

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).

This publication was made possible through support provided by the U.S. Agency for International Development under the terms of Contract No. HRN-C-00-97-00019-00. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

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Recommended citation:

National Population Commission (NPC) [Nigeria] and ORC Macro. 2004. *Nigeria Demographic and Health Survey 2003*. Calverton, Maryland: National Population Commission and ORC Macro.

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MESSAGE FROM THE VICE PRESIDENT

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

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

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 geo-graphical 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.

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

ACKNOWLEDGMENTS

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. Wor-thy 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.

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Samuel A. Ogunlade Project Director National Population Commission

SUMMARY OF FINDINGS

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 onethird 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, though 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

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

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

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

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 breast-feeding 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

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 occured 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, twothirds (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

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

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

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 nonmarital, 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

