAL ELIGIBLE WOMEN _____</p> <p>TOTAL ELIGIBLE MEN _____</p> <p>LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE _____</p>
---	--

	HAUSA	YORUBA	IGBO	ENGLISH	OTHER	
LANGUAGE OF INTERVIEW	1	2	3	4	6	TRANSLATOR USED?
NATIVE LANGUAGE OF RESPONDENT	1	2	3	4	6	YES 1 NO 2

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____	_____	_____
[ ] [ ]	[ ] [ ]	[ ] [ ]	[ ] [ ]
DATE _____	DATE _____		

**HOUSEHOLD SCHEDULE**

Now we would like some information about the people who usually live in your household or who are staying with you now.

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX		RESIDENCE				AGE	ELIGIBILITY		
			Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME) as of last birthday?	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-59	CIRCLE LINE NUMBER OF ALL CHILDREN UNDER AGE 6			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8A)	(9)			
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.	What is the relationship of (NAME) to the head of the household?*	M F	YES NO	YES NO	IN YEARS						
01		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	01	01	01			
02		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	02	02	02			
03		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	03	03	03			
04		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	04	04	04			
05		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	05	05	05			
06		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	06	06	06			
07		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	07	07	07			
08		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	08	08	08			
09		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	09	09	09			
10		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	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 OR SISTER-IN-LAW  
10 = OTHER RELATIVE  
11 = ADOPTED/FOSTER/STEPCHILD  
12 = NOT RELATED  
98 = DON'T KNOW

LINE NO.	PARENTAL SURVIVORSHIP AND RESIDENCE FOR PERSONS LESS THAN 15 YEARS OLD**				EDUCATION							
	Is (NAME)'s natural mother alive?	IF ALIVE Does (NAME)'s natural mother live in this household? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER	Is (NAME)'s natural father alive?	IF ALIVE Does (NAME)'s natural father live in this household? IF YES: What is his name? RECORD FATHER'S LINE NUMBER	IF AGE 5 YEARS OR OLDER			IF AGE 5-24 YEARS				
	(10)	(11)	(12)	(13)	(13A)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	YES NO DK 1 2 8 ↓ skip to (12)		YES NO DK 1 2 8 ↓ skip to (13A)		YES NO 1 2	YES NO 1 2 NEXT ↕ LINE	LEVEL CLASS/ YEAR	YES NO 1 2 ↳ GO TO 18	YES NO 1 2 GO TO ↕ 19	LEVEL CLASS/ YEAR	YES NO 1 2 NEXT ↕ LINE	LEVEL CLASS/ YEAR
01												
02												
03												
04												
05												
06												
07												
08												
09												
10												

\*\* CODES FOR Q.10 THROUGH Q.13  
THESE QUESTIONS REFER TO THE BIOLOGICAL PARENTS OF THE CHILD.  
IN Q.11 AND Q.13, RECORD '00' IF PARENT NOT LISTED IN HOUSEHOLD SCHEDULE.

\*\*\* CODES FOR Qs. 15, 18 AND 20  
EDUCATION LEVEL:  
0 = PRE-PRIMARY/KINDERGARTEN  
1 = PRIMARY  
2 = SECONDARY  
3 = HIGHER  
8 = DON'T KNOW

EDUCATION CLASS:  
00 = LESS THAN 1 YEAR COMPLETED  
98 = DON'T KNOW

FOR "HIGHER", TOTAL THE NUMBER OF YEARS AT THE POST-SECONDARY LEVEL.

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX		RESIDENCE				AGE	ELIGIBILITY		
			Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME) as of last birthday?	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-59		CIRCLE LINE NUMBER OF ALL CHILDREN UNDER AGE 6		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8A)	(9)			
11		<input type="text"/>	M F 1 2	YES NO 1 2	YES NO 1 2	IN YEARS <input type="text"/>	11	11	11			
12		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	12	12	12			
13		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	13	13	13			
14		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	14	14	14			
15		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	15	15	15			
16		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	16	16	16			
17		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	17	17	17			
18		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	18	18	18			
19		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	19	19	19			
20		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	20	20	20			
21		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	21	21	21			
22		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	22	22	22			
23		<input type="text"/>	1 2	1 2	1 2	<input type="text"/>	23	23	23			

\* 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 OR SISTER-IN-LAW
- 10 = OTHER RELATIVE
- 11 = ADOPTED/FOSTER/STEPCHILD
- 12 = NOT RELATED
- 98 = DON'T KNOW

\*\* Q.10 THROUGH Q.13  
THESE QUESTIONS REFER TO THE BIOLOGICAL PARENTS OF THE CHILD.  
IN Q.11 AND Q.13, RECORD '00' IF PARENT NOT LISTED IN HOUSEHOLD SCHEDULE.

\*\*\* CODES FOR Qs. 15, 18 AND 20  
EDUCATION LEVEL:  
0 = PRE-PRIMARY/KINDERGARTEN  
1 = PRIMARY  
2 = SECONDARY  
3 = HIGHER  
8 = DON'T KNOW  
EDUCATION CLASS:  
00 = LESS THAN 1 YEAR COMPLETED  
98 = DON'T KNOW



LINE NO.	PARENTAL SURVIVORSHIP AND RESIDENCE FOR PERSONS LESS THAN 15 YEARS OLD**				EDUCATION							
	Is (NAME)'s natural mother alive?	IF ALIVE	Is (NAME)'s natural father alive?	IF ALIVE	IF AGE 5 YEARS OR OLDER			IF AGE 5-24 YEARS				
Does (NAME)'s natural mother live in this household? IF YES: What is her name?  RECORD MOTHER'S LINE NUMBER		Does (NAME)'s natural father live in this household? IF YES: What is his name?  RECORD FATHER'S LINE NUMBER		Can (NAME) read & write in any language with understanding?	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended?*** What is the highest class/year (NAME) completed at that level?***	Is (NAME) currently attending school?	During the current school year, did (NAME) attend school at any time?	During the current school year, what level and class/year [is/was] (NAME) attending?***	During the previous school year, did (NAME) attend school at any time?	During that school year, what level and class/year did (NAME) attend?***	
	(10)	(11)	(12)	(13)	(13A)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	YES NO DK 1 2 8 ↓ skip to (12)	<input type="text"/>	YES NO DK 1 2 8 ↓ skip to (13A)	<input type="text"/>	YES NO 1 2	YES NO 1 2 NEXT ↕ LINE	LEVEL CLASS/ YEAR	YES NO 1 2 ↳ GO TO 18	YES NO 1 2 GO TO ↕ 19	LEVEL CLASS/ YEAR	YES NO 1 2 NEXT ↕ LINE	LEVEL CLASS/ YEAR
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												

TICK HERE IF CONTINUATION QUESTIONNAIRE USED

Just to make sure that I have a complete listing:

1) Are there any other persons such as small children or infants that we have not listed? YES  ENTER EACH IN TABLE NO

2) In addition, 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  ENTER EACH IN TABLE NO

3) Are there any guests or temporary visitors staying here, or anyone else who slept here last night, who have not been listed? YES  ENTER EACH IN TABLE NO



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP																								
27	<p>MAIN MATERIAL OF THE FLOOR.</p> <p>RECORD OBSERVATION.</p>	<p><b>NATURAL FLOOR</b>  EARTH/SAND.....11  DUNG.....12</p> <p><b>RUDIMENTARY FLOOR</b>  WOOD PLANKS.....21  PALM/BAMBOO.....22</p> <p><b>FINISHED FLOOR</b>  PARQUET OR POLISHED WOOD.....31  VINYL OR ASPHALT STRIPS.....32  CERAMIC TILES.....33  CEMENT.....34  CARPET.....35</p> <p>OTHER _____ 96  (SPECIFY)</p>																											
28	<p>Does any member of your household own:</p> <p>A bicycle?</p> <p>A motorcycle or motor scooter?</p> <p>A car or truck?</p> <p>A donkey or horse or camel?</p> <p>A canoe or boat or ship?</p>	<table border="0"> <tr> <td></td> <td style="text-align: center;">YES</td> <td style="text-align: center;">NO</td> <td></td> </tr> <tr> <td>BICYCLE.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td></td> </tr> <tr> <td>MOTORCYCLE/SCOOTER.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td></td> </tr> <tr> <td>CAR/TRUCK.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td></td> </tr> <tr> <td>DONKEY/HORSE/CAMEL.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td></td> </tr> <tr> <td>CANOE/BOAT/SHIP.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td></td> </tr> </table>				YES	NO		BICYCLE.....	1	2		MOTORCYCLE/SCOOTER.....	1	2		CAR/TRUCK.....	1	2		DONKEY/HORSE/CAMEL.....	1	2		CANOE/BOAT/SHIP.....	1	2		
	YES	NO																											
BICYCLE.....	1	2																											
MOTORCYCLE/SCOOTER.....	1	2																											
CAR/TRUCK.....	1	2																											
DONKEY/HORSE/CAMEL.....	1	2																											
CANOE/BOAT/SHIP.....	1	2																											
29A	<p>Does your household own any mosquito nets that can be used to protect against mosquitoes while sleeping? I am talking about nets people sleep under.</p>	<p>YES.....1</p> <p>NO.....2</p>			→30G																								
29B	<p>How many mosquito nets does your household own?</p>	<p>NUMBER OF NETS..... <input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/></p>																											
30A	<p>ASK RESPONDENT TO SHOW YOU THE NET(S) IN THE HOUSEHOLD. ASK OR RECORD APPROPRIATE ANSWER FOR THE FOLLOWING QUESTIONS. IF UNABLE TO OBSERVE THE NETS, CIRCLE APPROPRIATE CODE AND ASK QUESTIONS.</p>	<p style="text-align: center;">NET 1</p> <p>SEEN.....1</p> <p>NOT SEEN.....2</p>	<p style="text-align: center;">NET 2</p> <p>SEEN.....1</p> <p>NOT SEEN.....2</p>	<p style="text-align: center;">NET 3</p> <p>SEEN.....1</p> <p>NOT SEEN.....2</p>																									
30B	<p>How long ago did your household obtain the mosquito net?</p>	<p style="text-align: center;">MONTHS</p> <p style="text-align: center;"><input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/></p> <p>MORE THAN 3 YRS AGO .....96</p>	<p style="text-align: center;">MONTHS</p> <p style="text-align: center;"><input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/></p> <p>MORE THAN 3 YRS AGO .....96</p>	<p style="text-align: center;">MONTHS</p> <p style="text-align: center;"><input style="width: 40px; height: 20px; border: 1px solid black;" type="text"/></p> <p>MORE THAN 3 YRS AGO .....96</p>																									
30C	<p>OBSERVE OR ASK THE BRAND OF MOSQUITO NET(S) IN THE HOUSEHOLD.</p>	<p>PERMANENT NET<sup>1</sup>.....1  (SKIP TO 30F)← </p> <p>PRETREATED NET<sup>2</sup>.....2</p> <p>NET WITH KIT...3</p> <p>UNTREATED NET.....4</p> <p>OTHER.....6  DON'T KNOW/  UNSURE .....8</p>	<p>PERMANENT NET<sup>1</sup>.....1  (SKIP TO 30F)← </p> <p>PRETREATED NET<sup>2</sup>.....2</p> <p>NET WITH KIT...3</p> <p>UNTREATED NET.....4</p> <p>OTHER.....6  DON'T KNOW/  UNSURE .....8</p>	<p>PERMANENT NET<sup>1</sup>.....1  (SKIP TO 30F)← </p> <p>PRETREATED NET<sup>2</sup>.....2</p> <p>NET WITH KIT...3</p> <p>UNTREATED NET.....4</p> <p>OTHER.....6  DON'T KNOW/  UNSURE .....8</p>																									
30D	<p>Since you got the mosquito net, was it ever soaked or dipped in a liquid to repel mosquitoes or bugs?</p>	<p>YES.....1</p> <p>NO.....2  (SKIP TO 30F)← </p> <p>NOT SURE.....8</p>	<p>YES.....1</p> <p>NO.....2  (SKIP TO 30F)← </p> <p>NOT SURE.....8</p>	<p>YES.....1</p> <p>NO.....2  (SKIP TO 30F)← </p> <p>NOT SURE.....8</p>																									

<sup>1</sup> 'Permanent' is a pretreated net that does not require any further treatment

<sup>2</sup> 'Pretreated' net that requires additional treatments every 6-12 months

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP																
30E	How long ago was the net last soaked or dipped? IF LESS THAN 1 MONTH, RECORD '00'.	MONTHS <input type="text"/> <input type="text"/> MORE THAN 3 YRS AGO ..... 96	MONTHS <input type="text"/> <input type="text"/> MORE THAN 3 YRS AGO ..... 96	MONTHS <input type="text"/> <input type="text"/> MORE THAN 3 YRS AGO ..... 96																	
30F	Who slept under this mosquito net last night? RECORD RESPECTIVE LINE NUMBER FROM THE HOUSEHOLD SCHEDULE.	NET 1 LINE <input type="text"/> <input type="text"/> NO <input type="text"/> <input type="text"/> NAME _____  LINE <input type="text"/> <input type="text"/> NO <input type="text"/> <input type="text"/> NAME _____  LINE <input type="text"/> <input type="text"/> NO <input type="text"/> <input type="text"/> NAME _____	NET 2 LINE <input type="text"/> <input type="text"/> NO <input type="text"/> <input type="text"/> NAME _____  LINE <input type="text"/> <input type="text"/> NO <input type="text"/> <input type="text"/> NAME _____  LINE <input type="text"/> <input type="text"/> NO <input type="text"/> <input type="text"/> NAME _____	NET 3 LINE <input type="text"/> <input type="text"/> NO <input type="text"/> <input type="text"/> NAME _____  LINE <input type="text"/> <input type="text"/> NO <input type="text"/> <input type="text"/> NAME _____  LINE <input type="text"/> <input type="text"/> NO <input type="text"/> <input type="text"/> NAME _____																	
30G	Does your household do anything else to protect themselves against mosquito?	YES ..... 1 NO ..... 2			→33																
30H	What does your household do?	COIL ..... A SPRAY (INSECTICIDE) ..... B WIRE GAUZE ..... C  OTHER _____ X (SPECIFY)																			
33	Where do you usually wash your hands?	IN DWELLING/YARD/PLOT ..... 1 SOMEWHERE ELSE ..... 2 NOWHERE ..... 3			↘ 35																
34	Where you wash your hands, do you have the following:  Water/tap?  Soap, ash or other cleansing agent? Basin?	<table border="0"> <tr> <td></td> <td style="text-align: center;">YES</td> <td style="text-align: center;">NO</td> <td></td> </tr> <tr> <td>WATER/TAP?.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td></td> </tr> <tr> <td>SOAP, ASH OR OTHER CLEANSING AGENT? .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td></td> </tr> <tr> <td>BASIN?.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td></td> </tr> </table>				YES	NO		WATER/TAP?.....	1	2		SOAP, ASH OR OTHER CLEANSING AGENT? .....	1	2		BASIN?.....	1	2		
	YES	NO																			
WATER/TAP?.....	1	2																			
SOAP, ASH OR OTHER CLEANSING AGENT? .....	1	2																			
BASIN?.....	1	2																			
35	ASK RESPONDENT FOR A TEASPOONFUL OF SALT. TEST SALT FOR IODINE.  RECORD PPM (PARTS PER MILLION).	0 PPM (NO IODINE)..... 1 7 PPM ..... 2 15 PPM ..... 3 30 PPM ..... 4 NO SALT IN HH..... 5  SALT NOT TESTED ..... 6 (SPECIFY REASON)																			
There will be an education survey done at a later point in time. Your household may or may not be asked to participate in the survey. If your household is included in the survey someone will return to your house and ask additional questions about education.																					

### HEIGHT AND WEIGHT

CHECK COLUMNS (8) AND (9): RECORD THE LINE NUMBER, NAME AND AGE OF ALL WOMEN AGE 15-49 AND ALL CHILDREN UNDER AGE 6.

WOMEN 15-49			WEIGHT AND HEIGHT MEASUREMENT OF WOMEN 15-49				
LINE NO. FROM COL.(8)	NAME FROM COL.(2)	AGE FROM COL.(7)	What is (NAME)'s date of birth?	WEIGHT (KILOGRAMS)	HEIGHT (CENTIMETERS)	MEASURED LYING DOWN OR STANDING UP	RESULT 1 MEASURED 2 NOT PRESENT 3 REFUSED 6 OTHER
(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)
		YEARS					
[ ][ ]		[ ][ ]		[ ][ ][ ][ ] . [ ]	[ ][ ][ ][ ] . [ ]		[ ]
[ ][ ]		[ ][ ]		[ ][ ][ ][ ] . [ ]	[ ][ ][ ][ ] . [ ]		[ ]
[ ][ ]		[ ][ ]		[ ][ ][ ][ ] . [ ]	[ ][ ][ ][ ] . [ ]		[ ]
[ ][ ]		[ ][ ]		[ ][ ][ ][ ] . [ ]	[ ][ ][ ][ ] . [ ]		[ ]
[ ][ ]		[ ][ ]		[ ][ ][ ][ ] . [ ]	[ ][ ][ ][ ] . [ ]		[ ]

CHILDREN UNDER AGE 6			WEIGHT AND HEIGHT MEASUREMENT OF CHILDREN BORN IN 1998 OR LATER				
LINE NO. FROM COL.(9)	NAME FROM COL.(2)	AGE FROM COL.(7)	What is (NAME)'s date of birth?*	WEIGHT (KILOGRAMS)	HEIGHT (CENTIMETERS)	MEASURED LYING DOWN OR STANDING UP	RESULT 1 MEASURED 2 NOT PRESENT 3 REFUSED 6 OTHER
			DAY    MONTH    YEAR			LYING    STAND.	
[ ][ ]		[ ][ ]	[ ][ ] [ ][ ] [ ][ ][ ][ ]	0 [ ][ ][ ] . [ ]	[ ][ ][ ][ ] . [ ]	1    2	[ ]
[ ][ ]		[ ][ ]	[ ][ ] [ ][ ] [ ][ ][ ][ ]	0 [ ][ ][ ] . [ ]	[ ][ ][ ][ ] . [ ]	1    2	[ ]
[ ][ ]		[ ][ ]	[ ][ ] [ ][ ] [ ][ ][ ][ ]	0 [ ][ ][ ] . [ ]	[ ][ ][ ][ ] . [ ]	1    2	[ ]
[ ][ ]		[ ][ ]	[ ][ ] [ ][ ] [ ][ ][ ][ ]	0 [ ][ ][ ] . [ ]	[ ][ ][ ][ ] . [ ]	1    2	[ ]
[ ][ ]		[ ][ ]	[ ][ ] [ ][ ] [ ][ ][ ][ ]	0 [ ][ ][ ] . [ ]	[ ][ ][ ][ ] . [ ]	1    2	[ ]
[ ][ ]		[ ][ ]	[ ][ ] [ ][ ] [ ][ ][ ][ ]	0 [ ][ ][ ] . [ ]	[ ][ ][ ][ ] . [ ]	1    2	[ ]
[ ][ ]		[ ][ ]	[ ][ ] [ ][ ] [ ][ ][ ][ ]	0 [ ][ ][ ] . [ ]	[ ][ ][ ][ ] . [ ]	1    2	[ ]

TICK HERE IF CONTINUATION QUESTIONNAIRE USED

\* FOR CHILDREN NOT INCLUDED IN ANY BIRTH HISTORY, ASK DAY, MONTH AND YEAR. FOR ALL OTHER CHILDREN, COPY MONTH AND YEAR FROM 215 IN MOTHER'S BIRTH HISTORY AND ASK DAY.



**NIGERIA DEMOGRAPHIC AND HEALTH SURVEY 2003  
INDIVIDUAL WOMAN'S QUESTIONNAIRE**

NATIONAL POPULATION COMMISSION

IDENTIFICATION																																	
STATE NAME _____	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>																																
LOCAL GOVT. AREA _____																																	
LOCALITY NAME _____																																	
ENUMERATION AREA _____																																	
URBAN /RURAL (URBAN = 1, RURAL = 2) .....																																	
CLUSTER NUMBER.....																																	
BUILDING NUMBER.....																																	
HOUSEHOLD NAME/NUMBER _____																																	
LARGE TOWN/MEDIUM TOWN/SMALL TOWN/VILLAGE .....																																	
(LARGE TOWN = 1, MEDIUM TOWN = 2, SMALL TOWN = 3, VILLAGE = 4)																																	
NAME AND LINE NUMBER OF WOMAN _____																																	

INTERVIEWER VISITS				
	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> MONTH <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table> YEAR <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>
INTERVIEWER'S NAME	_____	_____	_____	NAME <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>
RESULT*	_____	_____	_____	RESULT <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>
NEXT VISIT: DATE	_____	_____		TOTAL NO. OF VISITS <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table>
TIME	_____	_____		

\*RESULT CODES:  
 1 COMPLETED                      4 REFUSED  
 2 NOT AT HOME                      5 PARTLY COMPLETED                      7 OTHER \_\_\_\_\_  
 3 POSTPONED                      6 INCAPACITATED                      (SPECIFY)

	HAUSA	YORUBA	IGBO	ENGLISH	OTHER	
LANGUAGE OF INTERVIEW	1	2	3	4	6	TRANSLATOR USED? YES NO 1 2
NATIVE LANGUAGE OF RESPONDENT	1	2	3	4	6	
SUPERVISOR	FIELD EDITOR				OFFICE EDITOR	KEYED BY
NAME _____	NAME _____				NAME _____	NAME _____
DATE _____	DATE _____				DATE _____	DATE _____

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

**INFORMED CONSENT**

GREETINGS. My name is \_\_\_\_\_ and I am working with the National Population Commission. We are conducting a national survey about the health of women, men and children. We would very much appreciate your participation in this survey. I would like to ask you about your health (and the health of your children). This information will help the government to plan health services. We won't take too much of your time. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

We hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?  
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 (START OF INTERVIEW).	HOUR..... <input type="text"/> <input type="text"/> MINUTES ..... <input type="text"/> <input type="text"/>	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in a city, in a town, or in a village?	CITY .....1 TOWN.....2 VILLAGE.....3	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS ..... <input type="text"/> <input type="text"/> ALWAYS.....95 VISITOR.....96	↳105
104	Just before you moved here, did you live in a city, in a town, or in a village?	CITY .....1 TOWN.....2 VILLAGE.....3	
105	In what month and year were you born?	MONTH ..... <input type="text"/> <input type="text"/> DON'T KNOW MONTH .....98 YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR.....9998	
106	How old were you as at last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS. <input type="text"/> <input type="text"/>	
107	Have you ever attended school?	YES .....1 NO .....2	→111
108	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY .....1 SECONDARY .....2 HIGHER.....3	
109	What is the highest (class/form/year) you completed at that level?	CLASS..... <input type="text"/> <input type="text"/>	
110	CHECK 108: PRIMARY <input type="checkbox"/> SECONDARY OR HIGHER <input type="checkbox"/>		→114



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	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)	
112	Have you ever participated in a literacy program or any other program that involves learning to read or write (not including primary school)?	YES ..... 1 NO ..... 2	
113	CHECK 111: CODE '2', '3' <input type="checkbox"/> OR '4' <input type="checkbox"/> CIRCLED <input type="checkbox"/> CODE '1' <input type="checkbox"/> CIRCLED <input type="checkbox"/>	→ 115	
114	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
115	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
116	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
117	What is your religion?	CATHOLIC ..... 1 PROTESTANT ..... 2 OTHER CHRISTIAN..... 3 ISLAM..... 4 TRADITIONALIST ..... 5  OTHER ..... 6 (SPECIFY)	
118	What is your ethnic group?	<input type="text"/> <input type="text"/> <input type="text"/>	

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 ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS AT HOME ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
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 ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS ELSEWHERE ... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
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 ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> GIRLS DEAD..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>									
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 <input type="checkbox"/> NO <input type="checkbox"/> → PROBE AND CORRECT 201-208 AS NECESSARY.										
210	CHECK 208:  ONE OR MORE BIRTHS <input type="checkbox"/> NO BIRTHS <input type="checkbox"/> _____		→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.

