Nigeria (Bauchi, Enugu, Oyo) Family Planning and Reproductive Health Survey 2002

MEASURE Evaluation Technical Report Series, No. 16

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The technical report series is made possible by support from USAID under the terms of Cooperative Agreement HRN-A-00-97-00018-00. The opinions expressed are those of the authors, and do not necessarily reflect the views of USAID.

August 2003

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Acknowledgements

This baseline study is funded by the United States Agency for International Development (USAID) through the MEASURE *Evaluation* Project and under the terms of Cooperative Agreement HRN-A-00-97-00018-00. We give special thanks to Dr. Bunmi Dosumu, USAID/Nigeria Senior Program Management Specialist, Dr. Ade Adetunji, VISION Project Director, Ms. Toyin Akpan, VISION Knowledge and Management Advisor, and Ms. Hannah Searing, EngenderHealth Senior Associate, for their guidance and oversight during this study. We are also grateful to Dr. Alfred Adewuyi, Dr. Titi Obilade, and Dr. Adesina, all from the Center for Research, Evaluation, and Resource Development (CRERD), for their leadership during all stages of survey implementation. Appendix A presents a full list of the supervisors and fieldworkers who participated in the baseline surveys, to whom we owe a debt of gratitude.

This study would not have been possible without the collaboration of numerous partners, many of whom reviewed earlier versions of the survey questionnaires and/or assisted in the preparation and/or training for the surveys. The authors are especially grateful to:

- Dr. Stella Babalola, Johns Hopkins University/Center for Communication Programs (JHU/CCP);
- Mr. Wale Adedeji, Society for Family Health/Population Services International (SFH/PSI);
- Ms. Sara Stratton and Ms. Shannon Salentine, Intrah; and
- Mrs. Grace Oluwatoye, VISION Project.

We thank our colleagues at the VISION Project for providing administrative and logistic support. We are also grateful to Ms. Livia Montana, who provided MEASURE staff with basic training in geographical information systems (GIS), and to Ms. Anne Stangl and Ms. Leslie Ornsteen, MEASURE *Evaluation* Research Assistants who helped with the preparation of the questionnaire and tables for this report.

The opinions expressed are those of the authors, and do not necessarily reflect the views of USAID.

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Executive Summary

This report presents findings from the 2002 Nigeria Family Planning and Reproductive Health survey conducted in the selected Local Government Areas (LGAs) in the states of Bauchi, Enugu, and Oyo, where the VISION Project is implemented. The VISION project operates in five LGAs in each of these three states. The purpose of the VISION Project is to develop models of high impact, high performing family planning/ reproductive health (FP/RH) service delivery networks in selected LGAs so that these may be replicated in other parts of Nigeria. The project was initiated in 2002.

From a representative sample of men and women in the VISION Project areas, the survey team collected information on respondents' exposure to mass media messages pertaining to family planning and AIDS, knowledge of family planning and sexually transmitted infections, sexual behavior, and use of family planning and AIDS prevention strategies. The objective of this report is to present the indicators that are used by the VISION Project and USAID/Nigeria to monitor project performance. Data from the baseline survey will also be used to measure changes in family planning and reproductive health indicators resulting from the VISION Project's interventions. The findings of this report may be helpful in fine-tuning the implementation of the VISION Project.

Chapter I of the report presents an overview of family planning and reproductive health in Nigeria, describes survey objectives and methods, and briefly describes the respondents' background characteristics. Chapter II addresses media habits and patterns of radio listenership, and covers sexual initiation and childbearing. Findings regarding knowledge and use of family planning methods are presented in Chapter IV, attitudes towards HIV/AIDS in Chapter V, and AIDS prevention strategies in Chapter VI. Key findings of the report are discussed below.

Exposure to Mass Media, Family Planning and AIDS Messages

- About one in ten men and one in seven women in the sample had never heard of HIV/AIDS.
- Respondents were more likely to have heard AIDS prevention messages on the radio than through other media. This finding reflects the prevalence of radio as a source of information and entertainment over television or the newspaper.
- Men in the sample were more likely than women to listen to the radio daily or read the newspaper weekly. The gender differential in television watching is minimal.
- Women were three times as likely as men to have no exposure to the mass media.

Initiation of Sex and Childbearing

- About a quarter of women had engaged in sex by age 15, and four in ten women had their first birth by age 18. One in ten men had engaged in sex by age 15 and one in thirteen had fathered a first child by age 18.
- Among women, sexual initiation and first birth occur substantially earlier in Bauchi than in Enugu or Oyo.

Knowledge and Use of Family Planning

- About half of respondents knew at least one modern method of family planning and one out of three knew two or more methods of family planning.
- The modern method of which the respondents were most aware is the condom, followed by the pill and the injection.

- Only four in ten respondents approved of family planning.
- Only one in twelve women and one in ten men currently used a modern family planning method.
- Condoms were the most commonly used modern method, followed by the pill and the IUD.

Knowledge of and Attitudes towards HIV/AIDS

- Six out of ten women and seven out of ten men knew how to avoid AIDS.
- About one in three sexually experienced women and half of sexually experienced men had discussed with a partner ways of preventing AIDS.
- About four out of ten respondents believed that children aged 12-14 should be taught about condom use to avoid AIDS.
- One in ten respondents had been tested for HIV. About four in ten women and half of men wanted to be tested for HIV.

Sexual Activity and AIDS Prevention Strategies

- The majority of respondents had no partner or one partner in the 12 months previous to the survey. Only 4% of women and 10% of men reported having two or more partners in the previous year.
- About 8% of women and 22% of men used a condom at last sex. Four out of ten women who had never been in-union and six out of ten men who had never been in-union used a condom during last sex. Condom use among respondents in-union is very low.
- Only one in five women and four out of ten men felt that they could get a condom if they wanted to.