212	213	214	215	216	217 IF ALIVE:	218 IF ALIVE	219 IF ALIVE:	220 IF DEAD:	221
What name was given to your (first/next) baby?  (NAME)	Were any of these births twins?	Is (NAME) a boy or a girl?	In what month and year was (NAME) born?  PROBE: What is his/her birthday?	Is (NAME) still alive?	How old was (NAME) at his/her last birthday?  RECORD AGE IN COMPLETED YEARS.	Is (NAME) living with you?	RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD)	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.	Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)?
01	SING...1 MULT...2	BOY..1 GIRL . 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES..... 1 NO..... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES..... 1 NO ..... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (NEXT BIRTH)	DAYS ..... 1 <input type="text"/> <input type="text"/> MONTHS. 2 <input type="text"/> <input type="text"/> YEARS .... 3 <input type="text"/> <input type="text"/>	
02	SING...1 MULT...2	BOY..1 GIRL . 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES..... 1 NO..... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES..... 1 NO ..... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ 221	DAYS ..... 1 <input type="text"/> <input type="text"/> MONTHS. 2 <input type="text"/> <input type="text"/> YEARS .... 3 <input type="text"/> <input type="text"/>	YES ..... 1 NO ..... 2
03	SING...1 MULT...2	BOY..1 GIRL . 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES..... 1 NO..... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES..... 1 NO ..... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ 221	DAYS ..... 1 <input type="text"/> <input type="text"/> MONTHS. 2 <input type="text"/> <input type="text"/> YEARS .... 3 <input type="text"/> <input type="text"/>	YES ..... 1 NO ..... 2
04	SING...1 MULT...2	BOY..1 GIRL . 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES..... 1 NO..... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES..... 1 NO ..... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ 221	DAYS ..... 1 <input type="text"/> <input type="text"/> MONTHS. 2 <input type="text"/> <input type="text"/> YEARS .... 3 <input type="text"/> <input type="text"/>	YES ..... 1 NO ..... 2
05	SING...1 MULT...2	BOY..1 GIRL . 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES..... 1 NO..... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES..... 1 NO ..... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ 221	DAYS ..... 1 <input type="text"/> <input type="text"/> MONTHS. 2 <input type="text"/> <input type="text"/> YEARS .... 3 <input type="text"/> <input type="text"/>	YES ..... 1 NO ..... 2
06	SING...1 MULT...2	BOY..1 GIRL . 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES..... 1 NO..... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES..... 1 NO ..... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ 221	DAYS ..... 1 <input type="text"/> <input type="text"/> MONTHS. 2 <input type="text"/> <input type="text"/> YEARS .... 3 <input type="text"/> <input type="text"/>	YES ..... 1 NO ..... 2
07	SING...1 MULT...2	BOY..1 GIRL . 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES..... 1 NO..... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES..... 1 NO ..... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ 221	DAYS ..... 1 <input type="text"/> <input type="text"/> MONTHS. 2 <input type="text"/> <input type="text"/> YEARS .... 3 <input type="text"/> <input type="text"/>	YES ..... 1 NO ..... 2

212	213	214	215	216	217 IF ALIVE:	218 IF ALIVE	219 IF ALIVE:	220 IF DEAD:	221
What name was given to your next baby? (NAME)	Were any of these births twins?	Is (NAME) a boy or a girl?	In what month and year was (NAME) born? PROBE: What is his/her birthday?	Is (NAME) still alive?	How old was (NAME) at his/her last birthday?  RECORD AGE IN COMPLETED YEARS.	Is (NAME) living with you?	RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD)	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.	Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)?
08	SING...1 MULT...2	BOY..1 GIRL..2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES....1 NO.....2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES.....1 NO.....2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ 221	DAYS.....1 <input type="text"/> <input type="text"/> MONTHS.2 <input type="text"/> <input type="text"/> YEARS....3 <input type="text"/> <input type="text"/>	YES.....1 NO.....2
09	SING...1 MULT...2	BOY..1 GIRL..2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES....1 NO.....2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES.....1 NO.....2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ 221	DAYS.....1 <input type="text"/> <input type="text"/> MONTHS.2 <input type="text"/> <input type="text"/> YEARS....3 <input type="text"/> <input type="text"/>	YES.....1 NO.....2
10	SING...1 MULT...2	BOY..1 GIRL..2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES....1 NO.....2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES.....1 NO.....2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ 221	DAYS.....1 <input type="text"/> <input type="text"/> MONTHS.2 <input type="text"/> <input type="text"/> YEARS....3 <input type="text"/> <input type="text"/>	YES.....1 NO.....2
11	SING...1 MULT...2	BOY..1 GIRL..2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES....1 NO.....2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES.....1 NO.....2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ 221	DAYS.....1 <input type="text"/> <input type="text"/> MONTHS.2 <input type="text"/> <input type="text"/> YEARS....3 <input type="text"/> <input type="text"/>	YES.....1 NO.....2
12	SING...1 MULT...2	BOY..1 GIRL..2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES....1 NO.....2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES.....1 NO.....2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ 221	DAYS.....1 <input type="text"/> <input type="text"/> MONTHS.2 <input type="text"/> <input type="text"/> YEARS....3 <input type="text"/> <input type="text"/>	YES.....1 NO.....2

222	Have you had any live births since the birth of (NAME OF LAST BIRTH)?	YES.....1 NO.....2
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223	<p>COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK:</p> <p>NUMBERS ARE SAME <input type="checkbox"/> NUMBERS ARE DIFFERENT <input type="checkbox"/> (PROBE AND RECONCILE)</p> <p>CHECK: FOR EACH BIRTH: YEAR OF BIRTH IS RECORDED Q.215.</p> <p>FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED Q.217.</p> <p>FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED Q. 220.</p> <p>FOR AGE AT DEATH 12 MONTHS OR 1 YR.: PROBE TO DETERMINE EXACT NUMBER OF MONTHS (Q220).</p>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
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224	CHECK 215 AND ENTER THE NUMBER OF BIRTHS IN 1998 OR LATER. IF NONE, RECORD '0'.	<input type="text"/>
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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
226	Are you pregnant now?	YES ..... 1 NO ..... 2 UNSURE ..... 8	<input type="checkbox"/> → 229
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS.	MONTHS..... <input type="text"/> <input type="text"/>	
228	At the time you became pregnant, did you want to become pregnant <u>then</u> , did you want to wait until <u>later</u> , or did you <u>not want</u> to have any (more) children at all?	THEN ..... 1 LATER ..... 2 NOT AT ALL ..... 3	
229	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES ..... 1 NO ..... 2	→ 237
230	When did the last such pregnancy end?	MONTH..... <input type="text"/> <input type="text"/> YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
231	CHECK 230: LAST PREGNANCY ENDED IN <input type="checkbox"/> JAN. 1998 OR LATER LAST PREGNANCY ENDED BEFORE <input type="checkbox"/> JAN. 1998		→ 237
232	How many months pregnant were you when the last such pregnancy ended? RECORD NUMBER OF COMPLETED MONTHS.	MONTHS..... <input type="text"/> <input type="text"/>	
233	Have you ever had any other pregnancies that did not result in live births?	YES ..... 1 NO ..... 2	→ 237
236	When did the last such previous pregnancy end?	MONTH..... <input type="text"/> <input type="text"/> YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
237	When did your last menstrual period start?  _____ (DATE, IF GIVEN)	DAYS AGO ..... 1 <input type="text"/> <input type="text"/> WEEKS AGO ..... 2 <input type="text"/> <input type="text"/> MONTHS AGO ..... 3 <input type="text"/> <input type="text"/> YEARS AGO ..... 4 <input type="text"/> <input type="text"/> IN MENOPAUSE/ HAS HAD HYSTERECTOMY ..... 994 BEFORE LAST BIRTH ..... 995 NEVER MENSTRUATED ..... 996	
238	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<input type="checkbox"/> → 301
239	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

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. CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302.

301	Which ways or methods have you heard about? FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)?	302	Have you ever used (METHOD)?
01	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	YES.....1 NO.....2	Have you ever had an operation to avoid having any more children? YES .....1 NO .....2
02	MALE STERILIZATION Men can have an operation to avoid having any more children.	YES.....1 NO.....2	Have you ever had a partner who had an operation to avoid having any more children? YES .....1 NO .....2
03	PILL Women can take a pill every day to avoid becoming pregnant.	YES.....1 NO.....2	YES .....1 NO .....2
04	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	YES.....1 NO.....2	YES .....1 NO .....2
05	INJECTABLES Women can have an injection by a health provider which stops them from becoming pregnant for one or more months.	YES.....1 NO.....2	YES .....1 NO .....2
06	IMPLANTS Women can have several 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	YES .....1 NO .....2
07	CONDOM Men can put a rubber sheath on their penis before sexual intercourse.	YES.....1 NO.....2	YES .....1 NO .....2
08	FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse.	YES.....1 NO.....2	YES .....1 NO .....2
09	DIAPHRAGM Women can place a thin flexible disk in their vagina before intercourse.	YES.....1 NO.....2	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	YES .....1 NO .....2
11	LACTATIONAL AMENORRHEA METHOD (LAM) Up to 6 months after childbirth, a woman can use a method that requires that she breastfeeds frequently, day and night, and that her menstrual period has not returned.	YES.....1 NO.....2	YES .....1 NO .....2
12	RHYTHM OR PERIODIC ABSTINENCE Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	YES.....1 NO.....2	YES .....1 NO .....2
13	WITHDRAWAL Men can be careful and pull out before climax.	YES.....1 NO.....2	YES .....1 NO .....2
14	EMERGENCY CONTRACEPTION Women can take pills up to three days after sexual intercourse to avoid becoming pregnant.	YES.....1 NO.....2	YES .....1 NO .....2
15	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?  _____ (SPECIFY)  _____ (SPECIFY) NO .....2	YES.....1     NO .....2	YES .....1 NO .....2  YES .....1 NO .....2

303	CHECK 302: NOT A SINGLE "YES" (NEVER USED) <input type="checkbox"/>	AT LEAST ONE "YES" (EVER USED) <input type="checkbox"/>	→307
304	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES .....1 NO .....2	→329
306	What have you used or done? CORRECT 302 AND 303 (AND 301 IF NECESSARY).		
307	Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant. How many living children did you have at that time, if any? IF NONE, RECORD '00'.	NUMBER OF CHILDREN..... <input type="text"/> <input type="text"/>	
308	CHECK 302 (01): WOMAN NOT STERILIZED <input type="checkbox"/>	WOMAN STERILIZED <input type="checkbox"/>	→311A
309	CHECK 226: NOT PREGNANT OR UNSURE <input type="checkbox"/>	PREGNANT <input type="checkbox"/>	→329
310	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES .....1 NO .....2	→329
311	Which method are you using? IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD ON LIST.	FEMALE STERILIZATION ..... A MALE STERILIZATION..... B PILL ..... C IUD ..... D INJECTABLES ..... E IMPLANTS ..... F CONDOM..... G FEMALE CONDOM ..... H DIAPHRAGM ..... I FOAM/JELLY ..... J LACTATIONAL AMEN. METHOD..... K PERIODIC ABSTINENCE ..... L WITHDRAWAL..... M OTHER _____ X (SPECIFY)	→316A
311A	CIRCLE 'A' FOR FEMALE STERILIZATION.		
313	In what facility did the sterilization take place? IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  _____ (NAME OF PLACE)	PUBLIC SECTOR GOVT. HOSPITAL .....11 GOVT. HEALTH CENTER.....12 FAMILY PLANNING CLINIC.....13 MOBILE CLINIC.....14 OTHER PUBLIC _____ 16 (SPECIFY)  PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC.....21 PRIVATE DOCTOR'S OFFICE.....23 MOBILE CLINIC.....24 NON-GOV. ORGANIZATION.....25 OTHER PRIVATE MEDICAL _____ 26 (SPECIFY) OTHER _____ 96 (SPECIFY) DON'T KNOW .....98	

314	<p>CHECK 311:</p> <p>CODE 'A' CIRCLED <input type="checkbox"/></p> <p>Before your sterilization operation, were you told that you would not be able to have any (more) children because of the operation?</p> <p>CODE 'A' NOT CIRCLED <input type="checkbox"/></p> <p>Before his sterilization operation, was your (husband/partner) told that he would not be able to have any (more) children because of the operation?</p>	<p>YES .....1</p> <p>NO .....2</p> <p>DON'T KNOW .....8</p>	
316	<p>In what month and year was the sterilization performed?</p>	<p>MONTH..... <input type="text"/> <input type="text"/></p> <p>YEAR..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/></p>	
316A	<p>For how long have you been using (CURRENT METHOD) now without stopping?</p> <p>PROBE: In what month and year did you start using (CURRENT METHOD) continuously?</p>		
316B	<p>CHECK 316/316A, 215 AND 230:</p> <p>ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 316/316A</p> <p>GO BACK TO 316/316A, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).</p>	<p>YES <input type="checkbox"/></p> <p>NO <input type="checkbox"/></p>	
317	<p>CHECK 316/316A:</p> <p>YEAR IS 1998 OR LATER <input type="checkbox"/></p> <p>YEAR IS 1997 OR EARLIER <input type="checkbox"/></p>		→327
319	<p>CHECK 311/311A:</p> <p>CIRCLE METHOD CODE</p> <p>IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.</p>	<p>FEMALE STERILIZATION .....01</p> <p>MALE STERILIZATION .....02</p> <p>PILL .....03</p> <p>IUD .....04</p> <p>INJECTABLES .....05</p> <p>IMPLANTS .....06</p> <p>CONDOM .....07</p> <p>FEMALE CONDOM .....08</p> <p>DIAPHRAGM .....09</p> <p>FOAM/JELLY .....10</p> <p>LACTATIONAL AMEN. METHOD .....11</p> <p>PERIODIC ABSTINENCE .....12</p> <p>WITHDRAWAL .....13</p> <p>OTHER METHOD .....96</p>	<p>→322</p> <p>→331</p> <p>→320A</p> <p>→331</p> <p>→331</p> <p>→331</p>



320	Where did you obtain (CURRENT METHOD) when you started using it?	PUBLIC SECTOR GOVT. HOSPITAL .....11 GOVT. HEALTH CENTER .....12 FAMILY PLANNING CLINIC .....13 MOBILE CLINIC .....14 COMMUNITY HEALTH WORKER .....15	
320A	Where did you learn to use the lactational amenorrhea method?  IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  _____ (NAME OF PLACE)	OTHER PUBLIC .....16 (SPECIFY)  PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC .....21 PHARMACY/PATENT MEDICINE  STORE .....22 PRIVATE DOCTOR .....23 MOBILE CLINIC .....24 COMMUNITY HEALTH WORKER .....25 OTHER PRIVATE MEDICAL .....26 (SPECIFY)  OTHER SOURCE SHOP .....31 CHURCH .....32 FRIEND/RELATIVE .....33 NGO .....34  OTHER .....96 (SPECIFY)	
321	CHECK 311/311A:  CIRCLE METHOD CODE:  IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	PILL .....03 IUD .....04 INJECTABLES .....05 IMPLANTS .....06 CONDOM .....07 FEMALE CONDOM .....08 DIAPHRAGM .....09 FOAM/JELLY .....10 LACTATIONAL AMEN. METHOD .....11	—→328 —→325 —→325 —→325 —→325
322	You first obtained (CURRENT METHOD FROM 319) from (SOURCE OF METHOD FROM 313 OR 320). At that time, were you told about side effects or problems you might have with the method?	YES .....1 NO .....2	—→324
323	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	—→325
324	Were you told what to do if you experienced side effects or problems?	YES .....1 NO .....2	
325	CHECK 322:  CODE '1' CIRCLED <input type="checkbox"/> CODE '1' NOT CIRCLED <input type="checkbox"/>  When you obtained (CURRENT METHOD) from (SOURCE OF METHOD FROM 313 OR 320), were you told about other methods of family planning that you could use?	YES .....1 NO .....2	—→327
326	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	

327	<p>CHECK 311/311A: CIRCLE METHOD CODE:</p> <p>IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.</p>	<p>FEMALE STERILIZATION .....01 MALE STERILIZATION .....02 PILL .....03 IUD .....04 INJECTABLES .....05 IMPLANTS .....06 CONDOM .....07 FEMALE CONDOM.....08 DIAPHRAGM.....09 FOAM/JELLY.....10 LACTATIONAL AMEN. METHOD.....11 PERIODIC ABSTINENCE.....12 WITHDRAWAL.....13 OTHER METHOD .....96</p>	<p>→331 →331 →331 →331 →331 →331 →331 →331 →331 →331</p>
328	<p>Where did you obtain (CURRENT METHOD) the last time?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____ (NAME OF PLACE)</p>	<p>PUBLIC SECTOR GOVT. HOSPITAL ..... 11 GOVT. HEALTH CENTER ..... 12 FAMILY PLANNING CLINIC ..... 13 MOBILE CLINIC ..... 14 COMMUNITY HEALTH WORKER..... 15 OTHER PUBLIC _____ 16 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... 21 PHARMACY/ PATENT MEDICINE STORE ..... 22 PRIVATE DOCTOR..... 23 MOBILE CLINIC ..... 24 COMMUNITY HEALTH WORKER..... 25 OTHER PRIVATE MEDICAL _____ 26 (SPECIFY)</p> <p>OTHER SOURCE SHOP ..... 31 CHURCH ..... 32 FRIEND/RELATIVE ..... 33 NGO ..... 34 OTHER _____ 96 (SPECIFY)</p>	<p>→331</p>
329	<p>Do you know of a place where you can obtain a method of family planning?</p>	<p>YES ..... 1 NO ..... 2</p>	<p>→331</p>
330	<p>Where is that?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____ (NAME OF PLACE)</p> <p>Any other place?</p> <p>RECORD ALL PLACES MENTIONED</p>	<p>PUBLIC SECTOR GOVT. HOSPITAL.....A GOVT. HEALTH CENTER .....B FAMILY PLANNING CLINIC ..... C MOBILE CLINIC ..... D COMMUNITY HEALTH WORKER.....E OTHER PUBLIC _____ F (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... G PHARMACY/ PATENT MEDICINE STORE ..... H PRIVATE DOCTOR..... I MOBILE CLINIC ..... J COMMUNITY HEALTH WORKER.....K OTHER PRIVATE MEDICAL _____ L (SPECIFY)</p> <p>OTHER SOURCE SHOP ..... M CHURCH ..... N FRIEND/RELATIVE ..... O NGO ..... P OTHER _____ X (SPECIFY)</p>	
331	<p>In the last 12 months, were you visited by a community health extension worker or family planning provider who talked to you about family planning?</p>	<p>YES ..... 1 NO ..... 2</p>	
332	<p>In the last 12 months, have you visited a health facility for care for yourself (or your children)?</p>	<p>YES ..... 1 NO ..... 2</p>	<p>→401</p>
333	<p>Did any staff member at the health facility speak to you about family planning methods?</p>	<p>YES ..... 1 NO ..... 2</p>	

**SECTION 4A, PREGNANCY, POSTNATAL CARE AND BREASTFEEDING**

401	CHECK 224: ONE OR MORE BIRTHS IN 1998 OR LATER <input type="checkbox"/>	NO BIRTHS IN 1998 OR LATER <input type="checkbox"/> →487	
402 ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 1998 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST TWO COLUMNS OF ADDITIONAL QUESTIONNAIRES).  Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about each separately)			
403	LINE NUMBER FROM 212 LAST BIRTH LINE NUMBER..... <input type="text"/> <input type="text"/>	NEXT-TO-LAST-BIRTH LINE NUMBER..... <input type="text"/> <input type="text"/>	SECOND-FROM-LAST-BIRTH LINE NUMBER..... <input type="text"/> <input type="text"/>
404	FROM 212 AND 216 NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>
405	At the time you became pregnant with (NAME), did you want to become pregnant <u>then</u> , did you want to wait until <u>later</u> , or did you <u>not want</u> to have any (more) children at all? THEN.....1 LATER.....2 (SKIP TO 407) ← NOT AT ALL.....3 (SKIP TO 407) ←	THEN.....1 LATER.....2 (SKIP TO 423) ← NOT AT ALL.....3 (SKIP TO 423) ←	THEN.....1 LATER.....2 (SKIP TO 423) ← NOT AT ALL.....3 (SKIP TO 423) ←
406	How much longer would you like to have waited? MONTHS.....1 <input type="text"/> <input type="text"/> YEARS.....2 <input type="text"/> <input type="text"/> DON'T KNOW..... 998	MONTHS.....1 <input type="text"/> <input type="text"/> YEARS.....2 <input type="text"/> <input type="text"/> DON'T KNOW..... 998	MONTHS.....1 <input type="text"/> <input type="text"/> YEARS.....2 <input type="text"/> <input type="text"/> DON'T KNOW..... 998
407	Did you see anyone for antenatal care for this pregnancy? IF YES: Whom did you see? Anyone else? PROBE FOR THE TYPE OF PERSONS AND RECORD ALL PERSONS SEEN. HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B AUXILIARY MIDWIFE.....C COMMUNITY HEALTH EXTENSION WORKER .....D OTHER PERSON TRADITIONAL BIRTH ATTENDANT.....E OTHER _____ X (SPECIFY) NO ONE ..... Y (SKIP TO 415) ←		
407A	Where did you receive antenatal care for this pregnancy? Anywhere else? HOME YOUR HOME .....A OTHER HOME .....B PUBLIC SECTOR GOVT. HOSPITAL .....C GOVT. HEALTH CENTRE .....D GOVT. HEALTH POST .....E MOBILE CLINIC .....F OTHER PUBLIC _____ G (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL .....H MOBILE CLINIC .....I OTHER PVT MEDICAL _____ J (SPECIFY) OTHER X		
408	How many months pregnant were you when you first received antenatal care for this pregnancy? MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98		

409	How many times did you receive antenatal care during this pregnancy?	NO. OF TIMES..... <input type="text"/> <input type="text"/> DON'T KNOW.....98		
410	CHECK 409 NUMBER OF TIMES RECEIVED ANTENATAL CARE	ONCE <input type="checkbox"/> MORE THAN ONCE OR DK <input type="checkbox"/> (SKIP TO 412)		
411	How many months pregnant were you the last time you received antenatal care?	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98		
412	During this pregnancy, were any of the following done at least once?  Were you weighed? Was your height measured? Was your blood pressure measured? Did you give a urine sample? Did you give a blood sample?	YES NO WEIGHT..... 1 2 HEIGHT..... 1 2 BLOOD PRESSURE..... 1 2 URINE SAMPLE..... 1 2 BLOOD SAMPLE..... 1 2		
412A	During any of the antenatal visits for this pregnancy, were you given any information or counseled about AIDS or the AIDS virus?	YES.....1 NO.....2 DON'T KNOW.....8		
413	Were you told about the signs of pregnancy complications?	YES.....1 NO.....2 (SKIP TO 415)-----  DON'T KNOW.....8		
414	Were you told where to go if you had these complications?	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 417)-----  DON'T KNOW.....8		
416	During this pregnancy, how many times did you get this injection?	TIMES..... <input type="text"/> DON'T KNOW.....8		
417	During this pregnancy, were you given or did you buy any iron tablets or iron syrups?  SHOW TABLET/SYRUPS	YES.....1 NO.....2 (SKIP TO 419)-----  DON'T KNOW.....8		
418	During the pregnancy, for how many days did you take the tablets or syrup?  IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS	NUMBER OF DAYS..... <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW.....998		
419	During this pregnancy, did you have difficulty with your vision during the daylight?	YES.....1 NO.....2 DON'T KNOW.....8		
420	During this pregnancy, did you suffer from night blindness?	YES.....1 NO.....2 DON'T KNOW.....8		
421	During this pregnancy, did you take any drugs to prevent you from getting malaria?	YES.....1 NO.....2 (SKIP TO 423)-----  DON'T KNOW.....8		

422	What drugs did you take?  RECORD ALL MENTIONED. IF TYPE OF DRUG IS NOT DETERMINED, SHOW TYPICAL ANTI-MALARIA DRUGS TO RESPONDENT.	FANSIDAR.....A CHLOROQUINE.....B HALFAN.....C DARAPRIM/METAPRIM.....D AMODIAQUINE.....E NIVAQUINE.....F MALOZINE.....G UNKNOWN DRUG.....H  OTHER _____ X (SPECIFY)		
422A	CHECK 422:  DRUGS TAKEN FOR MALARIA PREVENTION.	CODE 'A' <input type="checkbox"/> CODE 'A' NOT <input type="checkbox"/> CIRCLED CIRCLED  (SKIP TO 423)←		
422B	How many times did you take Fansidar during this pregnancy?	NUMBER OF TIMES..... <input type="text"/>		
422C	CHECK: 407  ANTENATAL CARE RECEIVED DURING THE PREGNANCY?	CODE 'A' <input type="checkbox"/> OTHER <input type="checkbox"/> OR 'B' OR 'C' OR 'D' CIRCLED  (SKIP TO 423)←		
422D	Did you get the Fansidar during an antenatal visit, during another visit to a health facility or from some other source?	ANTENATAL VISIT.....1 ANOTHER FACILITY VISIT.....2 OTHER SOURCE _____ 8 (SPECIFY)		
423	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
424	Was (NAME) weighed at birth?	YES.....1 NO.....2 (SKIP TO 426)← DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 426)← DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 426)← DON'T KNOW.....8
425	How much did (NAME) weigh?  RECORD WEIGHT FROM HEALTH CARD, IF AVAILABLE.	GRAMS FROM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> CARDS.....1  GRAMS FROM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> RECALL.....2  DON'T KNOW.....99998	GRAMS FROM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> CARDS.....1  GRAMS FROM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> RECALL.....2  DON'T KNOW.....99998	GRAMS FROM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> CARDS.....1  GRAMS FROM <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> RECALL.....2  DON'T KNOW.....99998
426	Who assisted with the delivery of (NAME)?  Anyone else?  PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING.  IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B AUXILIARY MIDWIFE.....C COMMUNITY HEALTH WORKER.....D OTHER PERSON TRADITIONAL BIRTH ATTENDANT.....E RELATIVE/FRIEND.....F OTHER _____ X (SPECIFY) NO ONE.....Y	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B AUXILIARY MIDWIFE.....C COMMUNITY HEALTH WORKER.....D OTHER PERSON TRADITIONAL BIRTH ATTENDANT.....E RELATIVE/FRIEND.....F OTHER _____ X (SPECIFY) NO ONE.....Y	HEALTH PROFESSIONAL DOCTOR.....A NURSE/MIDWIFE.....B AUXILIARY MIDWIFE.....C COMMUNITY HEALTH WORKER.....D OTHER PERSON TRADITIONAL BIRTH ATTENDANT.....E RELATIVE/FRIEND.....F OTHER _____ X (SPECIFY) NO ONE.....Y

426A	<p>Around the time of the birth of (NAME), did you have any of the following problems:</p> <p>Long labour, that is, did your regular contractions last more than 12 hours?</p> <p>Excessive bleeding that was so much that you feared it was life threatening?</p> <p>A high fever with bad smelling vaginal discharge?</p> <p>Convulsions not caused by a fever?</p>	<p style="text-align: center;">YES NO</p> <p>LABOUR MORE THAN 12 HOURS .....1 2</p> <p>EXCESSIVE BLEEDING .....1 2</p> <p>FEVER/BAD SMELLING VAG. DISCHARGE.....1 2</p> <p>CONVULSIONS.....1 2</p>	<p style="text-align: center;">YES NO</p> <p>LABOUR MORE THAN 12 HOURS....1 2</p> <p>EXCESSIVE BLEEDING.....1 2</p> <p>FEVER/BAD SMELLING VAG. DISCHARGE.....1 2</p> <p>CONVULSIONS.....1 2</p>	<p style="text-align: center;">YES NO</p> <p>LABOUR MORE THAN 12 HOURS.....1 2</p> <p>EXCESSIVE BLEEDING.....1 2</p> <p>FEVER/BAD SMELLING VAG. DISCHARGE.....1 2</p> <p>CONVULSIONS.....1 2</p>
427	<p>Where did you give birth to (NAME)</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTRE OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p style="text-align: center;">(NAME OF PLACE)</p>	<p>HOME YOUR HOME .....11 (SKIP TO 429) ←----- OTHER HOME .....12</p> <p>PUBLIC SECTOR GOVT. HOSPITAL .....21 GOVT. HEALTH CENTRE.....22 GOVT. HEALTH POST.....23</p> <p>OTHER PUBLIC _____ 26 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC.....31 OTHER PRIVATE MEDICAL _____ 36 (SPECIFY)</p> <p>OTHER _____ 96 (SPECIFY)</p> <p>(SKIP TO 429)←-----</p>	<p>HOME YOUR HOME .....11 (SKIP TO 429) ←----- OTHER HOME .....12</p> <p>PUBLIC SECTOR GOVT. HOSPITAL .....21 GOVT. HEALTH CENTRE.....22 GOVT. HEALTH POST.....23</p> <p>OTHER PUBLIC _____ 26 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC.....31 OTHER PRIVATE MEDICAL _____ 36 (SPECIFY)</p> <p>OTHER _____ 96 (SPECIFY)</p> <p>(SKIP TO 429)←-----</p>	<p>HOME YOUR HOME .....11 (SKIP TO 429) ←----- OTHER HOME .....12</p> <p>PUBLIC SECTOR GOVT. HOSPITAL .....21 GOVT. HEALTH CENTRE.....22 GOVT. HEALTH POST.....23</p> <p>OTHER PUBLIC _____ 26 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC.....31 OTHER PRIVATE MEDICAL _____ 36 (SPECIFY)</p> <p>OTHER _____ 96 (SPECIFY)</p> <p>(SKIP TO 429)←-----</p>
428	<p>Was (NAME) delivered by caesarean section?</p>	<p>YES.....1 (SKIP TO 433)←----- NO.....2</p>	<p>YES.....1 (SKIP TO 435)←----- NO.....2</p>	<p>YES.....1 (SKIP TO 435)←----- NO.....2</p>
429	<p>After (NAME) was born did a health professional or a traditional birth attendant check on your health?</p>	<p>YES.....1 NO.....2 (SKIP TO 433)←-----</p>	<p>YES.....1 NO.....2</p>	<p>YES.....1 NO.....2</p>
430	<p>How many days or weeks after the delivery did the first check take place?</p> <p>RECORD '00' DAYS IF SAME DAY.</p>	<p>DAYS AFTER DEL.....1</p> <p>WEEKS AFTER DEL.....2</p> <p>DON'T KNOW..... 998</p>		
431	<p>Who checked on your health at that time?</p> <p>PROBE FOR MOST QUALIFIED PERSON.</p>	<p>HEALTH PROFESSIONAL DOCTOR.....11 NURSE/MIDWIFE .....12 AUXILIARY/MIDWIFE.....13 COMMUNITY HEALTH EXTENSION WORKER.....14 OTHER PERSON TRADITIONAL BIRTH ATTENDANT.....21 OTHER _____ 96 (SPECIFY)</p>		
432	<p>Where did this first check take place?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTRE OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p style="text-align: center;">(NAME OF PLACE)</p>	<p>HOME YOUR HOME .....11 OTHER HOME .....12</p> <p>PUBLIC SECTOR GOVT. HOSPITAL .....21 GOVT. HEALTH CENTRE.....22 GOVT. HEALTH POST.....23</p> <p>OTHER PUBLIC _____ 26 (SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC.....31 OTHER PRIVATE MEDICAL _____ 36 (SPECIFY)</p>		

		OTHER _____ 96 (SPECIFY)		
433	In the first two months after delivery, did you receive a vitamin A dose like this?  (SHOW AMPULE/ CAPSULE/SYRUP)	YES.....1 NO.....2 DON'T KNOW .....8		
434	Has your period returned since the birth of (NAME)?	YES.....1 (SKIP TO 436)-----J NO.....2 (SKIP TO 437)-----J		
435	Did your period return between the birth of (NAME) and your next pregnancy?		YES.....1 NO.....2 (SKIP TO 439)-----J	YES.....1 NO.....2 (SKIP TO 439)-----J
436	For how many months after the birth of (NAME) did you <u>not</u> have a period?	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98
437	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREGNANT <input type="checkbox"/> PREGNANT OR UNSURE <input type="checkbox"/> (SKIP TO 439)-----J		
438	Have you resumed sexual relations since the birth of (NAME)?	YES.....1 NO.....2 (SKIP TO 440)-----J		
439	For how many months after the birth of (NAME) did you <u>not</u> have sexual relations?	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98
440	Did you ever breastfeed (NAME)?	YES.....1 NO.....2 (SKIP TO 447)-----J	YES.....1 NO.....2 (SKIP TO 447)-----J	YES.....1 NO.....2 (SKIP TO 447)-----J
441	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.....00 0 HOURS.....1 <input type="text"/> <input type="text"/> DAYS.....2 <input type="text"/> <input type="text"/>	IMMEDIATELY.....000 0 HOURS.....1 <input type="text"/> <input type="text"/> DAYS.....2 <input type="text"/> <input type="text"/>	IMMEDIATELY.....000 0 HOURS.....1 <input type="text"/> <input type="text"/> DAYS.....2 <input type="text"/> <input type="text"/>
442	In the first three days after delivery, before your milk began flowing regularly, was (NAME) given anything to drink other than breast milk?	YES.....1 NO.....2 (SKIP TO 444)-----J DON'T KNOW .....8	YES.....1 NO.....2 (SKIP TO 444)-----J DON'T KNOW .....8	YES.....1 NO.....2 (SKIP TO 444)-----J DON'T KNOW .....8
443	What was (NAME) given to drink before your milk began flowing regularly?  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/HERBAL DRINKS.....H HONEY.....I OTHER _____ X (SPECIFY)	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/HERBAL DRINKS.....H HONEY.....I OTHER _____ X (SPECIFY)	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/HERBAL DRINKS.....H HONEY.....I OTHER _____ X (SPECIFY)
444	CHECK 404 IS CHILD LIVING?	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> (SKIP TO 446)	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> (SKIP TO 446)	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/> (SKIP TO 446)
445	Are you still breastfeeding (NAME)?	YES .....1 (SKIP TO 448)-----J NO.....2	YES .....1 (SKIP TO 448)-----J NO.....2	YES .....1 (SKIP TO 448)-----J NO.....2

446	For how many months did you breastfeed (NAME)?	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98	MONTHS..... <input type="text"/> <input type="text"/> DON'T KNOW.....98
447	CHECK 404 IS CHILD LIVING?	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>  (GO BACK TO 405 IN NEXT COLUMN; OR IF NO MORE BIRTHS, GO TO 454)  (SKIP TO 450)	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>  (GO BACK TO 405 IN NEXT COLUMN; OR IF NO MORE BIRTHS, GO TO 454)  (SKIP TO 450)	LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>  (GO BACK TO 405 IN SECOND COLUMN OF NEW QUESTIONNAIRE; OR IF NO MORE BIRTHS, GO TO 454)  (SKIP TO 450)
448	How many times did you breastfeed last night between sunset and sunrise?  IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER	NUMBER OF NIGHT TIME FEEDINGS ..... <input type="text"/> <input type="text"/>	NUMBER OF NIGHT TIME FEEDINGS ..... <input type="text"/> <input type="text"/>	NUMBER OF NIGHT TIME FEEDINGS ..... <input type="text"/> <input type="text"/>
449	How many times did you breastfeed yesterday during the daylight hours?  IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER	NUMBER OF DAYLIGHT FEEDINGS ..... <input type="text"/> <input type="text"/>	NUMBER OF DAYLIGHT FEEDINGS ..... <input type="text"/> <input type="text"/>	NUMBER OF DAYLIGHT FEEDINGS ..... <input type="text"/> <input type="text"/>
450	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
451	Was sugar added to any of the foods or liquids (NAME) ate yesterday?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
452	How many times did (NAME) eat solid, semisolid, or soft foods other than liquids yesterday during the day or at night?  IF 7 OR MORE TIMES, RECORD '7'	NUMBER OF TIMES..... <input type="text"/>  DON'T KNOW..... 8	NUMBER OF TIMES..... <input type="text"/>  DON'T KNOW..... 8	NUMBER OF TIMES..... <input type="text"/>  DON'T KNOW..... 8
453		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 454.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 454.	GO BACK TO SECOND COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 454.



**SECTION 4B. IMMUNIZATION, HEALTH AND NUTRITION**

454	ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 1998 OR LATER. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST TWO COLUMNS OF ADDITIONAL QUESTIONNAIRES)			
455	LINE NUMBER FROM 212	LAST BIRTH LINE NUMBER..... <input type="text"/> <input type="text"/>	NEXT-TO-LAST BIRTH LINE NUMBER..... <input type="text"/> <input type="text"/>	SECOND-FROM-LAST BIRTH LINE NUMBER..... <input type="text"/> <input type="text"/>
456	FROM 212 AND 216	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>  (GO TO 456 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 484)	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>  (GO TO 456 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 484)	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>  (GO TO 456 IN NEXT COLUMN OF NEW QUESTIONNAIRE OR, IF NO MORE BIRTHS, GO TO 484)
457	Did (NAME) receive a vitamin A dose like this during the last 6 months? SHOW AMPULE/CAPSULE/SYRUP.	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
458	Do you have a card where (NAME'S) vaccinations are written down? IF YES: May I see it please?	YES, SEEN .....1 (SKIP TO 460) ← YES, NOT SEEN .....2 (SKIP TO 462) ← NO CARD.....3	YES, SEEN .....1 (SKIP TO 460) ← YES, NOT SEEN .....2 (SKIP TO 462) ← NO CARD.....3	YES, SEEN .....1 (SKIP TO 460) ← YES, NOT SEEN .....2 (SKIP TO 462) ← NO CARD.....3
459	Did you ever have a vaccination card for (NAME)?	YES.....1 (SKIP TO 462)← NO.....2	YES.....1 (SKIP TO 462)← NO.....2	YES.....1 (SKIP TO 462)← NO.....2
460	(1) COPY VACCINATION DATE FOR EACH VACCINE FROM THE CARD.  (2) WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE IS RECORDED.  BCG POLIO 0 (POLIO GIVEN AT BIRTH) POLIO 1 POLIO 2 POLIO 3 DPT 1 DPT 2 DPT 3 MEASLES VITAMIN A (MOST RECENT)	DAY MONTH YEAR BCG PO P1 P2 P3 D1 D2 D3 MEA VIT A	DAY MONTH YEAR BCG PO P1 P2 P3 D1 D2 D3 MEA VIT A	DAY MONTH YEAR BCG PO P1 P2 P3 D1 D2 D3 MEA VIT A
461	Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations received in a national immunization day campaign?  RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, POLIO 0-3, DPT 1-3, AND/OR MEASLES VACCINE(S).	YES .....1 (PROBE FOR VACCINATIONS ◀ —) AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 460) .....1 (SKIP TO 464) ← NO.....2 (SKIP TO 464)← DON'T KNOW.....8	YES .....1 (PROBE FOR VACCINATIONS ◀ —) AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 460) .....1 (SKIP TO 464) ← NO.....2 (SKIP TO 464)← DON'T KNOW.....8	YES .....1 (PROBE FOR VACCINATIONS ◀ —) AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 460) .....1 (SKIP TO 464) ← NO.....2 (SKIP TO 464)← DON'T KNOW.....8

		LAST BIRTH	NEXT-TO-LAST-BIRTH	SECOND-FROM-LAST-BIRTH
		NAME _____	NAME _____	NAME _____
462	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases, including vaccinations received in a national immunization day campaign?	YES.....1 NO.....2 (SKIP TO 466)←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 466)←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 466)←-----  DON'T KNOW.....8
463	Please tell me if (NAME) received any of the following vaccinations:			
463A	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
463B	Polio vaccine, that is, drops in the mouth?	YES.....1 NO.....2 (SKIP TO 463E)←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 463E)←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 463E)←-----  DON'T KNOW.....8
463C	When was the first polio vaccine received, just after birth or later?	JUST AFTER BIRTH.....1 LATER.....2	JUST AFTER BIRTH.....1 LATER.....2	JUST AFTER BIRTH.....1 LATER.....2
463D	How many times was the polio vaccine received?	NUMBER OF TIMES..... <input type="checkbox"/>	NUMBER OF TIMES..... <input type="checkbox"/>	NUMBER OF TIMES..... <input type="checkbox"/>
463E	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 463G)←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 463G)←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 463G)←-----  DON'T KNOW.....8
463F	How many times?	NUMBER OF TIMES..... <input type="checkbox"/>	NUMBER OF TIMES..... <input type="checkbox"/>	NUMBER OF TIMES..... <input type="checkbox"/>
463G	An injection to prevent 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
464	Were any of the vaccinations (NAME) received during the last two years given as a part of a national immunization day campaign?	YES.....1 NO.....2 NO VACCINATION IN THE LAST 2 YEARS.....3 DON'T KNOW.....8	YES.....1 NO.....2 NO VACCINATION IN THE LAST 2 YEARS.....3 DON'T KNOW.....8	YES.....1 NO.....2 NO VACCINATION IN THE LAST 2 YEARS.....3 DON'T KNOW.....8
466	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES.....1 NO.....2 (SKIP TO 467)←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 467)←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 467)←-----  DON'T KNOW.....8
466A	Does (NAME) have a fever now?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
467	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES.....1 NO.....2 (SKIP TO 469)←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 469)←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 469)←-----  DON'T KNOW.....8
468	When (NAME) had an illness with a cough, did he/she breath faster than usual with short, rapid breaths?	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8	YES.....1 NO.....2 DON'T KNOW.....8
469	CHECK 466 AND 467 FEVER OR COUGH?	“YES IN 466 <input type="checkbox"/> OTHER <input type="checkbox"/> OR 467 ↓ (SKIP TO 471A)	“YES IN 466 <input type="checkbox"/> OTHER <input type="checkbox"/> OR 467 ↓ (SKIP TO 471A)	“YES IN 466 <input type="checkbox"/> OTHER <input type="checkbox"/> OR 467 ↓ (SKIP TO 471A)

470	Did you seek advice or treatment for the fever/cough?	YES.....1 NO.....2 (SKIP TO 471A) ←-----J	YES.....1 NO.....2 (SKIP TO 471A) ←-----J	YES.....1 NO.....2 (SKIP TO 471A) ←-----J
471	Where did you seek advice or treatment?  Anywhere else?  RECORD ALL SOURCES MENTIONED	PUBLIC SECTOR GOVT. HOSPITAL.....A GOVT. HEALTH CENTER.....B GOVT. HEALTH POST.....C MOBILE CLINIC.....D COMM. HEALTH WORKER.....E  OTHER PUBLIC _____ F (SPECIFY)  PRIVATE MEDICAL SECTOR PVT. HOSPITAL/CLINIC.....G PHARMACY/PATENT MEDICINE STORE.....H PRIVATE DOCTOR.....I MOBILE CLINIC.....J COMM. HEALTH WORKER.....K OTHER PVT. MEDICAL _____ (SPECIFY) L  OTHER SOURCE SHOP.....M TRAD. PRACTITIONER.....N SPIRITUAL HEALER.....O  OTHER _____ X (SPECIFY)	PUBLIC SECTOR GOVT. HOSPITAL.....A GOVT. HEALTH CENTER.....B GOVT. HEALTH POST.....C MOBILE CLINIC.....D COMM. HEALTH WORKER.....E  OTHER PUBLIC _____ F (SPECIFY)  PRIVATE MEDICAL SECTOR PVT. HOSPITAL/CLINIC.....G PHARMACY/PATENT MEDICINE STORE.....H PRIVATE DOCTOR.....I MOBILE CLINIC.....J COMM. HEALTH WORKER.....K OTHER PVT. MEDICAL _____ (SPECIFY) L  OTHER SOURCE SHOP.....M TRAD. PRACTITIONER.....N SPIRITUAL HEALER.....O  OTHER _____ X (SPECIFY)	PUBLIC SECTOR GOVT. HOSPITAL.....A GOVT. HEALTH CENTER.....B GOVT. HEALTH POST.....C MOBILE CLINIC.....D COMM. HEALTH WORKER.....E  OTHER PUBLIC _____ F (SPECIFY)  PRIVATE MEDICAL SECTOR PVT. HOSPITAL/CLINIC.....G PHARMACY/PATENT MEDICINE STORE.....H PRIVATE DOCTOR.....I MOBILE CLINIC.....J COMM. HEALTH WORKER.....K OTHER PVT. MEDICAL _____ (SPECIFY) L  OTHER SOURCE SHOP.....M TRAD. PRACTITIONER.....N SPIRITUAL HEALER.....O  OTHER _____ X (SPECIFY)
471A	Has (NAME) been ill with convulsions at any time during the last 2 weeks?	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8	YES .....1 NO .....2 DON'T KNOW .....8
472A	CHECK 466 AND 471A:  HAD FEVER OR CONVULSIONS?	“YES” IN 466 <input type="checkbox"/> OTHER <input type="checkbox"/> OR 471A  ↓ (SKIP TO 475)	“YES” IN 466 <input type="checkbox"/> OTHER <input type="checkbox"/> OR 471A  ↓ (SKIP TO 475)	“YES” IN 466 <input type="checkbox"/> OTHER <input type="checkbox"/> OR 471A  ↓ (SKIP TO 475)
473A	Was (NAME) given any drugs for the (fever/convulsions)?	YES.....1 NO.....2 (SKIP TO 474R)←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 474R)←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 474R)←-----  DON'T KNOW.....8
474	What drugs did (NAME) take?  RECORD ALL MENTIONED  ASK TO SEE DRUG(S) IF TYPE OF DRUG IS NOT KNOWN. IF TYPE OF DRUG IS STILL NOT DETERMINED, SHOW TYPICAL ANTI-MALARIAL DRUGS TO RESPONDENT.	ANTI-MALARIAL CHLOROQUINE .....A FANSIDAR.....B AMODIAQUINE (CAMOQUINE).....C QUININE .....D  OTHER DRUGS ASPIRIN .....E PARACETAMOL(PANADOL) .....F  OTHER _____ X (SPECIFY)  DON'T KNOW .....Z	ANTI-MALARIAL CHLOROQUINE .....A FANSIDAR.....B AMODIAQUINE (CAMOQUINE).....C QUININE .....D  OTHER DRUGS ASPIRIN .....E PARACETAMOL(PANADOL) .....F  OTHER _____ X (SPECIFY)  DON'T KNOW .....Z	ANTI-MALARIAL CHLOROQUINE .....A FANSIDAR.....B AMODIAQUINE (CAMOQUINE).....C QUININE .....D  OTHER DRUGS ASPIRIN .....E PARACETAMOL(PANADOL) .....F  OTHER _____ X (SPECIFY)  DON'T KNOW .....Z
474A	Did (NAME) get any injection or suppository for the (fever/convulsions)?	INJECTION.....A SUPPOSITORY.....B NONE.....C DON'T KNOW.....Z	INJECTION.....A SUPPOSITORY.....B NONE.....C DON'T KNOW.....Z	INJECTION.....A SUPPOSITORY.....B NONE.....C DON'T KNOW.....Z
474B	CHECK 474:  WHICH MEDICINES?	CODE 'A' <input type="checkbox"/> CODE 'A' <input type="checkbox"/> CIRCLED NOT CIRCLED ↓ (SKIP TO 474F)	CODE 'A' <input type="checkbox"/> CODE 'A' <input type="checkbox"/> CIRCLED NOT CIRCLED ↓ (SKIP TO 474F)	CODE 'A' <input type="checkbox"/> CODE 'A' <input type="checkbox"/> CIRCLED NOT CIRCLED ↓ (SKIP TO 474F)
474C	How long after the (fever/convulsions) started did (NAME) first take chloroquine?	SAME DAY .....0 NEXT DAY.....1 TWO DAYS AFTER THE FEVER.....2 THREE OR MORE DAYS AFTER THE FEVER.....3 DON'T KNOW.....8	SAME DAY .....0 NEXT DAY.....1 TWO DAYS AFTER THE FEVER.....2 THREE OR MORE DAYS AFTER THE FEVER.....3 DON'T KNOW.....8	SAME DAY .....0 NEXT DAY.....1 TWO DAYS AFTER THE FEVER.....2 THREE OR MORE DAYS AFTER THE FEVER.....3 DON'T KNOW.....8

474D	For how many days did (NAME) take the chloroquine? IF 7 OR MORE DAYS, RECORD '7'.	DAYS..... <input type="text"/> DON'T KNOW..... 8	DAYS..... <input type="text"/> DON'T KNOW..... 8	DAYS..... <input type="text"/> DON'T KNOW..... 8
474E	Did you have the chloroquine at home or did you get it from somewhere else? IF MORE THAN ONE SOURCE MENTIONED, ASK: Where did you get the chloroquine first?	AT HOME.....1 OTHER SOURCE.....2 DON'T KNOW.....8	AT HOME.....1 OTHER SOURCE.....2 DON'T KNOW.....8	AT HOME.....1 OTHER SOURCE.....2 DON'T KNOW.....8
474F	CHECK 474: WHICH MEDICINES?	CODE 'B' <input type="checkbox"/> CIRCLED ↓ CODE 'B' <input type="checkbox"/> NOT CIRCLED ↓ (SKIP TO 474J)	CODE 'B' <input type="checkbox"/> CIRCLED ↓ CODE 'B' <input type="checkbox"/> NOT CIRCLED ↓ (SKIP TO 474J)	CODE 'B' <input type="checkbox"/> CIRCLED ↓ CODE 'B' <input type="checkbox"/> NOT CIRCLED ↓ (SKIP TO 474J)
474G	How long after the (fever/convulsions) started did (NAME) first take Fansidar?	SAME DAY.....0 NEXT DAY.....1 TWO DAYS AFTER THE FEVER.....2 THREE OR MORE DAYS AFTER THE FEVER.....3 DON'T KNOW.....8	SAME DAY.....0 NEXT DAY.....1 TWO DAYS AFTER THE FEVER.....2 THREE OR MORE DAYS AFTER THE FEVER.....3 DON'T KNOW.....8	SAME DAY.....0 NEXT DAY.....1 TWO DAYS AFTER THE FEVER.....2 THREE OR MORE DAYS AFTER THE FEVER.....3 DON'T KNOW.....8
474H	For how many days did (NAME) take Fansidar? IF 7 OR MORE DAYS, RECORD '7'.	DAYS..... <input type="text"/> DON'T KNOW..... 8	DAYS..... <input type="text"/> DON'T KNOW..... 8	DAYS..... <input type="text"/> DON'T KNOW..... 8
474I	Did you have Fansidar at home or did you get it from somewhere else? IF MORE THAN ONE SOURCE MENTIONED, ASK: Where did you get the Fansidar first?	AT HOME.....1 OTHER SOURCE.....2 DON'T KNOW.....8	AT HOME.....1 OTHER SOURCE.....2 DON'T KNOW.....8	AT HOME.....1 OTHER SOURCE.....2 DON'T KNOW.....8
474J	CHECK 474: WHICH MEDICINES?	CODE 'C' <input type="checkbox"/> CIRCLED ↓ CODE 'C' <input type="checkbox"/> NOT CIRCLED ↓ (SKIP TO 474N)	CODE 'C' <input type="checkbox"/> CIRCLED ↓ CODE 'C' <input type="checkbox"/> NOT CIRCLED ↓ (SKIP TO 474N)	CODE 'C' <input type="checkbox"/> CIRCLED ↓ CODE 'C' <input type="checkbox"/> NOT CIRCLED ↓ (SKIP TO 474N)
474K	How long after the (fever/convulsions) started did (NAME) first take (Amodiaquine/Camoquine)?	SAME DAY.....0 NEXT DAY.....1 TWO DAYS AFTER THE FEVER.....2 THREE OR MORE DAYS AFTER THE FEVER.....3 DON'T KNOW.....8	SAME DAY.....0 NEXT DAY.....1 TWO DAYS AFTER THE FEVER.....2 THREE OR MORE DAYS AFTER THE FEVER.....3 DON'T KNOW.....8	SAME DAY.....0 NEXT DAY.....1 TWO DAYS AFTER THE FEVER.....2 THREE OR MORE DAYS AFTER THE FEVER.....3 DON'T KNOW.....8
474L	For how many days did (NAME) take (Amodiaquine/Camoquine)? IF 7 OR MORE DAYS, RECORD '7'.	DAYS..... <input type="text"/> DON'T KNOW..... 8	DAYS..... <input type="text"/> DON'T KNOW..... 8	DAYS..... <input type="text"/> DON'T KNOW..... 8
474M	Did you have the (Amodiaquine/Camoquine) at home or did you get it from somewhere else? IF MORE THAN ONE SOURCE MENTIONED, ASK: Where did you get the (Amodiaquine/Camoquine) first?	AT HOME.....1 OTHER SOURCE.....2 DON'T KNOW.....8	AT HOME.....1 OTHER SOURCE.....2 DON'T KNOW.....8	AT HOME.....1 OTHER SOURCE.....2 DON'T KNOW.....8
474N	CHECK 474: WHICH MEDICINES?	CODE 'D' <input type="checkbox"/> CIRCLED ↓ CODE 'D' <input type="checkbox"/> NOT CIRCLED ↓ (SKIP TO 474R)	CODE 'D' <input type="checkbox"/> CIRCLED ↓ CODE 'D' <input type="checkbox"/> NOT CIRCLED ↓ (SKIP TO 474R)	CODE 'D' <input type="checkbox"/> CIRCLED ↓ CODE 'D' <input type="checkbox"/> NOT CIRCLED ↓ (SKIP TO 474R)

474Q	How long after the (fever/convulsions) started did (NAME) first take Quinine?	SAME DAY .....0 NEXT DAY .....1 TWO DAYS AFTER THE FEVER.....2 THREE OR MORE DAYS AFTER THE FEVER.....3 DON'T KNOW.....8	SAME DAY .....0 NEXT DAY .....1 TWO DAYS AFTER THE FEVER.....2 THREE OR MORE DAYS AFTER THE FEVER.....3 DON'T KNOW.....8	SAME DAY .....0 NEXT DAY .....1 TWO DAYS AFTER THE FEVER.....2 THREE OR MORE DAYS AFTER THE FEVER.....3 DON'T KNOW.....8
474P	For how many days did (NAME) take Quinine? IF 7 OR MORE DAYS, RECORD '7'.	DAYS..... <input type="text"/> DON'T KNOW.....8	DAYS..... <input type="text"/> DON'T KNOW.....8	DAYS..... <input type="text"/> DON'T KNOW.....8
474Q	Did you have the Quinine at home or did you get it from somewhere else? IF MORE THAN ONE SOURCE MENTIONED, ASK: Where did you get the Quinine first?	AT HOME.....1 OTHER SOURCE.....2 DON'T KNOW.....8	AT HOME.....1 OTHER SOURCE.....2 DON'T KNOW.....8	AT HOME.....1 OTHER SOURCE.....2 DON'T KNOW.....8
474R	Was anything else done about (NAME)'s (fever/convulsions)?	YES.....1 NO.....2 (SKIP TO 475) ←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 475) ←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 475) ←-----  DON'T KNOW.....8
474S	What was done about (NAME)'s (fever/convulsions)?	CONSULTED TRADITIONAL HEALER .....A GAVE TEPID SPONGING .....B GAVE HERBS .....C PRAYED/TOOK CHILD TO CHURCH.....D OTHER ..... X (SPECIFY)	CONSULTED TRADITIONAL HEALER .....A GAVE TEPID SPONGING .....B GAVE HERBS .....C PRAYED/TOOK CHILD TO CHURCH.....D OTHER ..... X (SPECIFY)	CONSULTED TRADITIONAL HEALER .....A GAVE TEPID SPONGING .....B GAVE HERBS .....C PRAYED/TOOK CHILD TO CHURCH.....D OTHER ..... X (SPECIFY)
475	Has (NAME) had diarrhoea in the last 2 weeks?	YES.....1 NO.....2 (SKIP TO 483) ←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 483) ←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 483) ←-----  DON'T KNOW.....8
476	Now I would like to know how much fluid (NAME) was offered to drink during the diarrhoea. Was he/she offered less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she offered 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
477	When (NAME) had diarrhoea, was he/she offered less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she offered 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
478	Was he/she given any of the following to drink: a A fluid made from a special packet called ORS ? b Salt-Sugar-Solution (ORT)?	YES NO DK FLUID FROM ORS PKT 1 2 8 SALT SUGAR 1 2 8	YES NO DK FLUID FROM ORS PKT 1 2 8 SALT SUGAR 1 2 8	YES NO DK FLUID FROM ORS PKT 1 2 8 SALT SUGAR 1 2 8
479	Was anything (else) given to treat the diarrhoea?	YES.....1 NO.....2 (SKIP TO 481) ←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 481) ←-----  DON'T KNOW.....8	YES.....1 NO.....2 (SKIP TO 481) ←-----  DON'T KNOW.....8
480	What (else) was given to treat the diarrhoea? Anything else? RECORD ALL TREATMENTS MENTIONED.	PILL OR SYRUP .....A INJECTION.....B (I.V.) INTRAVENOUS.....C HOME REMEDIES/HERBAL MEDICINES.....D OTHER ..... X (SPECIFY)	PILL OR SYRUP .....A INJECTION.....B (I.V.) INTRAVENOUS.....C HOME REMEDIES/HERBAL MEDICINES.....D OTHER ..... X (SPECIFY)	PILL OR SYRUP .....A INJECTION.....B (I.V.) INTRAVENOUS.....C HOME REMEDIES/HERBAL MEDICINES.....D OTHER ..... X (SPECIFY)
481	Did you seek advice or treatment for the diarrhoea?	YES.....1 NO.....2 (SKIP TO 483) ←-----	YES.....1 NO.....2 (SKIP TO 483) ←-----	YES.....1 NO.....2 (SKIP TO 483) ←-----

482	<p>Where did you seek advice or treatment?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTRE OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE)</p> <p>Anywhere else?</p> <p>RECORD ALL PLACES MENTIONED.</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL..... A</p> <p>GOVT. HEALTH CENTRE.....B</p> <p>GOVT. HEALTH POST.....C</p> <p>MOBILE CLINIC.....D</p> <p>COMM. HEALTH WORKER.....E</p> <p>OTHER PUBLIC _____ F</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PVT. HOSPITAL/CLINIC.....G</p> <p>PHARMACY/PATENT MEDICINE STORE.....H</p> <p>PRIVATE DOCTOR.....I</p> <p>MOBILE CLINIC.....J</p> <p>COMM. HEALTH WORKER.....K</p> <p>OTHER PVT. MEDICAL _____ L</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP..... M</p> <p>TRAD. PRACTITIONER..... N</p> <p>SPIRITUAL HEALER..... O</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL..... A</p> <p>GOVT. HEALTH CENTRE.....B</p> <p>GOVT. HEALTH POST.....C</p> <p>MOBILE CLINIC.....D</p> <p>COMM. HEALTH WORKER.....E</p> <p>OTHER PUBLIC _____ F</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PVT. HOSPITAL/CLINIC.....G</p> <p>PHARMACY/PATENT MEDICINE STORE.....H</p> <p>PRIVATE DOCTOR.....I</p> <p>MOBILE CLINIC.....J</p> <p>COMM. HEALTH WORKER.....K</p> <p>OTHER PVT. MEDICAL _____ L</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP..... M</p> <p>TRAD. PRACTITIONER..... N</p> <p>SPIRITUAL HEALER..... O</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	<p>PUBLIC SECTOR</p> <p>GOVT. HOSPITAL..... A</p> <p>GOVT. HEALTH CENTRE.....B</p> <p>GOVT. HEALTH POST.....C</p> <p>MOBILE CLINIC.....D</p> <p>COMM. HEALTH WORKER.....E</p> <p>OTHER PUBLIC _____ F</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PVT. HOSPITAL/CLINIC.....G</p> <p>PHARMACY/PATENT MEDICINE STORE.....H</p> <p>PRIVATE DOCTOR.....I</p> <p>MOBILE CLINIC.....J</p> <p>COMM. HEALTH WORKER.....K</p> <p>OTHER PVT. MEDICAL _____ L</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP..... M</p> <p>TRAD. PRACTITIONER..... N</p> <p>SPIRITUAL HEALER..... O</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>
483		<p><b>GO BACK TO 456 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 484.</b></p>	<p><b>GO BACK TO 456 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 484.</b></p>	<p><b>GO BACK TO SECOND COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 484.</b></p>

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
484	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 1998 OR LATER LIVING WITH THE RESPONDENT  ONE OR MORE <input type="checkbox"/> NONE <input type="checkbox"/>		→487
485	What is usually done to dispose of your (youngest) child's stools when he/she does not use any toilet facility?	CHILD ALWAYS USE TOILET/LATRINE .....01 THROW IN THE TOILET/LATRINE .....02 THROW OUTSIDE THE DWELLING.....03 THROW OUTSIDE THE YARD.....04 BURY IN THE YARD.....05 RINSE AWAY.....06 USE DISPOSABLE DIAPERS .....07 USE WASHABLE DIAPERS .....08 NOT DISPOSED OF .....09  OTHER _____ 96 (SPECIFY)	
486	CHECK 478a, ALL COLUMNS:  NO CHILD RECEIVED FLUID FROM ORS PACKET <input type="checkbox"/> AT LEAST ONE RECEIVED FLUID FROM ORS PACKET <input type="checkbox"/>		→488
487	Have you ever heard of a special product called an ORS packet you can get for the treatment of diarrhoea?	YES .....1 NO .....2	
488	CHECK 218:  HAS ONE OR MORE CHILDREN LIVING WITH HER <input type="checkbox"/> HAS NO CHILDREN LIVING WITH HER <input type="checkbox"/>		→490

489	<p>When (your child/one of your children) is seriously ill, can you decide by yourself whether or not the child should be taken for medical treatment?</p> <p>IF SAYS NO CHILD EVER SERIOUSLY ILL, ASK: If (your child/one of your children) became seriously ill, could you decide by yourself whether the child should be taken for medical treatment?</p>	<p>YES .....1 NO .....2 DEPENDS .....3</p>																																	
490	<p>Now I would like to ask you some questions about medical care for you yourself.</p> <p>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, a small problem or no problem?</p> <p>Knowing where to go.</p> <p>Getting permission to go.</p> <p>Getting money needed for treatment.</p> <p>The distance to a health facility.</p> <p>Having to take transport.</p> <p>Not wanting to go alone.</p> <p>Concern that there may not be a female health provider.</p>	<table border="1"> <thead> <tr> <th></th> <th>BIG PROBLEM</th> <th>SMALL PROBLEM</th> <th>NO PROBLEM</th> </tr> </thead> <tbody> <tr> <td>Knowing where to go.</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>Getting permission to go.</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>Getting money needed for treatment.</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>The distance to a health facility.</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>Having to take transport.</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>Not wanting to go alone.</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>Concern that there may not be a female health provider.</td> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>		BIG PROBLEM	SMALL PROBLEM	NO PROBLEM	Knowing where to go.	1	2	3	Getting permission to go.	1	2	3	Getting money needed for treatment.	1	2	3	The distance to a health facility.	1	2	3	Having to take transport.	1	2	3	Not wanting to go alone.	1	2	3	Concern that there may not be a female health provider.	1	2	3	
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491	<p>CHECK 215 AND 218:</p> <p>HAS AT LEAST ONE CHILD BORN IN 2000 OR LATER AND LIVING WITH HER <input type="checkbox"/></p> <p>DOES NOT HAVE ANY CHILDREN BORN IN 2000 OR LATER AND LIVING WITH HER <input type="checkbox"/></p> <p>RECORD NAME OF YOUNGEST CHILD LIVING WITH HER (AND CONTINUE TO 492)</p> <p>_____</p> <p>(NAME)</p>	→494																																	
492	<p>Now I would like to ask you about liquids (NAME FROM Q. 491) drank over the last seven days, including yesterday.</p> <p>How many <u>days</u> during last seven days did (NAME FROM Q. 491) drink each of the following?</p> <p>FOR EACH ITEM GIVEN AT LEAST ONCE IN LAST SEVEN DAYS, BEFORE PROCEEDING TO THE NEXT ITEM, ASK:</p> <p>In total, how many <u>times</u> yesterday during the day or at night did (NAME FROM Q. 491) drink (ITEM)?</p> <p>a. Plain water?</p> <p>b. Commercially produced infant formula?</p> <p>c. Any other milk such as tinned, powdered, or fresh animal milk?</p> <p>d. Fruit juice?</p> <p>e. Herbal drink?</p> <p>f. Any other liquids such as sugar water, tea, coffee, carbonated drinks, or soup broth?</p> <p>IF 7 OR MORE TIMES, RECORD '7'. IF DON'T KNOW, RECORD '8'.</p>	<table border="1"> <thead> <tr> <th></th> <th>LAST 7 DAYS NUMBER OF DAYS</th> <th>YESTERDAY/ LAST NIGHT NUMBER OF TIMES</th> </tr> </thead> <tbody> <tr> <td>a.</td> <td><input type="text"/></td> <td>a. <input type="text"/></td> </tr> <tr> <td>b.</td> <td><input type="text"/></td> <td>b. <input type="text"/></td> </tr> <tr> <td>c.</td> <td><input type="text"/></td> <td>c. <input type="text"/></td> </tr> <tr> <td>d.</td> <td><input type="text"/></td> <td>d. <input type="text"/></td> </tr> <tr> <td>e.</td> <td><input type="text"/></td> <td>e. <input type="text"/></td> </tr> <tr> <td>f.</td> <td><input type="text"/></td> <td>f. <input type="text"/></td> </tr> </tbody> </table>		LAST 7 DAYS NUMBER OF DAYS	YESTERDAY/ LAST NIGHT NUMBER OF TIMES	a.	<input type="text"/>	a. <input type="text"/>	b.	<input type="text"/>	b. <input type="text"/>	c.	<input type="text"/>	c. <input type="text"/>	d.	<input type="text"/>	d. <input type="text"/>	e.	<input type="text"/>	e. <input type="text"/>	f.	<input type="text"/>	f. <input type="text"/>												
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493	<p>Now I would like to ask you about the types of foods (NAME FROM Q. 491) ate over the last seven days, including yesterday.</p> <p>How many <u>days</u> during last seven days did (NAME FROM Q. 491) eat each of the following foods either separately or combined with other food?</p> <p>FOR EACH ITEM GIVEN AT LEAST ONCE IN LAST SEVEN DAYS, BEFORE PROCEEDING TO THE NEXT ITEM, ASK:</p> <p>In total, how many <u>times</u> yesterday during the day or at night did (NAME FROM Q. 491) eat (ITEM)?</p> <p>a Any food made from grains [e.g. millet, sorghum, maize, rice, wheat, porridge, or other local grains]?</p> <p>b Pumpkin, red or yellow yams, carrots, or sweet potatoes?</p> <p>c Food made from roots or tubers [e.g. Irish potatoes, white yams, cocoyam, cassava, or other local roots/tubers]?</p> <p>d Any green leafy vegetables?</p> <p>e Mango, pawpaw, and palm-nuts?</p> <p>f Any other fruits and vegetables [e.g. bananas, plantains, water-melon, apples/sauce, green beans, avocados, tomatoes]?</p> <p>g Meat, poultry, fish, shellfish, or eggs?</p> <p>h Any food made from legumes [e.g. lentils, beans, soybeans, pulses, or peanuts]?</p> <p>i Cheese or yoghurt (local cheese) ?</p> <p>j Any food made with oil, fat, or butter?</p> <p>IF 7 OR MORE TIMES, RECORD '7'. IF DON'T KNOW, RECORD '8'.</p>	<p>LAST 7 DAYS</p> <p>NUMBER OF DAYS</p> <p>a <input type="text"/></p> <p>b <input type="text"/></p> <p>c <input type="text"/></p> <p>d <input type="text"/></p> <p>e <input type="text"/></p> <p>f <input type="text"/></p> <p>g <input type="text"/></p> <p>h <input type="text"/></p> <p>i <input type="text"/></p> <p>j <input type="text"/></p>	<p>YESTERDAY/ LAST NIGHT</p> <p>NUMBER OF TIMES</p> <p>a <input type="text"/></p> <p>b <input type="text"/></p> <p>c <input type="text"/></p> <p>d <input type="text"/></p> <p>e <input type="text"/></p> <p>f <input type="text"/></p> <p>g <input type="text"/></p> <p>h <input type="text"/></p> <p>i <input type="text"/></p> <p>j <input type="text"/></p>
494	Did you sleep under a bednet last night?	YES .....1 NO .....2	
495	The last time you prepared a meal for your family, before starting did you wash your hands?	YES .....1 NO .....2 NEVER PREPARED MEALS .....3	
496	Do you currently smoke cigarettes or tobacco? IF YES: What type of tobacco/cigarette do you smoke?  RECORD ALL TYPES MENTIONED.	YES, CIGARETTES ..... A YES, PIPE ..... B YES, OTHER TOBACCO ..... C NO ..... Y	
497	CHECK 496:  CODE 'A' CIRCLED <input type="checkbox"/> CODE 'A' NOT CIRCLED <input type="checkbox"/>		→499A
498	In the last 24 hours, how many cigarettes did you smoke?	CIGARETTES ..... <input type="text"/>	
499A	Have you ever drunk an alcohol-containing beverage?	YES .....1 NO .....2	→ 50 1

499B	In the last 3 months, on how many days did you drink an alcohol-containing beverage?  IF EVERY DAY: RECORD '90'.	NUMBER OF DAYS ..... <input type="text"/> <input type="text"/>  NONE .....95	
499C	Have you ever gotten "drunk" from drinking an alcohol-containing beverage?	YES .....1 NO .....2	→ 501
499D	CHECK 499B  DRANK ALCOHOL ON AT LEAST ONE DAY <input type="checkbox"/>	NONE <input type="checkbox"/>	→501
499E	In the last 3 months, on how many occasions did you get "drunk"?	NUMBER OF TIMES ..... <input type="text"/> <input type="text"/>  NONE/NEVER .....95	

SECTION 5. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	Are you currently married or living with a man?	YES, CURRENTLY MARRIED ..... 1 YES, LIVING WITH A MAN..... 2 NO, NOT IN UNION..... 3	<input type="checkbox"/> →505
502	Have you ever been married or lived with a man?	YES, FORMERLY MARRIED ..... 1 YES, LIVED WITH A MAN..... 2 NO..... 3	→510 →514
504	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED ..... 1 DIVORCED ..... 2 SEPARATED ..... 3	<input type="checkbox"/> →510
505	Is your husband/partner living with you now or is he staying elsewhere?	LIVING WITH HER..... 1 STAYING ELSEWHERE..... 2	
506	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. .... <input type="text"/> <input type="text"/>	
507	Does your husband/partner have any other wives besides yourself?	YES ..... 1 NO..... 2 DON'T KNOW ..... 8	→510 →510
508	How many other wives does he have?	NUMBER. .... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	→510
509	Are you the first, second, ... wife?	RANK..... <input type="text"/> <input type="text"/>	
510	Have you been married or lived with a man only once, or more than once?	ONCE..... 1 MORE THAN ONCE ..... 2	
511	CHECK 510:  <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>MARRIED/ LIVED WITH A MAN ONLY ONCE</p> <input type="checkbox"/> </div> <div style="text-align: center;"> <p>MARRIED/ LIVED WITH A MAN MORE THAN ONCE</p> <input type="checkbox"/> </div> </div> <p>In what month and year did you start living with your husband/partner?</p> <p>Now we will talk about your first husband/partner. In what month and year did you start living with him?</p>	MONTH ..... <input type="text"/> <input type="text"/> DON'T KNOW MONTH..... 98 YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR ..... 9998	→514
512	How old were you when you started living with him?	AGE..... <input type="text"/> <input type="text"/>	
514	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues.  How old were you when you first had sexual intercourse (if ever)?	NEVER ..... 00 AGE IN YEARS ..... <input type="text"/> <input type="text"/> FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/PARTNER ... 95	→524
514A	CHECK 106:  <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>15-24 YEARS OLD</p> <input type="checkbox"/> </div> <div style="text-align: center;"> <p>25-49 YEARS OLD</p> <input type="checkbox"/> </div> </div>		→515
514B	The first time you had sexual intercourse, was a condom used?	YES ..... 1 NO..... 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
515	When was the last time you had sexual intercourse?  RECORD 'YEARS AGO' ONLY IF LAST INTERCOURSE WAS ONE OR MORE YEARS AGO.  RECORD MONTHS ONLY IF 11 MONTHS OR LESS.	DAYS AGO.....1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS AGO.....2 MONTHS AGO.....3 YEARS AGO.....4									→524
516	The last time you had sexual intercourse, was a condom used?	YES..... 1 NO..... 2	→517								
516A	What was the main reason you used a condom on that occasion?	RESPONDENT WANTED TO PREVENT STI/HIV..... 01 RESPONDENT WANTED TO PREVENT PREGNANCY ..... 02 RESPONDENT WANTED TO PREVENT BOTH STI/HIV AND PREGNANCY ..... 03 DID NOT TRUST PARTNER/FELT PARTNER HAD OTHER PARTNERS..... 04 PARTNER REQUESTED/INSISTED ..... 05  OTHER _____ 96 (SPECIFY)  DON'T KNOW ..... 98									
517	What is your relationship to the man with whom you last had sex?  IF MAN IS "BOYFRIEND" OR "FIANCÉ", ASK: Was your boyfriend/fiancé living with you when you last had sex?  IF YES, CIRCLE '01'. IF NO, CIRCLE '02'.	SPOUSE/COHABITING PARTNER..... 01 MAN IS BOYFRIEND/FIANCÉ ..... 02 OTHER FRIEND ..... 03 CASUAL ACQUAINTANCE ..... 04 RELATIVE..... 05 COMMERCIAL SEX WORKER ..... 06  OTHER _____ 96 (SPECIFY)	→519								
517A	CHECK 106:  15-19 <input type="checkbox"/> YEARS OLD 20-49 <input type="checkbox"/> YEARS OLD		→518								
517B	Was this man younger, about the same age or older than you?  IF OLDER: Do you think that he was less than 10 years older than you or 10 or more years older than you?	YOUNGER ..... 1 ABOUT THE SAME AGE ..... 2 LESS THAN 10 YEARS OLDER..... 3 10 OR MORE YEARS OLDER ..... 4 OLDER, DON'T KNOW DIFFERENCE.... 5 DON'T KNOW ..... 8									
518	For how long have you had sexual relations with this man?	DAYS.....1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS.....2 MONTHS.....3 YEARS.....4									
519	Have you had sex with any other man in the last 12 months?	YES..... 1 NO..... 2	→524								
520	The last time you had sexual intercourse with this other man, was a condom used?	YES..... 1 NO..... 2	→521								

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
520A	What was the main reason you used a condom on that occasion?	RESPONDENT WANTED TO PREVENT STI/HIV..... 01 RESPONDENT WANTED TO PREVENT PREGNANCY ..... 02 RESPONDENT WANTED TO PREVENT BOTH STI/HIV AND PREGNANCY ..... 03 DID NOT TRUST PARTNER/FELT PARTNER HAD OTHER PARTNERS..... 04 PARTNER REQUESTED/INSISTED ..... 05  OTHER _____ 96 (SPECIFY)  DON'T KNOW ..... 98									
521	What is your relationship to this other man?  IF MAN IS "BOYFRIEND" OR "FIANCÉ", ASK: Was your boyfriend/fiancé living with you when you last had sex with him?  IF YES, CIRCLE '01'. IF NO, CIRCLE '02'.	SPOUSE/COHABITING PARTNER..... 01 MAN IS BOYFRIEND/FIANCÉ..... 02 OTHER FRIEND ..... 03 CASUAL ACQUAINTANCE ..... 04 RELATIVE ..... 05 COMMERCIAL SEX WORKER ..... 06  OTHER _____ 96 (SPECIFY)	→522A								
521A	CHECK 106:  <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">             15-19 YEARS OLD             <input style="width: 30px; height: 20px; margin-left: 10px;" type="checkbox"/> </div> <div style="text-align: center;">             20-49 YEARS OLD             <input style="width: 30px; height: 20px; margin-left: 10px;" type="checkbox"/> </div> </div>		→522								
521B	Was this man younger, about the same age or older than you?  IF OLDER: Do you think that he was less than 10 years older than you or 10 or more years older than you?	YOUNGER ..... 1 ABOUT THE SAME AGE ..... 2 LESS THAN 10 YEARS OLDER ..... 3 10 OR MORE YEARS OLDER ..... 4 OLDER, DON'T KNOW DIFFERENCE... 5 DON'T KNOW ..... 8									
522	For how long have you had sexual relations with this man?	DAYS.....1 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> WEEKS.....2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> MONTHS.....3 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> YEARS.....4 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table>									
522A	Other than these two men, have you had sex with any other man in the last 12 months?	YES ..... 1 NO ..... 2	→524								
522B	The last time you had sexual intercourse with this other man, was a condom used?	YES ..... 1 NO ..... 2	→522D								
522C	What was the main reason you used a condom on that occasion?	RESPONDENT WANTED TO PREVENT STI/HIV..... 01 RESPONDENT WANTED TO PREVENT PREGNANCY ..... 02 RESPONDENT WANTED TO PREVENT BOTH STI/HIV AND PREGNANCY ..... 03 DID NOT TRUST PARTNER/FELT PARTNER HAD OTHER PARTNERS..... 04 PARTNER REQUESTED/INSISTED ..... 05  OTHER _____ 96 (SPECIFY)  DON'T KNOW ..... 98									

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
522D	What is your relationship to this man?  IF MAN IS "BOYFRIEND" OR "FIANCÉ", ASK: Was your boyfriend/fiancé living with you when you last had sex with him?  IF YES, CIRCLE '01'. IF NO, CIRCLE '02'.	SPOUSE/COHABITING PARTNER..... 01 MAN IS BOYFRIEND/FIANCÉ..... 02 OTHER FRIEND ..... 03 CASUAL ACQUAINTANCE ..... 04 RELATIVE ..... 05 COMMERCIAL SEX WORKER ..... 06  OTHER _____ 96 (SPECIFY)	→523
522D1	CHECK 106:  15-19 YEARS OLD <input type="checkbox"/> 20-49 YEARS OLD <input type="checkbox"/>		→522E
522D2	Was this man younger, about the same age or older than you?  IF OLDER: Do you think that he was less than 10 years older than you or 10 or more years older than you?	YOUNGER ..... 1 ABOUT THE SAME AGE ..... 2 LESS THAN 10 YEARS OLDER ..... 3 10 OR MORE YEARS OLDER ..... 4 OLDER, DON'T KNOW DIFFERENCE..... 5 DON'T KNOW ..... 8	
522E	For how long have you had sexual relations with this man?	DAYS.....1 <input type="checkbox"/> <input type="checkbox"/> WEEKS.....2 <input type="checkbox"/> <input type="checkbox"/> MONTHS.....3 <input type="checkbox"/> <input type="checkbox"/> YEARS.....4 <input type="checkbox"/> <input type="checkbox"/>	
523	In total, with how many different men have you had sex in the last 12 months?	NUMBER OF PARTNERS..... <input type="checkbox"/> <input type="checkbox"/>	
524	Do you know of a place where a person can get male condoms?	YES ..... 1 NO ..... 2	→527
525	Where is that?  IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  _____ (NAME OF PLACE)  Any other place?  RECORD ALL SOURCES MENTIONED.	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... A GOVT. HEALTH CENTER ..... B FAMILY PLANNING CLINIC ..... C MOBILE CLINIC ..... D COMMUNITY HEALTH WORKER ..... E  OTHER PUBLIC _____ F (SPECIFY)  PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... G PHARMACY/PATENT MEDICINE STORE ..... H PRIVATE DOCTOR ..... I MOBILE CLINIC ..... J COMMUNITY HEALTH WORKER ..... K OTHER PRIVATE MEDICAL _____ L (SPECIFY)  OTHER SOURCE SHOP ..... M CHURCH ..... N FRIENDS/RELATIVES ..... O NGO ..... P  OTHER _____ X (SPECIFY)	
526	If you wanted to, could you yourself get a condom?	YES ..... 1 NO ..... 2 DON'T KNOW/UNSURE ..... 8	
527	Do you know of a place where a person can get female condoms?	YES ..... 1 NO ..... 2	→530

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																				
528	<p>Where is that?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE)</p> <p>Any other place?</p> <p>RECORD ALL SOURCES MENTIONED.</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL ..... A</p> <p>GOVT. HEALTH CENTER..... B</p> <p>FAMILY PLANNING CLINIC..... C</p> <p>MOBILE CLINIC ..... D</p> <p>COMMUNITY HEALTH WORKER ..... E</p> <p>OTHER PUBLIC _____ F</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC ..... G</p> <p>PHARMACY/PATENT MEDICINE STORE ..... H</p> <p>PRIVATE DOCTOR ..... I</p> <p>MOBILE CLINIC ..... J</p> <p>COMMUNITY HEALTH WORKER ..... K</p> <p>OTHER PRIVATE MEDICAL _____ L</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP ..... M</p> <p>CHURCH ..... N</p> <p>FRIENDS/RELATIVES ..... O</p> <p>NGO ..... P</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>																																					
529	<p>If you wanted to, could you yourself get a female condom?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW/UNSURE ..... 8</p>																																					
530	<p>Is it acceptable or not acceptable to you for information on condoms to be provided:</p> <p>On the radio?</p> <p>On the television?</p> <p>In newspaper or magazine?</p>	<table border="0"> <tr> <td></td> <td style="text-align: center;">ACCEPT- ABLE</td> <td style="text-align: center;">NOT ACCEPT- ABLE</td> <td></td> </tr> <tr> <td>DK</td> <td></td> <td></td> <td></td> </tr> <tr> <td>RADIO.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>TELEVISION.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>NEWSPAPER/ MAGAZINE....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> </table>		ACCEPT- ABLE	NOT ACCEPT- ABLE		DK				RADIO.....	1	2	8	TELEVISION.....	1	2	8	NEWSPAPER/ MAGAZINE....	1	2	8																	
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531	<p>In the last few months, have you heard/read about condoms</p> <p>On the radio?</p> <p>On the television?</p> <p>In a newspaper or magazine?</p> <p>From a poster?</p> <p>From leaflets or brochures?</p> <p>From town crier?</p> <p>Mobile public announcement?</p>	<table border="0"> <tr> <td></td> <td></td> <td style="text-align: center;">YES</td> <td></td> </tr> <tr> <td>NO</td> <td></td> <td></td> <td></td> </tr> <tr> <td>RADIO.....</td> <td style="text-align: center;">1</td> <td></td> <td style="text-align: center;">2</td> </tr> <tr> <td>TELEVISION.....</td> <td style="text-align: center;">1</td> <td></td> <td style="text-align: center;">2</td> </tr> <tr> <td>NEWSPAPER OR MAGAZINE ..</td> <td style="text-align: center;">1</td> <td></td> <td style="text-align: center;">2</td> </tr> <tr> <td>POSTER.....</td> <td style="text-align: center;">1</td> <td></td> <td style="text-align: center;">2</td> </tr> <tr> <td>LEAFLETS OR BROCHURES.....</td> <td style="text-align: center;">1</td> <td></td> <td style="text-align: center;">2</td> </tr> <tr> <td>TOWN CRIER .....</td> <td style="text-align: center;">1</td> <td></td> <td style="text-align: center;">2</td> </tr> <tr> <td>MOBILE PUBLIC ANNOUNCEMENT.....</td> <td style="text-align: center;">1</td> <td></td> <td style="text-align: center;">2</td> </tr> </table>			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	
		YES																																					
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TOWN CRIER .....	1		2																																				
MOBILE PUBLIC ANNOUNCEMENT.....	1		2																																				

SECTION 6. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	CHECK 311/311A:  NEITHER <input type="checkbox"/> STERILIZED HE OR SHE <input type="checkbox"/> STERILIZED		→614
602	CHECK 226:  NOT PREGNANT <input type="checkbox"/> OR UNSURE PREGNANT <input type="checkbox"/>  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?  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 (A/ANOTHER) CHILD..... 1 NO MORE/NONE ..... 2 SAYS SHE CAN'T GET PREGNANT ..... 3 UNDECIDED/DON'T KNOW: AND PREGNANT ..... 4 AND NOT PREGNANT OR UNSURE ..... 5	→604 →614 →610 →608
603	CHECK 226:  NOT PREGNANT <input type="checkbox"/> OR UNSURE PREGNANT <input type="checkbox"/>  How long would you like to wait from now before the birth of (a/another) child?  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	→609 →614 →609
604	CHECK 226:  NOT PREGNANT <input type="checkbox"/> OR UNSURE PREGNANT <input type="checkbox"/>		→610
605	CHECK 310: USING A CONTRACEPTIVE METHOD?  NOT <input type="checkbox"/> ASKED CURRENTLY <input type="checkbox"/> NOT USING CURRENTLY <input type="checkbox"/> USING		→608
606	CHECK 603:  NOT <input type="checkbox"/> ASKED 24 OR MORE MONTHS <input type="checkbox"/> OR 02 OR MORE YEARS 00-23 MONTHS <input type="checkbox"/> OR 00-01 YEAR		→610



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
607	<p>CHECK 602:</p> <p>WANTS TO HAVE A/ANOTHER CHILD <input type="checkbox"/></p> <p>↓</p> <p>You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy. Can you tell me why?</p> <p>Any other reason?</p> <p>RECORD ALL REASONS MENTIONED.</p> <p>WANTS NO MORE/ NONE <input type="checkbox"/></p> <p>↓</p> <p>You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy. Can you tell me why?</p> <p>Any other reason?</p>	<p>NOT MARRIED .....A</p> <p>FERTILITY-RELATED REASONS</p> <p>NOT HAVING SEX.....B</p> <p>INFREQUENT SEX.....C</p> <p>MENOPAUSAL/HYSTERECTOMY.....D</p> <p>SUBFECUND/INFECUND .....E</p> <p>POSTPARTUM AMENORRHEIC .....F</p> <p>BREASTFEEDING .....G</p> <p>GOD WILL DECIDE/FATE .....H</p> <p>OPPOSITION TO USE</p> <p>RESPONDENT OPPOSED.....I</p> <p>HUSBAND/PARTNER OPPOSED .....J</p> <p>OTHERS OPPOSED.....K</p> <p>RELIGIOUS PROHIBITION .....L</p> <p>LACK OF KNOWLEDGE</p> <p>KNOWS NO METHOD.....M</p> <p>KNOWS NO SOURCE .....N</p> <p>METHOD-RELATED REASONS</p> <p>HEALTH CONCERNS.....O</p> <p>FEAR OF SIDE EFFECTS .....P</p> <p>LACK OF ACCESS/TOO FAR .....Q</p> <p>COSTS TOO MUCH .....R</p> <p>INCONVENIENT TO USE.....S</p> <p>INTERFERES WITH BODY'S NATURAL PROCESSES .....T</p> <p>OTHER _____ X (SPECIFY)</p> <p>DON'T KNOW .....Z</p>	
608	<p>In the next few weeks, if you discovered that you were pregnant, would that be a big problem, a small problem, or no problem for you?</p>	<p>BIG PROBLEM.....1</p> <p>SMALL PROBLEM .....2</p> <p>NO PROBLEM.....3</p> <p>SAYS SHE CAN'T GET PREGNANT/ NOT HAVING SEX.....4</p>	
609	<p>CHECK 310: USING A CONTRACEPTIVE METHOD?</p> <p>NOT ASKED <input type="checkbox"/></p> <p>↓</p> <p>NO, NOT CURRENTLY USING <input type="checkbox"/></p> <p>↓</p> <p>YES, CURRENTLY USING <input type="checkbox"/></p>		→614
610	<p>Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?</p>	<p>YES .....1</p> <p>NO .....2</p> <p>DON'T KNOW .....8</p>	→612
611	<p>Which contraceptive method would you prefer to use?</p>	<p>FEMALE STERILIZATION .....01</p> <p>MALE STERILIZATION .....02</p> <p>PILL .....03</p> <p>IUD .....04</p> <p>INJECTABLES .....05</p> <p>IMPLANTS .....06</p> <p>CONDOM .....07</p> <p>FEMALE CONDOM.....08</p> <p>DIAPHRAGM.....09</p> <p>FOAM/JELLY.....10</p> <p>LACTATIONAL AMEN. METHOD .....11</p> <p>PERIODIC ABSTINENCE .....12</p> <p>WITHDRAWAL .....13</p> <p>OTHER _____ 96 (SPECIFY)</p> <p>UNSURE .....98</p>	→614

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																														
612	What is the main reason that you think you will not use a contraceptive method at any time in the future?	NOT MARRIED ..... 11  FERTILITY-RELATED REASONS INFREQUENT SEX/NO SEX ..... 22 MENOPAUSAL/HYSTERECTOMY ..... 23 SUBFECUND/INFECUND ..... 24 WANTS AS MANY CHILDREN AS POSSIBLE ..... 26  OPPOSITION TO USE RESPONDENT OPPOSED ..... 31 HUSBAND/PARTNER OPPOSED ..... 32 OTHERS OPPOSED ..... 33 RELIGIOUS PROHIBITION ..... 34  LACK OF KNOWLEDGE KNOWS NO METHOD ..... 41 KNOWS NO SOURCE ..... 42  METHOD-RELATED REASONS HEALTH CONCERNS ..... 51 FEAR OF SIDE EFFECTS ..... 52 LACK OF ACCESS/TOO FAR ..... 53 COSTS TOO MUCH ..... 54 INCONVENIENT TO USE ..... 55 INTERFERES WITH BODY'S NORMAL PROCESSES ..... 56  OTHER ..... 96 (SPECIFY) DON'T KNOW ..... 98	→614																														
613	Would you ever use a contraceptive method if you were married?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																															
614	CHECK 216:  HAS LIVING CHILDREN <input type="checkbox"/> NO LIVING CHILDREN <input type="checkbox"/> 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?  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.	NUMBER ..... <input type="text"/> <input type="text"/>  OTHER ..... 96 (SPECIFY)	→616																														
615	How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter?	BOYS      GIRLS      EITHER NUMBER <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>  OTHER ..... 96 (SPECIFY)																															
616	Would you say that you approve or disapprove of couples using a method to avoid getting pregnant?	APPROVE ..... 1 DISAPPROVE ..... 2 DON'T KNOW/UNSURE ..... 3																															
617	In the last 3 months have you heard/read about family planning:	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">YES</th> <th style="width: 10%; text-align: center;">NO</th> </tr> </thead> <tbody> <tr> <td>RADIO .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>TELEVISION .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>NEWSPAPER OR MAGAZINE ....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>POSTER.....</td> <td style="text-align: center;">1</td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> </tr> <tr> <td>LEAFLETS OR BROCHURES.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>TOWN CRIER.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>MOBILE PUBLIC ANNOUNCEMEN.....</td> <td style="text-align: center;">1</td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> </tr> </tbody> </table>		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			
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2																																	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																				
619	In the last 3 months, have you discussed the practice of family planning with your friends, neighbours, or relatives?	YES ..... 1 NO ..... 2	→621																				
620	With whom? Anyone else? RECORD ALL PERSONS MENTIONED.	HUSBAND/PARTNER ..... A MOTHER ..... B FATHER ..... C SISTER(S) ..... D BROTHER(S) ..... E DAUGHTER(S) ..... F SON(S) ..... G MOTHER-IN-LAW ..... H FRIENDS/NEIGHBOURS ..... I  OTHER _____ X (SPECIFY)																					
621	CHECK 501:  YES, CURRENTLY MARRIED <input type="checkbox"/> YES, LIVING WITH A MAN <input type="checkbox"/> NO, NOT IN UNION <input type="checkbox"/>		→628																				
622	CHECK 311/311A:  AT LEAST ONE CODE CIRCLED <input type="checkbox"/> NO CODE CIRCLED <input type="checkbox"/>		→624																				
623	You have told me that you are currently using contraception. 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)																					
624	Now I want to ask you about your husband's/partner's views on family planning.  Do you think that your husband/partner approves or disapproves of couples using a contraceptive method to avoid pregnancy?	APPROVES ..... 1 DISAPPROVES ..... 2 DON'T KNOW ..... 8																					
625	How often have you talked to your husband/partner about family planning in the past year?	NEVER ..... 1 ONCE OR TWICE ..... 2 MORE OFTEN ..... 3																					
627	Do you think your husband/partner wants 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																					
628	Husbands and wives do not always agree on everything. Please tell me if you think a wife is justified in refusing to have sex with her husband when:  She knows her husband has a sexually transmitted infection? She knows her husband has sex with women other than his wives? She has recently given birth? She is tired or not in the mood?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>HAS STI.....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>OTHER WOMEN.....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>RECENT BIRTH.....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>TIRED/MOOD.....</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		YES	NO	DK	HAS STI.....	1	2	8	OTHER WOMEN.....	1	2	8	RECENT BIRTH.....	1	2	8	TIRED/MOOD.....	1	2	8	
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628A	When a wife knows her husband has a sexually transmitted infection, is she justified in asking that he use a condom?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																					

SECTION 7. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 501 AND 502:  CURRENTLY MARRIED/ LIVING WITH A MAN <input type="checkbox"/>  FORMERLY MARRIED/ LIVED WITH A MAN <input type="checkbox"/>  NEVER MARRIED AND NEVER LIVED WITH A MAN <input type="checkbox"/>	      	  →703  →707
702	How old was your husband/partner on his last birthday?	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
703	Did your (last) husband/partner ever attend school?	YES..... 1 NO.....2	→706
704	What was the highest level of school he attended: primary, secondary, or higher?	PRIMARY..... 1 SECONDARY..... 2 HIGHER.....3 DON'T KNOW.....8	→706
705	What was the highest (class/form/year) he completed at that level ?	CLASS ..... <input type="text"/> <input type="text"/>  DON'T KNOW.....98	
706	CHECK 701:  CURRENTLY MARRIED/ LIVING WITH A MAN <input type="checkbox"/>  FORMERLY MARRIED/ LIVED WITH A MAN <input type="checkbox"/>  What is your husband's/partner's occupation?      What was your (last) husband's/ That is, what kind of work does      partner's occupation? he mainly do?      That is, what kind of work did he 	      	
707	Aside from your own housework, are you currently working?	YES..... 1 NO.....2	→710
708	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. Are you currently doing any of these things or any other work?	YES..... 1 NO.....2	→710
709	Have you done any work in the last 12 months?	YES..... 1 NO.....2	→719
710	What is your occupation, that is, what kind of work do you mainly do?	    	
711	CHECK 710:  WORKS IN AGRICULTURE <input type="checkbox"/>  DOES NOT WORK IN AGRICULTURE <input type="checkbox"/>		→713
712	Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?	OWN LAND.....1 FAMILY LAND.....2 RENTED LAND.....3 SOMEONE ELSE'S LAND.....4	
713	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
714	Do you usually work at home or away from home?	HOME.....1 AWAY.....2	
714A	CHECK 217 AND 218: IS A CHILD LIVING AT HOME WHO IS AGE 5 OR LESS?  YES <input type="checkbox"/> <input type="checkbox"/> NO		→715
714B	Who usually takes care of (NAME OF YOUNGEST CHILD AT HOME) while you are working?	RESPONDENT .....01 HUSBAND/PARTNER.....02 OLDER FEMALE CHILD.....03 OLDER MALE CHILD .....04 OTHER RELATIVES.....05 NEIGHBOURS .....06 FRIENDS .....07 SERVANTS/HIRED HELP .....08 CHILD IS IN SCHOOL .....09 INSTITUTIONAL CHILD CARE.....10 HAS NOT WORKED SINCE LAST BIRTH.....95 OTHER _____ 96 (SPECIFY)	
715	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	
716	Are you paid or do you earn 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	→719
717	Who mainly decides how the money you earn will be used?	RESPONDENT .....1 HUSBAND/PARTNER.....2 RESPONDENT AND HUSBAND/PARTNER JOINTLY .....3 SOMEONE ELSE.....4 RESPONDENT AND SOMEONE ELSE JOINTLY.....5	
718	On average, how much of your household's expenditures do your earnings pay for: none, almost none, less than half, about half, more than half, or all?	NONE.....1 ALMOST NONE .....2 LESS THAN HALF .....3 ABOUT HALF .....4 MORE THAN HALF .....5 ALL.....6	
719	Who in your family usually has the final say on the following decisions:  Your own health care? Making large household purchases? Making household purchases for daily needs? Visits to family or relatives? What food should be cooked each day? Children's health care? Children's education?	RESPONDENT = 1 HUSBAND/PARTNER = 2 RESPONDENT & HUSBAND/PARTNER JOINTLY = 3 SOMEONE ELSE = 4 RESPONDENT & SOMEONE ELSE JOINTLY = 5 DECISION NOT MADE/NOT APPLICABLE = 6  1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6 1 2 3 4 5 6	
720	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        8 HUSBAND..... 1        2        8 OTHER MALES..... 1        2        8 OTHER FEMALES..... 1        2        8	



SECTION 8: AIDS AND OTHER SEXUALLY TRANSMITTED INFECTIONS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES ..... 1 NO ..... 2	→817
801A	How can a person get AIDS?  Any other ways?  RECORD ALL MENTIONED.	SEX WITH PROSTITUTES ..... A SEXUAL INTERCOURSE WITH MULTIPLE PARTNERS ..... B SEX WITH PROSTITUTES ..... C NOT USING CONDOM ..... D HOMOSEXUAL CONTACT ..... E BLOOD TRANSFUSION ..... F INJECTIONS ..... G KISSING ..... H MOSQUITO BITES ..... I CIRCUMCISION ..... J RAZOR BLADES/BARBER/CLIPPER..... K SHARP OBJECTS..... L  OTHER _____ W (SPECIFY)  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	
802	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	↳809
803	What can a person do?  Anything else?  RECORD ALL WAYS MENTIONED.	ABSTAIN FROM SEX ..... A USE CONDOMS ..... B LIMIT SEX TO ONE PARTNER/STAY FAITHFUL TO ONE PARTNER ..... C LIMIT NUMBER OF SEXUAL PARTNERS ..... D AVOID SEX WITH PROSTITUTES ..... E AVOID SEX WITH PERSONS WHO HAVE MANY PARTNERS..... F AVOID SEX WITH HOMOSEXUALS ..... G AVOID SEX WITH PERSONS WHO INJECT DRUGS INTRAVENOUSLY ... H AVOID BLOOD TRANSFUSIONS..... I AVOID INJECTIONS ..... J AVOID SHARING RAZORS/BLADES..... K AVOID KISSING..... L AVOID MOSQUITO BITES ..... M SEEK PROTECTION FROM TRADITIONAL PRACTITIONER..... N AVOID USING SHARP OBJECTS..... O  OTHER _____ W (SPECIFY)  OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	
804	Can people reduce their chances of getting the AIDS virus by having just one sex partner who is not infected and who has no other partners?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
805	Can a person get the AIDS virus from mosquito bites?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
806	Can people reduce their chances of getting the AIDS virus by using a condom every time they have sex?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																					
807	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																						
808	Can a person reduce their chance of getting the AIDS virus by not having sex at all?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																						
808A	Can people get the AIDS virus because of witchcraft or other supernatural means?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																						
809	Is it possible for a healthy-looking person to have the AIDS virus?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																						
810	Do you know someone personally who has the virus that causes AIDS or someone who died of AIDS?	YES ..... 1 NO ..... 2																						
811	Can the virus that causes AIDS be transmitted from a mother to a child?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→813																					
812	Can the virus that causes AIDS be transmitted from a mother to a child:  During pregnancy? During delivery? By breastfeeding?	<table border="0"> <tr> <td></td> <td>YES</td> <td>NO</td> <td>DK</td> </tr> <tr> <td>DURING PREG .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>DURING DELIVERY... 1</td> <td>2</td> <td>8</td> <td></td> </tr> <tr> <td>BREASTFEEDING .... 1</td> <td>2</td> <td>8</td> <td></td> </tr> </table>		YES	NO	DK	DURING PREG .....	1	2	8	DURING DELIVERY... 1	2	8		BREASTFEEDING .... 1	2	8							
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DURING PREG .....	1	2	8																					
DURING DELIVERY... 1	2	8																						
BREASTFEEDING .... 1	2	8																						
812A	Have you heard of any drugs that a woman infected with the AIDS virus can take to reduce the risk of transmission to the baby during pregnancy?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																						
813	CHECK 501: YES, CURRENTLY MARRIED/ LIVING WITH A MAN <input type="checkbox"/> NO, NOT IN UNION <input type="checkbox"/>		→814A																					
814	Have you ever talked with (your husband/the man you are living with) about ways to prevent getting the virus that causes AIDS?	YES ..... 1 NO ..... 2																						
814A	In your opinion, is it acceptable or unacceptable for AIDS to be discussed:  On the radio? On the TV?  In newspapers/magazines? In Church/Mosque? At home? In School?	<table border="0"> <tr> <td></td> <td>ACCEPT ABLE</td> <td>NOT ACCEPT ABLE</td> </tr> <tr> <td>ON THE RADIO.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>ON THE TV .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>IN NEWSPAPERS/ MAGAZINES .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>IN CHURCH/MOSQUE</td> <td>1</td> <td>2</td> </tr> <tr> <td>AT HOME .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>IN SCHOOL.....</td> <td>1</td> <td>2</td> </tr> </table>		ACCEPT ABLE	NOT ACCEPT ABLE	ON THE RADIO.....	1	2	ON THE TV .....	1	2	IN NEWSPAPERS/ MAGAZINES .....	1	2	IN CHURCH/MOSQUE	1	2	AT HOME .....	1	2	IN SCHOOL.....	1	2	
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IN SCHOOL.....	1	2																						
814B	Would you buy fresh vegetables from a seller who has the AIDS virus?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8																						
815	If a member of your family got infected with the virus that causes AIDS, would you want it to remain a secret or not?	YES, SECRET ..... 1 NO, NOT SECRET ..... 2 DK/NOT SURE ..... 8																						
816	If a relative of yours became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household?	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS..... 8																						
816A	If a female teacher has the AIDS virus, should she be allowed to continue teaching in the school?	CAN CONTINUE ..... 1 SHOULD NOT CONTINUE ..... 2 DK/NOT SURE/DEPENDS..... 8																						
816B	Should children age 12-14 be taught about using a condom to avoid AIDS?	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS..... 8																						
816C	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	→816D																					



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
816C1	When was the last time you were tested?	LESS THAN 12 MONTHS ..... 1 12-23 MONTHS ..... 2 2 YEARS OR MORE ..... 3	
816C2	The last time you had the test, did you yourself ask for the test, was it offered to you and you accepted, or was it required?	ASKED FOR THE TEST ..... 1 OFFERED AND ACCEPTED ..... 2 REQUIRED ..... 3	
816C3	I don't want to know the results, but did you get the results of the test?	YES ..... 1 NO ..... 2	→816FX
816D	Would you want to be tested for the AIDS virus?	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
816E	Do you know a place where you could go to get an AIDS test?	YES ..... 1 NO ..... 2	→816G
816F	Where can you go for the test?  RECORD ONLY FIRST RESPONSE GIVEN.	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 11 GOVT. HEALTH CENTER ..... 12 FAMILY PLANNING CLINIC ..... 13 MOBILE CLINIC ..... 14 DISPENSARY ..... 15  OTHER PUBLIC _____ 16 (SPECIFY)	
816FX	Where did you go for the test?  IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  _____ (NAME OF PLACE)	PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... 21 PHARMACY/PATENT MEDICINE STORE ..... 22 PRIVATE DOCTOR ..... 23 MOBILE CLINIC ..... 24 OTHER PRIVATE MEDICAL _____ 26 (SPECIFY)  OTHER SOURCE SHOP ..... 31 CHURCH ..... 32 FRIENDS/RELATIVES ..... 33  OTHER _____ 96 (SPECIFY)	
816G	Do you think your chances of getting AIDS are small, moderate, great, or no risk at all?	SMALL ..... 1 MODERATE ..... 2 GREAT ..... 3 NO RISK AT ALL ..... 4 HAS AIDS ..... 5 DON'T KNOW/UNSURE ..... 8	→816I →816I →816K →816J
816H	Why do you think that you have (NO RISK/A SMALL CHANCE) of getting AIDS?  Any other reasons?  RECORD ALL MENTIONED.	ABSTAIN FROM SEX ..... B USE CONDOMS ..... C AVOID MULTIPLE SEX PARTNERS ..... D AVOID SEX WITH PROSTITUTES ..... E AVOID SEX WITH HOMOSEXUALS ..... F ENSURE SAFE BLOOD TRANSFUSION ..... G ENSURE INJECTION WITH STERILIZED NEEDLE ..... H AVOID KISSING ..... I AVOID MOSQUITO BITES ..... J SEEK PROTECTION FROM TRADITIONAL HEALER ..... K  OTHER _____ W (SPECIFY) OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	→816J

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
816I	<p>Why do you think that you have a (MODERATE/GREAT CHANCE) of getting AIDS?</p> <p>Any other reasons?</p> <p>RECORD ALL MENTIONED.</p>	<p>DO NOT USE CONDOMS .....A</p> <p>MORE THAN ONE SEXUAL PARTNER...B</p> <p>SEX WITH PROSTITUTES ..... C</p> <p>SPOUSE HAS OTHER PARTNER(S) .... D</p> <p>HOMOSEXUAL CONTACT .....E</p> <p>HAD BLOOD TRANSFUSION..... F</p> <p>HAD INJECTIONS WITH UNSTERILISED NEEDLES..... G</p> <p>SEEK PROTECTION FROM TRADITIONAL HEALER ..... H</p> <p>OTHER _____ W (SPECIFY)</p> <p>OTHER _____ X (SPECIFY)</p> <p>DON'T KNOW..... Z</p>	
816J	<p>Since you heard of AIDS, have you changed your behaviour to prevent getting AIDS?</p> <p>IF YES, what did you do?</p> <p>RECORD ALL MENTIONED.</p>	<p>DIDN'T START SEX.....A</p> <p>STOPPED ALL SEX .....B</p> <p>STARTED USING CONDOMS ..... C</p> <p>RESTRICTED SEX TO ONE PARTNER D</p> <p>REDUCED NUMBER OF PARTNERS .....E</p> <p>ADVICE SPOUSE/PARTNER TO BE FAITHFUL ..... F</p> <p>NO MORE HOMOSEXUAL CONTACTS G</p> <p>ENSURE INJECTION WITH STERILIZED NEEDLES ..... H</p> <p>OTHER _____ W (SPECIFY)</p> <p>OTHER _____ X (SPECIFY)</p> <p>NO BEHAVIOUR CHANGE ..... Y</p>	
816K	<p>From which sources of information have you learned most about AIDS?</p> <p>Any other source?</p> <p>RECORD ALL MENTIONED.</p>	<p>RADIO .....A</p> <p>T.V. ....B</p> <p>NEWSPAPER/MAGAZINE ..... C</p> <p>PAMPHLETS/POSTERS ..... D</p> <p>HEALTH WORKERS .....E</p> <p>CHURCHES/MOSQUES ..... F</p> <p>SCHOOLS/TEACHERS ..... G</p> <p>COMMUNITY MEETINGS ..... H</p> <p>FRIENDS/RELATIVES .....I</p> <p>WORKPLACE ..... J</p> <p>OTHER _____ X (SPECIFY)</p>	
817	<p>(Apart from AIDS), have you heard about (other) infections that can be transmitted through sexual contact?</p>	<p>YES .....1</p> <p>NO .....2</p>	→819A



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP															
819G	<p>The last time you had (PROBLEM FROM 819B/819C/819D), did you do any of the following? Did you....</p> <p>Go to a clinic, hospital or private doctor?  Consult a traditional healer?  Seek advice or buy medicines in a shop or pharmacy?  Ask for advice from friends or relatives?</p>	<table> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>CLINIC/HOSPITAL.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>TRADITIONAL HEALER.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>SHOP/PHARMACY.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>FRIENDS/RELATIVES.....</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	CLINIC/HOSPITAL.....	1	2	TRADITIONAL HEALER.....	1	2	SHOP/PHARMACY.....	1	2	FRIENDS/RELATIVES.....	1	2	
	YES	NO																
CLINIC/HOSPITAL.....	1	2																
TRADITIONAL HEALER.....	1	2																
SHOP/PHARMACY.....	1	2																
FRIENDS/RELATIVES.....	1	2																
819H	<p>When you had (PROBLEM FROM 819B/819C/819D), did you inform the person with whom you were having sex?</p>	<p>YES .....1  NO .....2  SOME/NOT ALL.....3  DID NOT HAVE PARTNER.....4</p>	→901															
819I	<p>When you had (PROBLEM FROM 819B/819C/819D), did you do something to avoid infecting your sexual partner(s)?</p>	<p>YES .....1  NO .....2  PARTNER ALREADY INFECTED.....3</p>	→901															
819J	<p>What did you do to avoid infecting your partner(s)? Did you....</p> <p>Use medicine?  Stop having sex?  Use a condom when having sex?</p>	<table> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>USE MEDICINE.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>STOP SEX.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>USE CONDOM.....</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		YES	NO	USE MEDICINE.....	1	2	STOP SEX.....	1	2	USE CONDOM.....	1	2				
	YES	NO																
USE MEDICINE.....	1	2																
STOP SEX.....	1	2																
USE CONDOM.....	1	2																

SECTION 9. FEMALE GENITAL CUTTING (CIRCUMCISION)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	Have you ever heard of female circumcision?	YES .....1 NO .....2	→903
902	In a number of countries, there is a practice in which a girl may have part of her genitals cut. Have you ever heard about this practice?	YES .....1 NO .....2	→925
903	Have you ever been circumcised?	YES .....1 NO .....2 DON'T KNOW .....8	↳909
904	Now I would like to ask you what was done to you at this time. Was any flesh removed from the genital area?	YES .....1 NO .....2 DON'T KNOW .....8	→906
905	Was the genital area cut on the surface without removing any flesh?	YES .....1 NO .....2 DON'T KNOW .....8	
906	Was your genital area sewn closed?	YES .....1 NO .....2 DON'T KNOW .....8	
907	How old were you when this occurred?  IF THE RESPONDENT DOES NOT KNOW THE EXACT AGE, PROBE TO GET AN ESTIMATE.	AGE IN COMPLETED YEARS..... <input type="text"/>  DURING INFANCY .....95 DON'T KNOW .....98	
908	Who did the circumcision?	TRADITIONAL TRAD. "CIRCUMCISER" .....11 TRAD. BIRTH ATTENDANT .....12  OTHER TRADITIONAL .....16 (SPECIFY)  HEALTH PROFESSIONAL DOCTOR .....21 TRAINED NURSE/MIDWIFE.....22  OTHER HEALTH PROFESSIONAL .....26 (SPECIFY) DON'T KNOW .....98	
909	CHECK 214 AND 216:  HAS AT LEAST ONE LIVING DAUGHTER <input type="checkbox"/> HAS NO LIVING DAUGHTER <input type="checkbox"/>		→919
910	Have any of your daughters been circumcised? IF YES: How many?	NUMBER CIRCUMCISED ..... <input type="text"/> NO DAUGHTER CIRCUMCISED .....95	→918
911	To which of your daughters did this happen most recently?  _____ (DAUGHTER'S NAME)  INTERVIEWER: CHECK 212 AND RECORD THE LINE NUMBER FOR THE DAUGHTER	DAUGHTER'S LINE NUMBER FROM Q212 ..... <input type="text"/>	
912	Now I would like to ask you what was done to (NAME OF THE DAUGHTER FROM Q.911) at this time? Was any flesh removed from her genital area?	YES .....1 NO .....2 DON'T KNOW .....8	→914
913	Was her genital area cut on the surface without removing any flesh?	YES .....1 NO .....2 DON'T KNOW .....8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
914	Was her genital area sewn closed?	YES .....1 NO .....2 DON'T KNOW .....8	
915	How old was (NAME OF THE DAUGHTER FROM Q.911) when this occurred?  IF THE RESPONDENT DOES NOT KNOW THE AGE, PROBE TO GET AN ESTIMATE.	AGE IN COMPLETED YEARS..... <input type="text"/>  DURING INFANCY .....95 DON'T KNOW .....98	
916	Who did the circumcision?	TRADITIONAL TRAD. "CIRCUMCISER" .....11 TRAD. BIRTH ATTENDANT .....12  OTHER TRADITIONAL .....16 (SPECIFY)  HEALTH PROFESSIONAL DOCTOR .....21 TRAINED NURSE/MIDWIFE .....22  OTHER HEALTH PROFESSIONAL .....26 (SPECIFY) DON'T KNOW .....98	
917	At the time of circumcision or afterwards, did (NAME OF THE DAUGHTER FROM Q.911) have any of the following:  Excessive bleeding? Difficulty in passing urine or urine retention?  Swelling in the genital area? Infection in the genital area? / Wound that did not heal properly?	YES NO DK EXCESSIVE BLEEDING .....1 2 8 DIF. IN PASSING URINE/ URINE RETENTION .....1 2 8 SWELLING .....1 2 8 INFECTION/NOT HEAL PROPERLY .....1 2 8	} →919
918	Do you intend to have any of your daughters circumcised in the future?	YES .....1 NO .....2 DON'T KNOW .....8	
919	What benefits do girls themselves get if they undergo this circumcision?  PROBE: Any other benefits?  RECORD ALL MENTIONED.	CLEANLINESS/HYGIENE ..... A SOCIAL ACCEPTANCE ..... B BETTER MARRIAGE PROSPECTS ..... C PRESERVE VIRGINITY/PREVENT PREMARITAL SEX ..... D MORE SEXUAL PLEASURE FOR THE MAN ..... E RELIGIOUS APPROVAL ..... F  OTHER ..... X (SPECIFY) NO BENEFITS ..... Y DON'T KNOW ..... Z	
920	What benefits do girls themselves get if they do <u>not</u> undergo this circumcision?  PROBE: Anything else?  RECORD ALL MENTIONED.	FEWER MEDICAL PROBLEMS ..... A AVOIDING PAIN ..... B MORE SEXUAL PLEASURE FOR HER ..... C MORE SEXUAL PLEASURE FOR THE MAN ..... D FOLLOWS RELIGION ..... E  OTHER ..... X (SPECIFY) NO BENEFITS ..... Y DON'T KNOW ..... Z	
921	Would you say that this practice is a way to prevent a girl from having sex before marriage or does it have no effect?	PREVENT SEX .....1 NO EFFECT .....2 DON'T KNOW .....8	
922	Do you believe that this practice is required by your religion?	YES .....1 NO .....2 DON'T KNOW .....8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
923	Do you think that this practice should be continued, or should it be discontinued?	CONTINUED .....1 DISCONTINUED .....2 DEPENDS .....3 DON'T KNOW .....8									
924	Do you think that men want this practice to be continued, or discontinued?	CONTINUED .....1 DISCONTINUED .....2 DEPENDS .....3 DON'T KNOW .....8									
925	RECORD THE TIME.	HOUR ..... <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table> MINUTES ..... <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table>									

**NOTE: GO BACK TO THE HOUSEHOLD QUESTIONNAIRE AND ADMINISTER THE HEIGHT AND WEIGHT SECTION.**

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

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COMMENTS ON SPECIFIC QUESTIONS:

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ANY OTHER COMMENTS:

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SUPERVISOR'S OBSERVATIONS

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NAME OF THE SUPERVISOR: \_\_\_\_\_ DATE: \_\_\_\_\_

EDITOR'S OBSERVATIONS

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NAME OF EDITOR: \_\_\_\_\_ DATE: \_\_\_\_\_



**NIGERIA DEMOGRAPHIC AND HEALTH SURVEY 2003  
INDIVIDUAL MAN'S QUESTIONNAIRE**

NATIONAL POPULATION COMMISSION

IDENTIFICATION																																	
STATE NAME _____	<table border="1" style="margin: auto;"> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>																																
LOCAL GOVT. AREA _____																																	
LOCALITY NAME _____																																	
ENUMERATION AREA _____																																	
URBAN /RURAL (URBAN = 1, RURAL = 2) _____																																	
CLUSTER NUMBER.....																																	
BUILDING NUMBER.....																																	
HOUSEHOLD NAME/NUMBER _____																																	
LARGE TOWN/MEDIUM TOWN/SMALL TOWN/VILLAGE (LARGE TOWN = 1, MEDIUM TOWN = 2, SMALL TOWN = 3, VILLAGE = 4)	<table border="1" style="margin: auto;"> <tr><td> </td><td> </td></tr> </table>																																
NAME AND LINE NUMBER OF MAN _____																																	

INTERVIEWER VISITS												
	1	2	3	FINAL VISIT								
DATE	_____	_____	_____	DAY <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table> MONTH <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table> YEAR <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td><td> </td><td> </td></tr></table>								
INTERVIEWER'S NAME	_____	_____	_____	NAME <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td><td> </td><td> </td></tr></table>								
RESULT*	_____	_____	_____	RESULT <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td></tr></table>								
NEXT VISIT: DATE	_____	_____		TOTAL NO. OF VISITS <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td></tr></table>								
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 LANGUAGE OF INTERVIEW	1	2		3	4	TRANSLATOR USED?    YES    NO 1        2
NATIVE LANGUAGE OF RESPONDENT	1	2	3		4	

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY								
NAME _____ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>			NAME _____ <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>			<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>			<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>		
DATE _____	DATE _____										

ENGLISH

SECTION 1. RESPONDENT'S BACKGROUND

**INTRODUCTION AND CONSENT**

GREETINGS. My name is \_\_\_\_\_ and I am working with the National Population Commission. We are conducting a national survey about the health of women, men and children. We would very much appreciate your participation in this survey. I would like to ask you about your health. This information will help the government to plan health services. We won't take too much of your time. Whatever information you provide will be kept strictly confidential and will not be shown to other persons. We hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey? 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 (START OF INTERVIEW).	HOUR ..... <input type="text"/> <input type="text"/> MINUTES..... <input type="text"/> <input type="text"/>	
102	First I would like to ask some questions about you and your household. For most of the time until you were 12 years old, did you live in a city, in a town, or in a village?	CITY ..... 1 TOWN..... 2 VILLAGE..... 3	
103	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?  IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS ..... <input type="text"/> <input type="text"/> ALWAYS..... 95 VISITOR ..... 96	↳ 105
104	Just before you moved here, did you live in a city, in a town, or in a village?	CITY ..... 1 TOWN..... 2 VILLAGE..... 3	
105	In the last 12 months, have you ever traveled away from this community and slept away?	YES ..... 1 NO ..... 2	→ 108
106	In the last 12 months, on how many separate occasions have you traveled away from this community and slept away?	NUMBER OF TRIPS AWAY.... <input type="text"/> <input type="text"/>	
107	In the last 12 months, have you been away from this community for more than 1 month at a time?	YES ..... 1 NO ..... 2	
108	In what month and year were you born?	MONTH ..... <input type="text"/> <input type="text"/> DOES NOT KNOW MONTH ..... 98 YEAR..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DOES NOT KNOW YEAR..... 9998	
109	How old were you at your last birthday?  COMPARE AND CORRECT 108 AND/OR 109 IF INCONSISTENT.	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
110	Have you ever attended school?	YES ..... 1 NO ..... 2	→ 114
111	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY ..... 1 SECONDARY ..... 2 HIGHER..... 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
112	What is the highest (class/form/year) you completed at that level?	CLASS/FORM/YEAR ..... <input type="text"/> <input type="text"/>	
113	CHECK 111: PRIMARY <input type="checkbox"/> SECONDARY OR HIGHER <input type="checkbox"/>		→117
114	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)	
115	Have you ever participated in a literacy program or any other program that involves learning to read or write (not including primary school)?	YES ..... 1 NO ..... 2	
116	CHECK 114: CODE '2', '3' OR '4' CIRCLED <input type="checkbox"/> CODE '1' CIRCLED <input type="checkbox"/>		→118
117	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
118	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
119	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY ..... 1 AT LEAST ONCE A WEEK ..... 2 LESS THAN ONCE A WEEK ..... 3 NOT AT ALL ..... 4	
120	Are you currently working?	YES ..... 1 NO ..... 2	→123
121	Have you done any work in the last 12 months?	YES ..... 1 NO ..... 2	→123
122	What have you been doing for most of the time over the last 12 months?	GOING TO SCHOOL/STUDYING ..... 1 LOOKING FOR WORK ..... 2 RETIRED ..... 3 UNABLE TO WORK, ILL/ HANDICAPPED ..... 4 HOUSEWORK/CHILDCARE ..... 5 OTHER ..... 6 (SPECIFY)	→129
123	What is your occupation, that is, what kind of work do you mainly do?	<input type="text"/> <input type="text"/> _____ _____ _____	
124	CHECK 123: WORKS IN AGRICULTURE <input type="checkbox"/> DOES NOT WORK IN AGRICULTURE <input type="checkbox"/>		→126

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
125	Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?	OWN LAND .....1 FAMILY LAND .....2 RENTED LAND .....3 SOMEONE ELSE'S LAND .....4	
126	During the last 12 months, how many months did you work?	NUMBER OF MONTHS ..... <input type="text"/> <input type="text"/>	
127	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	↳ 129
127A	Who mainly decides how the money you earn will be used?	RESPONDENT .....1 WIFE/PARTNER .....2 RESPONDENT AND WIFE/ PARTNER JOINTLY .....3 SOMEONE ELSE .....4 RESPONDENT AND SOMEONE ELSE JOINTLY .....5	
128	On average, how much of your household's expenditures do your earnings pay for: almost none, less than half, about half, more than half, or all?	NONE .....1 ALMOST NONE .....2 LESS THAN HALF .....3 ABOUT HALF .....4 MORE THAN HALF .....5 ALL .....6	
129	What is your religion?	CATHOLIC ..... 1 PROTESTANT ..... 2 OTHER CHRISTIAN ..... 3 ISLAM ..... 4 TRADITIONALIST ..... 5 OTHER _____ 6 (SPECIFY)	
130	What is your ethnic group?	_____ <input type="text"/> <input type="text"/> <input type="text"/>	

**SECTION 2: REPRODUCTION AND PREFERENCES**

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 only in the children that are biologically yours. 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 ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS AT HOME ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
204	Do you have any sons or daughters 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 ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS ELSEWHERE .. <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
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 survived only a few hours or days?	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 ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> GIRLS DEAD ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
208	(In addition to the children that you have just told me about), have you ever fathered a) Any other living sons or daughters who are biologically yours but who are not legally yours or do not have your last name? b) Any other sons or daughters who died and who were biologically your children but were not legally yours or did not have your last name?  NO TO BOTH <input type="checkbox"/> OTHER <input type="checkbox"/> → PROBE AND CORRECT 201-207 AS NECESSARY										
209	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>									
210	CHECK 209:  HAS HAD MORE THAN ONE CHILD <input type="checkbox"/> HAS HAD ONLY ONE CHILD <input type="checkbox"/> HAS NOT HAD ANY CHILDREN <input type="checkbox"/>		→213 →301								
211	Do the children that you have fathered all have the same biological mother?	YES ..... 1 NO ..... 2	→213								
212	In all how many women have you fathered children with?	NUMBER OF WOMEN ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>									
213	How old were you when your (first) child was born?	AGE IN YEARS ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>									
214	At the time when this child was born, were you married to the child's mother?	YES ..... 1 NO ..... 2									

SECTION 3. CONTRACEPTION

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. CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNISED, AND CODE 2 IF NOT RECOGNISED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302, IF APPLICABLE.

301	Which ways or methods have you heard about? FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)?	302	Have you ever used (METHOD)?
01	FEMALE STERILISATION Women can have an operation to avoid having any more children.	YES.....1 NO .....2	
02	MALE STERILISATION Men can have an operation to avoid having any more children.	YES.....1 NO .....2	Have you ever had an operation to avoid having any more children? YES .....1 NO .....2
03	PILL Women can take a pill every day to avoid becoming pregnant.	YES.....1 NO .....2	
04	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	YES.....1 NO .....2	
05	INJECTABLES Women can have an injection by a health provider which stops them from becoming pregnant for one or more months.	YES.....1 NO .....2	
06	IMPLANTS Women can have several 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	
07	CONDOM Men can put a rubber sheath on their penis before sexual intercourse.	YES.....1 NO .....2	YES .....1 NO .....2
08	FEMALE CONDOM 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	LACTATIONAL AMENORRHEA METHOD (LAM) Up to 6 months after childbirth, a woman can use a method that requires that she breastfeeds frequently, day and night, and that her menstrual period has not returned.	YES.....1 NO .....2	
12	RHYTHM OR PERIODIC ABSTINENCE Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	YES.....1 NO .....2	YES .....1 NO .....2 DON'T KNOW .....8
13	WITHDRAWAL Men can be careful and pull out before climax.	YES.....1 NO .....2	YES .....1 NO .....2
14	EMERGENCY CONTRACEPTION Women can take pills up to three days after sexual intercourse to avoid becoming pregnant.	YES.....1 NO .....2	
15	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?  _____ (SPECIFY)  _____ (SPECIFY) NO .....2	YES.....1    NO .....2	YES .....1 NO .....2   YES .....1 NO .....2

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
303	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 if she has sexual relations?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→305
304	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	
305	Do you think that a woman who is breastfeeding her baby can become pregnant?	YES ..... 1 NO ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8	
311	CHECK 301(07) AND 302(07): KNOWLEDGE AND USE OF CONDOMS  HAS HEARD OF AND USED CONDOMS <input type="checkbox"/> HAS HEARD OF CONDOMS BUT HAS NEVER USED <input type="checkbox"/> HAS NOT HEARD OF CONDOMS <input type="checkbox"/>		→324 →324
314	Now when you have sex, do you use a condom every time, sometimes, or not at all?	EVERY TIME ..... 1 SOMETIMES ..... 2 NOT AT ALL ..... 3 NOT HAVING SEX ..... 4	→324 →324
315	When do you use a condom?  PROBE: Any other times?  RECORD ALL SITUATIONS MENTIONED.	ON PARTNER'S FERTILE DAYS ..... A DURING WIFE'S/PARTNER'S MENSTRUATION ..... B WHEN NOT USING SOME OTHER METHOD ..... C WITH A STRANGER ..... D WITH A COMMERCIAL SEX WORKER... E WITH ANYONE OTHER THAN WIFE/REGULAR PARTNER ..... F WITH WIFE/REGULAR PARTNER ..... G OTHER ..... X (SPECIFY)	
324	CHECK 301(02) AND 302(02): KNOWLEDGE OF MALE STERILIZATION  RESPONDENT IS STERILIZED <input type="checkbox"/> HAS HEARD OF MALE STERILIZATION BUT IS NOT STERILIZED <input type="checkbox"/> HAS NOT HEARD OF MALE STERILIZATION <input type="checkbox"/>		→326 →328
325	Once you have had all the children you want, would you yourself ever consider getting sterilized?	WOULD CONSIDER ..... 1 WOULD NOT CONSIDER ..... 2 UNSURE/DEPENDS ..... 3 WIFE ALREADY STERILIZED ..... 4	→327 →328
326	In your opinion what are some of the advantages of male sterilization?  PROBE: Any other advantages?  RECORD ALL ADVANTAGES MENTIONED.	PUTS MAN IN CONTROL ..... A EFFECTIVE METHOD ..... B OPERATION IS SAFE ..... C SAFER THAN FEMALE STERILIZATION ..... D OPERATION INEXPENSIVE ..... E LESS EXPENSIVE THAN FEMALE STERILIZATION ..... F OPERATION IS SIMPLE ..... G GIVES MAN FREEDOM ..... H OTHER ..... X (SPECIFY) DON'T KNOW ..... Z	→328

327	Why would you never consider getting sterilized?  PROBE: Any other reasons?  RECORD ALL REASONS MENTIONED.	AGAINST RELIGION ..... A BAD FOR MAN'S HEALTH ..... B OPERATION NOT SAFE ..... C LESS INTRUSIVE WAYS AVAILABLE ..... D MAY WANT MORE CHILDREN/MAY WANT TO REPLACE CHILD WHO DIED ..... E MAY REMARRY SOME DAY ..... F LOSS OF WEIGHT ..... G LOSS OF SEXUAL FUNCTION ..... H LOSS OF MANLINESS ..... I OTHER _____ X  (SPECIFY)	
328	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one.  a) Contraception is women's business and a man should not have to worry about it.  b) Women who use contraception may become promiscuous.  c) A woman is the one who gets pregnant so she should be the one to use contraception.	AGREE      DISAGREE      DK  a)            1            2            8  b)            1            2            8  c)            1            2            8	
329	Do you currently smoke cigarettes or tobacco?  IF YES: What type of cigarette/tobacco do you smoke?  RECORD ALL TYPES MENTIONED.	YES, CIGARETTES ..... A YES, PIPE ..... B YES, OTHER TOBACCO ..... C  NO ..... Y	
330	CHECK 329:  CODE 'A' CIRCLED <input type="checkbox"/>  CODE 'A' NOT CIRCLED <input type="checkbox"/>		→332
331	In the last 24 hours, how many cigarettes did you smoke?	CIGARETTES ..... <input type="text"/> <input type="text"/>	
332	Have you ever drunk an alcohol-containing beverage?	YES ..... 1 NO ..... 2	→401
333	In the last 3 months, on how many days did you drink an alcohol-containing beverage?  IF EVERY DAY, RECORD '90'.	NUMBER OF DAYS ..... <input type="text"/> <input type="text"/>  NONE ..... 95	
334	Have you ever gotten "drunk" from drinking an alcohol-containing beverage?	YES ..... 1 NO ..... 2	→401



335	CHECK 333:  DRANK ALCOHOL ON AT LEAST ONE DAY <input type="checkbox"/>	
NONE <input type="checkbox"/>		→401

336	In the last 3 months, on how many occasions did you get "drunk"?	NUMBER OF DAYS ..... <input type="checkbox"/> <input type="checkbox"/> NONE ..... 95	
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SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																		
401	Are you currently married or living with a woman?	YES, CURRENTLY MARRIED ..... 1 YES, LIVING WITH A WOMAN ..... 2 NO, NOT IN UNION ..... 3	→404 →406																		
402	Do you have one wife or more than one wife? IF ONLY ONE WIFE, ENTER '01' . IF MORE THAN ONE, ASK: How many wives do you currently have?	NUMBER OF WIVES ..... <input type="text"/> <input type="text"/>																			
403	Are there any other women with whom you live as if married?	YES ..... 1 NO ..... 2	→405																		
404	Are you living with one (other) woman or more than one (other) woman as if married? IF ONE LIVE-IN PARTNER, ENTER '01'. IF MORE THAN ONE, ASK: How many women are you living with as if married?	NUMBER OF ..... <input type="text"/> <input type="text"/> LIVE-IN PARTNERS																			
405	Apart from the woman/women you have already mentioned, do you currently have any other regular or occasional sexual partner?	REGULAR PARTNER(S) ONLY ..... 1 OCCASIONAL PARTNER(S) ONLY ..... 2 REGULAR AND OCCASIONAL PARTNER(S) ..... 3 NO OTHER PARTNER ..... 4	→409																		
406	Do you currently have any regular sexual partners, occasional sexual partners, or no sexual partner at all?	REGULAR PARTNER(S) ONLY ..... 1 OCCASIONAL PARTNER(S) ONLY ..... 2 REGULAR AND OCCASIONAL PARTNER(S) ..... 3 NO SEXUAL PARTNER ..... 4																			
407	Have you ever been married or lived with a woman?	YES, FORMERLY MARRIED ..... 1 YES, LIVED WITH A WOMAN ..... 2 NO ..... 3	→411 →416																		
408	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED ..... 1 DIVORCED ..... 2 SEPARATED ..... 3	→411																		
409	WRITE THE LINE NUMBERS FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE/PARTNER REPORTED IN QUESTIONS 402 AND 404 ONLY. IF A WIFE/PARTNER DOES NOT LIVE IN THE HOUSEHOLD, ENTER '00' IN THE LINE NUMBER BOXES. THE NUMBER OF LINES FILLED IN MUST BE EQUAL TO THE NUMBER OF WIVES AND PARTNERS. (IF RESPONDENT HAS MORE THAN FIVE WIVES/PARTNERS USE ADDITIONAL QUESTIONNAIRE(S)).																				
	<p>CHECK 402 AND 404</p> <p>SUM OF <input type="text"/> SUM OF <input type="text"/> 402 AND 404 = 1 402 AND 404 &gt; 1</p> <p>Please tell me the name of your wife/partner.</p> <p>Please tell me the name of each (wife/partner that you live with as if married), starting with the one you lived with first.</p> <p>WIFE/PARTNER NUMBER</p> <p>1 _____</p> <p>2 _____</p> <p>3 _____</p> <p>4 _____</p> <p>5 _____</p>	<table border="1"> <thead> <tr> <th>LINE NUMBER IN HHD. QUEST</th> <th>WIFE</th> <th>PARTNER</th> </tr> </thead> <tbody> <tr> <td><input type="text"/> <input type="text"/></td> <td>1</td> <td>2</td> </tr> <tr> <td><input type="text"/> <input type="text"/></td> <td>1</td> <td>2</td> </tr> <tr> <td><input type="text"/> <input type="text"/></td> <td>1</td> <td>2</td> </tr> <tr> <td><input type="text"/> <input type="text"/></td> <td>1</td> <td>2</td> </tr> <tr> <td><input type="text"/> <input type="text"/></td> <td>1</td> <td>2</td> </tr> </tbody> </table>	LINE NUMBER IN HHD. QUEST	WIFE	PARTNER	<input type="text"/> <input type="text"/>	1	2	<input type="text"/> <input type="text"/>	1	2	<input type="text"/> <input type="text"/>	1	2	<input type="text"/> <input type="text"/>	1	2	<input type="text"/> <input type="text"/>	1	2	
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<input type="text"/> <input type="text"/>	1	2																			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
410	CHECK 409:  ONLY ONE WIFE/ PARTNER <input type="checkbox"/> MORE THAN ONE WIFE/PARTNER <input type="checkbox"/>		→412
411	Have you been married or lived with a woman only once, or more than once?	ONCE..... 1 MORE THAN ONCE ..... 2	→414 →413
412	Have you ever been married to or lived as if married to any woman other than those you have just mentioned?	YES ..... 1 NO ..... 2	→414
413	In total, how many women have you been married to or lived with as if married in your whole life?	NUMBER OF WOMEN ..... <input type="text"/>	
414	CHECK 409 AND 411:  ONLY ONE WIFE/ PARTNER AND 411=1 <input type="checkbox"/>  In what month and year did you start living with your wife/partner?  OTHER <input type="checkbox"/>  Now we will talk about your first wife/partner. In what month and year did you start living with her?	MONTH..... <input type="text"/> DOES NOT KNOW MONTH ..... 98 YEAR ..... <input type="text"/> DOES NOT KNOW YEAR ..... 9998	→416
415	How old were you when you started living with her?	AGE..... <input type="text"/>	
416	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues.  How old were you when you first had sexual intercourse with a woman (if ever)?	NEVER..... 00 AGE IN YEARS..... <input type="text"/> FIRST TIME WHEN STARTED LIVING WITH (FIRST) WIFE/PARTNER ..... 95	→448
416A	CHECK 109:  15-24 YEARS OLD <input type="checkbox"/> 25-59 YEARS OLD <input type="checkbox"/>		→417
416B	The first time you had sexual intercourse, was a condom used?	YES ..... 1 NO ..... 2	
416C	What is your relationship to the woman with whom you had your first sexual intercourse?	GIRL-FRIEND ..... 1 SPOUSE ..... 2 CASUAL PARTNER..... 3 COMMERCIAL SEX WORKER ..... 4 OTHER ..... 6 (SPECIFY)	
417	When was the last time you had sexual intercourse with a woman?  RECORD 'YEARS AGO' ONLY IF LAST INTERCOURSE WAS ONE OR MORE YEARS AGO.  IF 12 MONTHS OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO ..... 1 <input type="text"/> WEEKS AGO ..... 2 <input type="text"/> MONTHS AGO..... 3 <input type="text"/> YEARS AGO ..... 4 <input type="text"/>	→445
418	The last time you had sexual intercourse with a woman, did you use a condom?	YES ..... 1 NO ..... 2	→420

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
419	What was the main reason you used a condom on that occasion?	RESPONDENT WANTED TO PREVENT STI/HIV..... 1 RESPONDENT WANTED TO PREVENT PREGNANCY ..... 2 RESPONDENT WANTED TO PREVENT BOTH STI/HIV AND PREGNANCY ..... 3 DID NOT TRUST PARTNER/FELT SHE HAD OTHER PARTNERS ..... 4 PARTNER REQUESTED/INSISTED ..... 5 OTHER _____ 6 (SPECIFY) DON'T KNOW.....8	→424
420	CHECK 302(02): RESPONDENT NOT STERILIZED <input type="checkbox"/> RESPONDENT STERILIZED <input type="checkbox"/>		→424
421	The last time you had sexual intercourse with a woman, did you or she do something or use any method to avoid a pregnancy?	YES ..... 1 NO ..... 2 UNSURE/DON'T KNOW ..... 8	→423 →424
422	What method was used? IF MORE THAN ONE METHOD USED, RECORD THE HIGHEST METHOD ON THE LIST.	FEMALE STERILIZATION ..... 01 PILL ..... 03 IUD ..... 04 INJECTABLES ..... 05 IMPLANTS ..... 06 FEMALE CONDOM ..... 08 DIAPHRAGM ..... 09 FOAM/JELLY ..... 10 LACTATIONAL AMENORRHEA ..... 11 PERIODIC ABSTINENCE ..... 12 WITHDRAWAL ..... 13 OTHER _____ 96 (SPECIFY) DON'T KNOW ..... 98	→424

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
423	What is the main reason a method was not used?	CASUAL SEX PARTNER SO DOES NOT CARE ..... 11 CONTRACEPTION WOMEN'S BUSINESS ..... 12  FERTILITY-RELATED REASONS WIFE/PARTNER MENOPAUSAL/HAD HYSTERECTOMY ..... 23 COUPLE SUBFECUND/INFECUND . 24 WIFE/PARTNER WAS PREGNANT. 25 WIFE/PARTNER WAS POSTPARTUM AMENORRHEIC ..... 26 WIFE/PARTNER WAS BREASTFEEDING ..... 27 WANTED (MORE) CHILDREN ..... 28  OPPOSITION TO USE RESPONDENT OPPOSED ..... 31 WIFE/PARTNER OPPOSED ..... 32 OTHERS OPPOSED ..... 33 RELIGIOUS PROHIBITION ..... 34  LACK OF KNOWLEDGE KNOWS NO METHOD ..... 41 KNOWS NO SOURCE ..... 42  METHOD-RELATED REASONS HEALTH CONCERNS ..... 51 FEAR OF SIDE EFFECTS ..... 52 LACK OF ACCESS/TOO FAR ..... 53 COST TOO MUCH ..... 54 INCONVENIENT TO USE ..... 55 INTERFERES WITH BODY'S NORMAL PROCESSES ..... 56  OTHER ..... 96 (SPECIFY) DON'T KNOW ..... 98									
424	What is your relationship to the woman with whom you last had sex? IF WOMAN IS "GIRLFRIEND" OR "FIANCÉE", ASK: Was your girlfriend/fiancée living with you when you last had sex?  IF YES, RECORD '01'. IF NO, RECORD '02'.	SPOUSE/COHABITING PARTNER ..... 01 WOMAN IS GIRLFRIEND/FIANCÉE ..... 02 OTHER FRIEND ..... 03 CASUAL ACQUAINTANCE ..... 04 RELATIVE ..... 05 COMMERCIAL SEX WORKER ..... 06  OTHER ..... 96 (SPECIFY)	→426								
425	For how long have you had (did you have) sexual relations with this woman?  IF ONLY HAD SEXUAL RELATIONS WITH THIS WOMAN ONCE, RECORD '01' DAYS.	DAYS ..... 1 <table border="1"> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> <tr><td></td><td></td></tr> </table> WEEKS ..... 2 MONTHS ..... 3 YEARS ..... 4									
426	Have you had sex with any other woman in the last 12 months?	YES ..... 1 NO ..... 2	→445								
427	The last time you had sexual intercourse with another woman, was a condom used?	YES ..... 1 NO ..... 2	→429								
428	What is the main reason you used a condom on that occasion?	RESPONDENT WANTED TO PREVENT STI/HIV ..... 01 RESPONDENT WANTED TO PREVENT A PREGNANCY ..... 02 RESPONDENT WANTED TO PREVENT BOTH STI/HIV AND PREGNANCY ..... 03 DID NOT TRUST PARTNER/FELT SHE HAD OTHER PARTNERS ..... 04 PARTNER REQUESTED/INSISTED ..... 05  OTHER ..... 96 (SPECIFY) DON'T KNOW ..... 98	→433								





NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
441	What is the main reason a method was not used?	CASUAL SEX PARTNER SO DOES NOT CARE ..... 11 CONTRACEPTION WOMEN'S BUSINESS ..... 12  FERTILITY-RELATED REASONS WIFE/PARTNER MENOPAUSAL/HAD HYSTERECTOMY ..... 23 COUPLE SUBFECUND/INFECUND . 24 WIFE/PARTNER WAS PREGNANT. 25 WIFE/PARTNER WAS POSTPARTUM AMENORRHEIC ..... 26 WIFE/PARTNER WAS BREASTFEEDING ..... 27 WANTED (MORE) CHILDREN ..... 28  OPPOSITION TO USE RESPONDENT OPPOSED ..... 31 WIFE/PARTNER OPPOSED ..... 32 OTHERS OPPOSED ..... 33 RELIGIOUS PROHIBITION ..... 34  LACK OF KNOWLEDGE KNOWS NO METHOD ..... 41 KNOWS NO SOURCE ..... 42  METHOD-RELATED REASONS HEALTH CONCERNS ..... 51 FEAR OF SIDE EFFECTS ..... 52 LACK OF ACCESS/TOO FAR ..... 53 COST TOO MUCH ..... 54 INCONVENIENT TO USE ..... 55 INTERFERES WITH BODY'S NORMAL PROCESSES ..... 56  OTHER ..... 96 (SPECIFY) DON'T KNOW ..... 98									
442	What is your relationship to this woman?  IF WOMAN IS "GIRLFRIEND" OR "FIANCÉE", ASK: Was your girlfriend/fiancée living with you when you last had sex?  IF YES, RECORD '01'. IF NO, RECORD '02'.	SPOUSE/COHABITING PARTNER ..... 01 WOMAN IS GIRLFRIEND/FIANCÉE ..... 02 OTHER FRIEND ..... 03 CASUAL ACQUAINTANCE ..... 04 RELATIVE ..... 05 COMMERCIAL SEX WORKER ..... 06  OTHER ..... 96 (SPECIFY)	→444								
443	For how long have you had (did you have) sexual relations with this woman?   IF ONLY HAD SEXUAL RELATIONS WITH THIS WOMAN ONCE, RECORD '01' DAYS.	DAYS ..... 1 <table border="1"><tr><td></td><td></td></tr></table> WEEKS ..... 2 <table border="1"><tr><td></td><td></td></tr></table> MONTHS ..... 3 <table border="1"><tr><td></td><td></td></tr></table> YEARS ..... 4 <table border="1"><tr><td></td><td></td></tr></table>									
444	In total, with how many different women have you had sex in the last 12 months?	NUMBER OF PARTNERS ..... <table border="1"><tr><td></td><td></td></tr></table>									
445	Have you ever paid for sex?	YES ..... 1 NO ..... 2	→448								
446	How long ago was the last time you paid for sex?	DAYS AGO ..... 1 <table border="1"><tr><td></td><td></td></tr></table> WEEKS AGO ..... 2 <table border="1"><tr><td></td><td></td></tr></table> MONTHS AGO ..... 3 <table border="1"><tr><td></td><td></td></tr></table> YEARS AGO ..... 4 <table border="1"><tr><td></td><td></td></tr></table>									
447	The last time that you paid for sex, was a condom used on that occasion?	YES ..... 1 NO ..... 2									



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																
448	Do you know of a place where a person can get condoms?	YES ..... 1 NO ..... 2	→451																
449	<p>Where is that?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p>(NAME OF PLACE)</p> <p>Any other place?</p> <p>RECORD ALL MENTIONED.</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL ..... A</p> <p>GOVT. HEALTH CENTER ..... B</p> <p>FAMILY PLANNING CLINIC ..... C</p> <p>MOBILE CLINIC ..... D</p> <p>COMMUNITY HEALTH WORKER ..... E</p> <p>OTHER PUBLIC _____ F</p> <p>(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC ..... G</p> <p>PHARMACY/PATENT MEDICINE STORE ..... H</p> <p>PRIVATE DOCTOR ..... I</p> <p>MOBILE CLINIC ..... J</p> <p>COMMUNITY HEALTH WORKER ..... K</p> <p>OTHER PRIVATE MEDICAL _____ L</p> <p>(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP ..... M</p> <p>CHURCH ..... N</p> <p>FRIENDS/RELATIVES ..... O</p> <p>NGO ..... P</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>																	
450	If you wanted to, could you yourself get a condom?	YES ..... 1 NO ..... 2 DON'T KNOW/UNSURE ..... 8																	
451	<p>CHECK 302(07), 416B, 418, 427, 436, AND 447: USE OF CONDOMS</p> <p>AT LEAST ONE YES <input type="checkbox"/> OTHER <input type="checkbox"/></p>		→455																
452	How old were you when you used a condom for the first time?	AGE ..... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98																	
453	<p>Why did you use a condom that first time?</p> <p>PROBE: Any other reason?</p> <p>RECORD ALL REASONS MENTIONED.</p>	<p>TO AVOID A PREGNANCY ..... A</p> <p>TO AVOID GETTING AIDS/HIV ..... B</p> <p>TO AVOID GETTING AN STI ..... C</p> <p>TO AVOID INFECTING A PARTNER ..... D</p> <p>TO EXPERIMENT/TRY A CONDOM ..... E</p> <p>PARTNER REQUESTED/INSISTED ..... F</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>																	
454	<p>Have you ever experienced any problems when using condoms?</p> <p>IF YES: What problems have you experienced?</p> <p>PROBE: Any other problems?</p> <p>RECORD ALL PROBLEMS MENTIONED.</p>	<p>DIFFICULT TO DISPOSE OF ..... A</p> <p>DIFFICULT TO PUT ON/TAKE OFF ..... B</p> <p>SPOILS THE MOOD ..... C</p> <p>DIMINISHES PLEASURE ..... D</p> <p>WIFE/PARTNER OBJECTS/DOES NOT LIKE ..... E</p> <p>WIFE/PARTNER GOT PREGNANT ..... F</p> <p>INCONVENIENT TO USE/MESSY ..... G</p> <p>CONDOM BROKE ..... H</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p> <p>NO PROBLEM ..... Z</p>																	
455	<p>Is it acceptable or not acceptable to you for information on condoms to be provided:</p> <p>On the radio?</p> <p>On the television?</p> <p>In newspaper or magazine?</p>	<table border="0"> <tr> <td></td> <td>ACCEPT-ABLE</td> <td>NOT ACCEPT-ABLE</td> <td>DK</td> </tr> <tr> <td>RADIO.....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>TELEVISION....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>NEWSPAPER/MAGAZINE.....</td> <td>1</td> <td>2</td> <td>8</td> </tr> </table>		ACCEPT-ABLE	NOT ACCEPT-ABLE	DK	RADIO.....	1	2	8	TELEVISION....	1	2	8	NEWSPAPER/MAGAZINE.....	1	2	8	
	ACCEPT-ABLE	NOT ACCEPT-ABLE	DK																
RADIO.....	1	2	8																
TELEVISION....	1	2	8																
NEWSPAPER/MAGAZINE.....	1	2	8																

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
455A	<p>In the last few months, have you heard/read about condom</p> <p>On the radio?  On the television?  In a newspaper or magazine?  From a poster?  From leaflets or brochures?  From town crier?  Mobile public announcement?</p>	<p style="text-align: right;">YES</p> <p>NO</p> <p>RADIO ..... 1 2</p> <p>TELEVISION..... 1 2</p> <p>NEWSPAPER OR MAGAZINE 1 2</p> <p>POSTER..... 1 2</p> <p>LEAFLETS OR BROCHURES 1 2</p> <p>TOWN CRIER ..... 1 2</p> <p>MOBILE PUBLIC ANNOUNCEMENT----- 1 2</p>	
456	<p>I will now read to you some statements about condom use. Please tell me if you agree or disagree with each.</p> <p>a) Condoms diminish a man's sexual pleasure.  b) A condom is very inconvenient to use.  c) A condom can be reused.  d) A condom protects against disease.  e) Buying condoms is embarrassing.  f) A woman has no right to tell a man to use a condom.  g) Condoms break easily  h) Condoms are expensive</p>	<p style="text-align: center;">AGREE      DISAGREE      DK</p> <p>a)            1            2            8</p> <p>b)            1            2            8</p> <p>c)            1            2            8</p> <p>d)            1            2            8</p> <p>e)            1            2            8</p> <p>f)            1            2            8</p> <p>g)            1            2            8</p> <p>h)            1            2            8</p>	
457	<p>Do you know of a place where a person can get female condoms?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→460
458	<p>Where is that?</p> <p>IF SOURCE IS HOSPITAL, HEALTH CENTER OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>_____</p> <p style="text-align: center;">(NAME OF PLACE)</p> <p>PROBE: Any other place?</p> <p>RECORD ALL PLACES MENTIONED.</p>	<p>PUBLIC SECTOR</p> <p>GOVERNMENT HOSPITAL ..... A</p> <p>GOVT. HEALTH CENTER..... B</p> <p>FAMILY PLANNING CLINIC..... C</p> <p>MOBILE CLINIC..... D</p> <p>COMMUNITY HEALTH WORKER ..... E</p> <p>OTHER PUBLIC _____ F</p> <p style="text-align: center;">(SPECIFY)</p> <p>PRIVATE MEDICAL SECTOR</p> <p>PRIVATE HOSPITAL/CLINIC..... G</p> <p>PHARMACY/PATENT MEDICINE STORE..... H</p> <p>PRIVATE DOCTOR..... I</p> <p>MOBILE CLINIC..... J</p> <p>COMMUNITY HEALTH WORKER ..... K</p> <p>OTHER PRIVATE MEDICAL _____ L</p> <p style="text-align: center;">(SPECIFY)</p> <p>OTHER SOURCE</p> <p>SHOP ..... M</p> <p>CHURCH ..... N</p> <p>FRIENDS/RELATIVES ..... O</p> <p>NGO..... P</p> <p>OTHER _____ X</p> <p style="text-align: center;">(SPECIFY)</p>	
459	<p>If you wanted to, could you yourself get a female condom?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW/UNSURE..... 8</p>	
460	<p>As I said earlier all the information you give me will be kept secret.</p> <p>Have you ever heard of men who have sex with other men?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	→505 →505
461	<p>Do you know any man who has had sex with another man?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	→505 →505
462	<p>Have you ever had sex with another man?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	

**SECTION 5: FERTILITY PREFERENCES**

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
505	<p>CHECK 203 AND 205:</p> <p>HAS LIVING CHILDREN <input type="checkbox"/> NO LIVING CHILDREN <input type="checkbox"/></p> <p>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? <input type="text"/></p> <p>If you could choose exactly the number of children to have in your whole life, how many would that be? <input type="text"/></p> <p>PROBE FOR A NUMERIC RESPONSE.</p>	<p>NONE .....00</p> <p>NUMBER..... <input type="text"/></p> <p>OTHER _____ 96 (SPECIFY)</p>	<p>→507</p> <p>→507</p>
506	<p>How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter?</p>	<p>BOYS GIRLS EITHER</p> <p>NUMBER... <input type="text"/> <input type="text"/> <input type="text"/></p> <p>OTHER _____ 96 (SPECIFY)</p>	
507	<p>Would you say that you approve or disapprove of couples using a method to avoid getting pregnant?</p>	<p>APPROVE .....1 DISAPPROVE .....2 DON'T KNOW/UNSURE .....8</p>	
508	<p>In the last 3 months have you heard/read about family planning:</p> <p>On the radio? On the television? In newspaper or magazine? From a poster? From leaflet or brochure? From town crier? Mobile public announcement ?</p>	<p>YES NO</p> <p>RADIO .....1 2 TELEVISION .....1 2 NEWSPAPER OR MAGAZINE .....1 2 POSTER.....1 2 LEAFLET OR BROCHURE..... 1 2 TOWN CRIER .....1 2 MOBILE PUBLIC ANNOUNCEMENT.....1 2</p>	
509	<p>Is it acceptable or not acceptable to you for information on Family Planning to be provided:</p> <p>On the radio? On the television? In newspaper or magazine?</p>	<p>ACCEPT- NOT ACCEPT- ABLE ABLE DK</p> <p>RADIO.....1 2 8 TELEVISION.....1 2 8 NEWSPAPER/ MAGAZINE.....1 2 8</p>	
510	<p>In the last 3 months, have you discussed the practice of family planning with your friends, neighbours, or relatives?</p>	<p>YES .....1 NO .....2</p>	<p>→512</p>
511	<p>With whom? Anyone else? RECORD ALL MENTIONED.</p>	<p>WIFE(VES)/PARTNER .....A MOTHER.....B FATHER.....C SISTER(S).....D BROTHER(S).....E DAUGHTER(S).....F SON(S).....G MOTHER-IN-LAW .....H FATHER-IN-LAW .....I FRIENDS/NEIGHBOURS .....J OTHER _____ X (SPECIFY)</p>	
512	<p>In the last 3 months, have you discussed the practice of family planning with a health worker or health professional?</p>	<p>YES .....1 NO .....2</p>	

SECTION 7. AIDS AND OTHER SEXUALLY-TRANSMITTED INFECTIONS

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	→ 724
701A	How can a person get AIDS? Any other ways? RECORD ALL MENTIONED.	SEXUAL INTERCOURSE ..... A SEXUAL INTERCOURSE WITH MULTIPLE PARTNERS ..... B SEX WITH PROSTITUTES ..... C NOT USING CONDOM ..... D HOMOSEXUAL CONTACT ..... E BLOOD TRANSFUSION ..... F INJECTIONS ..... G KISSING ..... H MOSQUITO BITES ..... I CIRCUMCISION ..... J RAZOR BLADES/BARBER CLIPPER..... K SHARP OBJECT ..... L UNSTERILIZED/REUSED NEEDLE ..... M OTHER _____ W (SPECIFY) OTHER _____ X (SPECIFY) DON'T KNOW..... Z	
702	Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS?	YES..... 1 NO ..... 2 DON'T KNOW..... 8	↳ 709
703	What can a person do? Anything else? RECORD ALL MENTIONED.	ABSTAIN FROM SEX..... A USE CONDOMS..... B LIMIT SEX TO ONE PARTNER/STAY FAITHFUL TO ONE PARTNER..... C LIMIT NUMBER OF SEXUAL PARTNERS ..... D AVOID SEX WITH PROSTITUTES ..... E AVOID SEX WITH PERSONS WHO HAVE MANY PARTNERS ..... F AVOID SEX WITH HOMOSEXUALS ..... G AVOID SEX WITH PERSONS WHO INJECT DRUGS INTRAVENOUSLY ..... H AVOID BLOOD TRANSFUSIONS ..... I AVOID INJECTIONS ..... J AVOID SHARING RAZORS, BLADES ..... K AVOID KISSING ..... L AVOID MOSQUITO BITES..... M SEEK PROTECTION FROM TRADITIONAL HEALER..... N AVOID USING SHARP OBJECTS ..... O OTHER _____ W (SPECIFY) OTHER _____ X (SPECIFY) DOES NOT KNOW ..... Z	
704	Can people reduce their chances of getting the AIDS virus by having just one sex partner who is not infected and has no other partners?	YES..... 1 NO ..... 2 DON'T KNOW..... 8	
705	Can a person get the AIDS virus from mosquito bites?	YES..... 1 NO ..... 2 DON'T KNOW..... 8	
706	Can people reduce their chances of getting the AIDS virus by using a condom every time they have sex?	YES..... 1 NO ..... 2 DON'T KNOW..... 8	
707	Can a person get the AIDS virus by sharing food with a person who has AIDS?	YES..... 1 NO ..... 2 DON'T KNOW..... 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
708	Can people reduce their chance of getting the AIDS virus by not having sex at all?	YES..... 1 NO ..... 2 DON'T KNOW..... 8	
708A	Can people get the AIDS virus because of witchcraft or other supernatural means?	YES..... 1 NO ..... 2 DON'T KNOW..... 8	
709	Is it possible for a healthy-looking person to have the AIDS virus?	YES..... 1 NO ..... 2 DON'T KNOW..... 8	
710	Do you know someone personally who has the virus that causes AIDS or someone who died of AIDS?	YES..... 1 NO ..... 2	
711	Can the virus that causes AIDS be transmitted from a mother to a child?	YES..... 1 NO ..... 2 DON'T KNOW..... 8	↳713
712	Can the virus that causes AIDS be transmitted from a mother to her child...  During pregnancy? During delivery? By breastfeeding?	YES NO DK  DURING PREGNANCY..... 1 2 8 DURING DELIVERY..... 1 2 8 BY BREASTFEEDING..... 1 2 8	
712A	Have you heard of any drugs that a woman infected with the AIDS virus can take to reduce the risk of transmission to the baby during pregnancy?	YES..... 1 NO ..... 2 DON'T KNOW..... 8	
713	CHECK 401:  YES, CURRENTLY MARRIED/LIVING WITH A WOMAN <input type="checkbox"/> NO, NOT IN UNION <input type="checkbox"/>		→715
714	Have you ever talked with (your wife/woman you are living with) about ways to prevent getting the virus that causes AIDS?  IF MORE THAN ONE WIFE/PARTNER, ASK ABOUT ANY OF HIS WIVES/PARTNERS.	YES..... 1 NO ..... 2	
715	In your opinion, is it acceptable or unacceptable for AIDS to be discussed:  on the radio? on the TV?  in newspapers/magazines? in Church/Mosque? at home? at school?	ACCEP- NOT TABLE ACCEP- TABLE ON THE RADIO..... 1 2 ON THE TV..... 1 2 IN NEWSPAPERS/ MAGAZINE..... 1 2 IN CHURCH/MOSQUE..... 1 2 AT HOME..... 1 2 AT SCHOOL..... 1 2	
715A	Would you buy fresh vegetables from a seller who has the AIDS virus?	YES..... 1 NO ..... 2 DOES NOT KNOW..... 8	
716	If a member of your family got infected with the virus that causes AIDS, would you want it to remain a secret or not?	YES, SECRET..... 1 NO, NOT SECRET..... 2 DON'T KNOWK/UNSURE..... 8	
717	If a relative of yours became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household?	YES..... 1 NO ..... 2 DK/NOT SURE/DEPENDS..... 8	
718	If a female teacher has the AIDS virus, should she be allowed to continue teaching in school?	CAN CONTINUE..... 1 SHOULD NOT CONTINUE..... 2 DON'T KNOW /UNSURE/DEPENDS..... 8	
719	Should children aged 12-14 be taught about using a condom to avoid AIDS?	YES..... 1 NO ..... 2 DK/NOT SURE/DEPENDS..... 8	
720	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	→721

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
720A	When was the last time you were tested?	LESS THAN 12 MONTHS ..... 1 12-23 MONTHS ..... 2 2 YEARS OR MORE ..... 3	
720B	The last time you had the test, did you yourself ask for the test, was it offered to you and you accepted, or was it required?	ASKED FOR THE TEST ..... 1 OFFERED AND ACCEPTED ..... 2 REQUIRED ..... 3	
720C	I don't want to know the results, but did you get the results of the test?	YES ..... 1 NO ..... 2	↳ 723A
721	Would you want to be tested for the AIDS virus?	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS ..... 8	
722	Do you know a place where you could go to get an AIDS test?	YES ..... 1 NO ..... 2	→ 723B
723	Where can you go for the test?  RECORD ONLY FIRST RESPONSE GIVEN.	PUBLIC SECTOR GOVERNMENT HOSPITAL ..... 11 GOVT. HEALTH CENTER ..... 12 FAMILY PLANNING CLINIC ..... 13 MOBILE CLINIC ..... 14 DISPENSARY ..... 15	
723A	Where did you go for the test?  IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.  _____ (NAME OF PLACE)	OTHER PUBLIC _____ 16 (SPECIFY)  PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... 21 PHARMACY/PATENT MEDICINE STORE ..... 22 PRIVATE DOCTOR ..... 23 MOBILE CLINIC ..... 24 OTHER PRIVATE MEDICAL _____ 26 (SPECIFY)  OTHER SOURCE SHOP ..... 31 CHURCH ..... 32 FRIENDS/RELATIVES ..... 33  OTHER _____ 96 (SPECIFY)	
723B	Do you think your chances of getting AIDS are small, moderate, great, or no risk at all?	SMALL ..... 1 MODERATE ..... 2 GREAT ..... 3 NO RISK AT ALL ..... 4 HAS AIDS ..... 5 DON'T KNOW/UNSURE ..... 8	↳ 723D → 723F → 723E
723C	Why do you think that you have (NO RISK/A SMALL CHANCE) of getting AIDS?  Any other reasons?  RECORD ALL MENTIONED.	ABSTAIN FROM SEX ..... B USE CONDOMS ..... C AVOID MULTIPLE SEX PARTNERS ..... D AVOID SEX WITH PROSTITUTES ..... E AVOID SEX WITH HOMOSEXUALS ..... F ENSURE SAFE BLOOD TRANSFUSION ..... G ENSURE INJECTION WITH STERILIZED NEEDLE ..... H AVOID KISSING ..... I AVOID MOSQUITO BITES ..... J SEEK PROTECTION FROM TRADITIONAL HEALER ..... K  OTHER _____ W (SPECIFY)  OTHER _____ X (SPECIFY)  DON'T KNOW ..... Z	↳ 723E

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
723D	<p>Why do you think that you have a (MODERATE/GREAT CHANCE) of getting AIDS?</p> <p>Any other reasons?</p> <p>RECORD ALL MENTIONED.</p>	<p>DO NOT USE CONDOMS..... A</p> <p>MORE THAN ONE SEXUAL PARTNER.. B</p> <p>SEX WITH PROSTITUTES ..... C</p> <p>SPOUSE HAS OTHER (PARTNERS) .... D</p> <p>HOMOSEXUAL CONTACT ..... E</p> <p>HAD BLOOD TRANSFUSION..... F</p> <p>HAD INJECTIONS WITH UNSTERILISED NEEDLES..... G</p> <p>SEEK PROTECTION FROM TRADITIONAL HEALER..... H</p> <p>OTHER _____ W (SPECIFY)</p> <p>OTHER _____ X (SPECIFY)</p> <p>DON'T KNOW..... Z</p>	
723E	<p>Since you heard of AIDS, have you changed your behaviour to prevent getting AIDS?</p> <p>IF YES, what did you do?</p> <p>RECORD ALL MENTIONED.</p>	<p>DIDN'T START SEX ..... A</p> <p>STOPPED ALL SEX ..... B</p> <p>STARTED USING CONDOMS ..... C</p> <p>RESTRICTED SEX TO ONE PARTNER . D</p> <p>REDUCED NUMBER OF PARTNERS .... E</p> <p>ADVICE SPOUSE/PARTNER TO BE FAITHFUL ..... F</p> <p>NO MORE HOMOSEXUAL CONTACTS G</p> <p>ENSURE INJECTION WITH STERILIZED NEEDLES ..... H</p> <p>OTHER _____ W (SPECIFY)</p> <p>OTHER _____ X (SPECIFY)</p> <p>NO BEHAVIOUR CHANGE ..... Y</p>	
723F	<p>From which sources of information have you learned most about AIDS?</p> <p>Any other sources?</p> <p>RECORD ALL MENTIONED.</p>	<p>RADIO ..... A</p> <p>T.V. .... B</p> <p>NEWSPAPER/MAGAZINE ..... C</p> <p>PAMPHLETS/POSTERS ..... D</p> <p>HEALTH WORKERS ..... E</p> <p>CHURCHES/MOSQUES ..... F</p> <p>SCHOOLS/TEACHERS ..... G</p> <p>COMMUNITY MEETINGS ..... H</p> <p>FRIENDS/RELATIVES ..... I</p> <p>WORKPLACE ..... J</p> <p>OTHER _____ X (SPECIFY)</p>	
724	<p>(Apart from AIDS), have you heard about (other) infections that can be transmitted through sexual contact?</p>	<p>YES..... 1</p> <p>NO ..... 2</p>	→727

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
725	<p>If a man has a sexually transmitted infection, what symptoms might he have?</p> <p>Any others?</p> <p>RECORD ALL MENTIONED.</p>	ABDOMINAL PAIN .....A GENITAL DISCHARGE/DRIPPING.....B FOUL SMELLING DISCHARGE.....C BURNING PAIN ON URINATION.....D REDNESS/INFLAMMATION IN GENITAL AREA.....E SWELLING IN GENITAL AREA .....F GENITAL SORES/ULCERS .....G GENITAL WARTS .....H GENITAL ITCHING .....I BLOOD IN URINE .....J LOSS OF WEIGHT .....K IMPOTENCE .....L  OTHER _____ W (SPECIFY)  OTHER _____ X (SPECIFY)  NO SYMPTOMS .....Y DON'T KNOW.....Z	
726	<p>If a woman has a sexually transmitted infection, what symptoms might she have?</p> <p>Any others?</p> <p>RECORD ALL MENTIONED.</p>	ABDOMINAL PAIN .....A GENITAL DISCHARGE .....B FOUL SMELLING DISCHARGE.....C BURNING PAIN ON URINATION.....D REDNESS/INFLAMMATION IN GENITAL AREA.....E SWELLING IN GENITAL AREA .....F GENITAL SORES/ULCERS .....G GENITAL WARTS .....H GENITAL ITCHING.....I BLOOD IN URINE .....J LOSS OF WEIGHT .....K HARD TO GET PREGNANT/HAVE A CHILD.....L  OTHER _____ W (SPECIFY)  OTHER _____ X (SPECIFY)  NO SYMPTOMS .....Y DON'T KNOW.....Z	
727	CHECK 416:  HAS HAD SEXUAL INTERCOURSE <input type="checkbox"/> HAS NOT HAD SEXUAL INTERCOURSE <input type="checkbox"/> _____		→801
727A	CHECK 724:  KNOWS STIs <input type="checkbox"/> DOES NOT KNOW STIs <input type="checkbox"/> _____		→729
728	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 sexually-transmitted infection?	YES..... 1 NO ..... 2 DON'T KNOW..... 8	
729	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	
730	Sometimes men have a sore or ulcer on or near their penis. During the last 12 months, have you had a sore or ulcer on or near your penis?	YES..... 1 NO ..... 2 DON'T KNOW..... 8	
731	CHECK 728/729/730:  AT LEAST ONE 'YES' <input type="checkbox"/> OTHER <input type="checkbox"/> _____		→801
732	The last time you had (PROBLEM(S) FROM 728/729/730), did you seek any kind of advice or treatment?	YES..... 1 NO ..... 2	→734



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
733	<p>The last time you had (PROBLEM(S) FROM 728/729/730), did you do any of the following? Did you....</p> <p>Go to a clinic, hospital or private doctor?  Consult a traditional healer?  Seek advice or buy medicines in a shop or pharmacy?  Ask for advice from friends or relatives?</p>	<p style="text-align: center;">YES      NO</p> <p>CLINIC/HOSPITAL ..... 1      2  TRADITIONAL HEALER... 1      2  SHOP/PHARMACY ..... 1      2  FRIENDS/RELATIVES ..... 1      2</p>		
734	<p>When you had (PROBLEM(S) FROM 728/729/730), did you inform the person(s) with whom you were having sex?</p>	<p>YES..... 1  NO ..... 2  SOME/NOT ALL ..... 3  DID NOT HAVE A PARTNER..... 4</p>		→801
735	<p>When you had (PROBLEM(S) FROM 728/729/730), did you do anything to avoid infecting your sexual partner(s)?</p>	<p>YES..... 1  NO ..... 2  PARTNER(S) ALREADY INFECTED ..... 3</p>		↓801
736	<p>What did you do to avoid infecting your partner(s)? Did you....</p> <p>Use medicine?  Stop having sex?  Use a condom when having sex?</p>	<p style="text-align: center;">YES      NO</p> <p>USE MEDICINE..... 1      2  STOP SEX..... 1      2  USE CONDOM ..... 1      2</p>		

SECTION 8. ATTITUDES TOWARD WOMEN

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES				SKIP
801	<p>In a couple, who do you think should have the greater say in each of the following decisions: the husband, the wife or both equally:</p> <p>a) making large household purchases?</p> <p>b) making small daily household purchases?</p> <p>c) deciding when to visit family, friends or relatives?</p> <p>d) deciding what to do with the money she earns for her work?</p> <p>e) deciding how many children to have and when to have them?</p>	HUS- BAND	WIFE	BOTH	DON'T KNOW/ DEPENDS	
	a)	1	2	3	8	
	b)	1	2	3	8	
	c)	1	2	3	8	
	d)	1	2	3	8	
	e)	1	2	3	8	
802	<p>Sometimes a husband is annoyed or angered by things that his wife/partner does. In your opinion, is a husband justified in hitting or beating his wife in the following situations...</p> <p>a) If she goes out without telling him?</p> <p>b) If she neglects the children?</p> <p>c) If she argues with him?</p> <p>d) If she refuses to have sex with him?</p> <p>e) If she burns the food?</p> <p>f) If the food is not cooked on time?</p>	YES	NO		DON'T KNOW/ DEPENDS	
	a)	1	2		8	
	b)	1	2		8	
	c)	1	2		8	
	d)	1	2		8	
	e)	1	2		8	
	f)	1	2		8	
803	<p>Husbands and wives do not always agree on everything. Please tell me if you think a wife is justified in refusing to have sex with her husband if...</p> <p>a) She is tired and not in the mood?</p> <p>b) She has recently given birth?</p> <p>c) She knows her husband has sex with women other than his wives?</p> <p>d) She knows her husband has a sexually transmitted infection?</p>	YES	NO		DON'T KNOW/ DEPENDS	
	a)	1	2		8	
	b)	1	2		8	
	c)	1	2		8	
	d)	1	2		8	
803A	<p>When a wife knows her husband has a sexually transmitted disease, is she justified in asking that he use a condom?</p>	YES.....	NO .....		1 2 8	
804	<p>Do you think that if a woman refuses to have sex with her husband when he wants her to, he has the right to...</p> <p>a) Get angry and reprimand her?</p> <p>b) Refuse to give her money or other means of financial support?</p> <p>c) Use force and have sex with her even if she doesn't want to?</p> <p>d) Go and have sex with another woman?</p>	YES	NO		DON'T KNOW/ DEPENDS	
	a)	1	2		8	
	b)	1	2		8	
	c)	1	2		8	
	d)	1	2		8	

SECTION 9. FEMALE GENITAL CUTTING (CIRCUMCISION)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	Have you ever heard of female circumcision?	YES ..... 1 NO ..... 2	→903
902	In a number of countries, there is a practice in which a girl may have part of her genitals cut. Have you ever heard about this practice?	YES ..... 1 NO ..... 2	→909
903	What benefits do girls themselves get if they undergo circumcision?  PROBE: Any other benefits?  RECORD ALL MENTIONED.	CLEANLINESS/HYGIENE ..... A SOCIAL ACCEPTANCE ..... B BETTER MARRIAGE PROSPECTS ..... C PRESERVE VIRGINITY/PREVENT PREMARITAL SEX ..... D MORE SEXUAL PLEASURE FOR THE MAN ..... E RELIGIOUS APPROVAL ..... F  OTHER _____ X (SPECIFY) NO BENEFITS ..... Y DON'T KNOW ..... Z	
904	What benefits do girls themselves get if they <u>do not</u> undergo circumcision?  PROBE: Anything else?  RECORD ALL MENTIONED.	FEWER MEDICAL PROBLEMS ..... A AVOIDING PAIN ..... B MORE SEXUAL PLEASURE FOR HER ..... C MORE SEXUAL PLEASURE FOR THE MAN ..... D FOLLOWS RELIGION ..... E  OTHER _____ X (SPECIFY) NO BENEFITS ..... Y DON'T KNOW ..... Z	
905	Would you say that this practice is a way to prevent a girl from having sex before marriage or does it have no effect on premarital sex?	PREVENT SEX ..... 1 NO EFFECT ..... 2 DON'T KNOW ..... 8	
906	Do you believe that this practice is required by your religion?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	
907	Do you think that this practice should be continued, or should it be discontinued?	CONTINUED ..... 1 DISCONTINUED ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8	
908	Do you think that women want this practice to be continued, or discontinued?	CONTINUED ..... 1 DISCONTINUED ..... 2 DEPENDS ..... 3 DON'T KNOW ..... 8	
909	RECORD THE TIME.	HOURS ..... <input type="text"/> <input type="text"/>  MINUTES ..... <input type="text"/> <input type="text"/>	

# WORLD SUMMIT FOR CHILDREN INDICATORS

# APPENDIX *F*

World Summit for Children Indicators, Nigeria 2003		
		Total
Under-five mortality rate	201 per 1,000	0.0
Infant mortality rate	100 per 1,000	0.0
Underweight prevalence		28.7
Stunting prevalence		38.3
Wasting prevalence		9.2
Use of safe drinking water sources <sup>1</sup>		42.8
Use of sanitary means of excreta disposal		74.3
Children reaching grade five <sup>2</sup>		97.3
Net primary school attendance rate <sup>2</sup>		60.1
Proportion entering primary school <sup>2</sup>		23.0
Contraceptive prevalence - women in union		12.6
Contraceptive prevalence - all women		13.3
Antenatal care <sup>3</sup>		60.1
Childbirth care		36.2
Low birth weight <sup>4</sup>		12.1
Iodized salt consumption <sup>5</sup>		97.3
Children receiving vitamin A supplements <sup>3</sup>		33.7
Mothers receiving vitamin A supplements <sup>3</sup>		19.6
Night blindness in pregnant women		7.7
Exclusive breastfeeding		17.2
Continued breastfeeding at 12-15 months		88.9
Continued breastfeeding at 20-23 months		32.1
Timely complementary feeding		63.7
Tuberculosis immunization coverage		48.3
DPT immunization coverage		21.4
Polio immunization coverage		29.4
Measles immunization coverage		35.9
Children protected against neonatal tetanus		40.2
ORT use		29.4
Home management of diarrhoea		13.5
Care seeking for acute respiratory infections		32.8
Children's living arrangements <sup>2</sup>		10.9
Orphans in households <sup>2</sup>		6.2
Home management of illness		29.6
Malaria treatment		33.9
Knowledge of preventing HIV/AIDS <sup>6</sup>		42.3
Knowledge of misconceptions of HIV/AIDS <sup>7</sup>		27.8
Knowledge of mother-to-child transmission of HIV		41.3
Attitude to people with HIV/AIDS <sup>8</sup>		60.3
Women who know where to be tested for HIV		33.3
Women who have been tested for HIV		7.1

<sup>1</sup> Piped water, protected well water, rainwater, or bottled water

<sup>2</sup> Based on de jure children

<sup>3</sup> For the last live birth in the five years preceding the survey

<sup>4</sup> For children without a reported birth weight, the proportion with low birth weight is assumed to be the same as the proportion with low birth weight in each birth size category among children who have a reported birth weight.

<sup>5</sup> 15 parts per million or more

<sup>6</sup> Having sex with only one partner who has no other partners and using a condom every time they have sex

<sup>7</sup> Say that AIDS cannot be transmitted through mosquito bites and that a healthy-looking person can have the AIDS virus

<sup>8</sup> Express a discriminatory attitude toward people with HIV or AIDS