Chapter 1. Introduction

The Nigerian Context

With an estimated population of 126 million, Nigeria is Africa's most populous country, and one of its poorest. Like many poor countries, Nigeria's health needs remain substantial. Mortality levels are high. In 2000, life expectancy at birth was estimated at 47 years (World Development Indicators Database, 2001). The infant mortality rate is estimated at 84 deaths per 1,000 live births (World Development Indicators Database, 2001). The total fertility rate (TFR) is high at 5.2 children per woman (NPC, 2000). As a result of this high fertility, Nigeria's population has been growing by 2.5 percent annually (CIA, 2002).

Large geographic regional disparities in availability of services and resources characterize the Nigerian health sector. The majority of health services are located in the southern states while many northern states have more limited access to comprehensive health care (NPC, 2000). These regional differences in access to and availability of health services are reflected in levels of key family planning and reproductive health indicators.

Family Planning and Reproductive Health in Nigeria

Sexual and reproductive health is a major concern for Nigeria's government. The HIV epidemic is spreading rapidly. By the end of 2001, approximately 3.5 million Nigerians were infected with the HIV virus (UNAIDS, 2002). At 8.9 percent, the contraceptive prevalence rate for modern methods among all women is low, even for sub-Saharan Africa (NPC, 2000). Levels of maternal mortality are extremely high, reaching an estimated 1,000 deaths per 100,000 women (WHO, 1996). Induced abortion is estimated to account for 20,000 of the estimated 50,000 maternal deaths that occur in Nigeria each year – the largest single contributor to maternal mortality (Otoide, Oronsaye, and Okonofua, 2001). Young women particularly are exposed to unsafe abortions and abortion-related complications. Hospital-based studies have shown that up to 80 percent of patients with abortion-related complications are adolescents (Otoide et al., 2001).

In response to these health concerns, the government of Nigeria, international donor agencies, and NGOs are implementing programs aimed at addressing these problems. For example, the Nigerian government established the National Action Committee on AIDS (NACA). HIV/AIDS prevention interventions target high-risk populations such as commercial sex workers and transportation workers (USAID, 2003). The Nigerian government, with assistance from the World Bank, is also working to improve the deteriorated delivery of basic health care services, and building institutional capacities to pave the way for sustained development of the country's health care system (World Bank Project Data, 2001). The British Department of International Development (DFID) is funding "Promoting Sexual and Reproductive Health for HIV/AIDS Reduction" (PSRHH), a seven-year program implemented by the Society for Family Health (SFH), a local affiliate of Population Services International (PSI). The United States Agency for International Development (USAID) is supporting interventions aimed at integrating HIV/AIDS prevention, family planning, and maternal and child health activities into a more strategically targeted program. USAID/Nigeria seeks to increase the use and availability of high quality family planning services as well as increase demand for and use of condoms through behavior change and communication activities. One of the mechanisms through which USAID/Nigeria seeks to improve reproductive health is through the VISION Project, a family planning and reproductive health (FP/RH) project launched in February 2002 in three Nigerian states: Bauchi, Enugu, and Oyo.

This report describes the results of a baseline household survey that was conducted as part of an external evaluation of the impact of the

VISION family planning and reproductive health project.

The VISION Project and MEASURE *Evaluation's* Role

In September 2001, USAID/Nigeria awarded EngenderHealth and its partners a three-year, US$10 million contract to assist USAID in developing a strategic framework for the future of its FP/RH program in Nigeria. Collaborating partners under VISION include Johns Hopkins University/Center for Communication Programs (JHU/CCP), Intrah, and the Society for Family Health (SFH), an affiliate of Population Services International (PSI).

The VISION Project aims to establish models of high-impact, high-performing FP/RH service delivery networks, to be built on public-private partnerships in selected LGAs in Bauchi, Enugu, and Oyo states. At present, the VISION Project is being implemented in 15 selected LGAs, five each in Bauchi, Enugu, and Oyo states (see Table 1.1 for a list of LGAs by state). In subsequent phases of the project, the VISION activities may be replicated in other parts of Nigeria. The three states in which the VISION Project operates differ from each other not only in terms of languages spoken, ethnic groups, and religion, but also in terms of access to and availability of health services. The current timeline for project implementation is February 2002 – September 2004.[1]

The VISION project aims to contribute to USAID/Nigeria's Strategic Objective 4 (SO4): increased use of family planning, HIV/AIDS, and child survival services. Specifically, the project objectives include:

- Increasing **demand** for FP/RH, HIV/AIDS, and child survival services;
- Increasing **access** to and availability of FP/RH services and commodities;
- Improving the **quality** of FP/RH, HIV/AIDS, and child survival services;
- Increasing the **capacity** of FP/RH, HIV/AIDS, and child survival service delivery systems; and
- Improving the policy environment for **delivery** of FP/RH, HIV/AIDS, and child survival services.

MEASURE *Evaluation* (M2)/Tulane University is the external evaluator for the VISION Project[2]. Given the nature of the VISION Project, M2/Tulane, in consultation with VISION collaborating partners USAID/Nigeria, M2/UNC, and M2/ORC/Macro developed and implemented a household survey and a facility survey: Results from the household survey provide data for constructing indicators at the individual level (e.g., indicators related to information on individual knowledge of and demand for FP/RH issues and services); results of the facility survey—provide information necessary to measure indicators related to access, types of services offered, and quality of services at the facility or Service Delivery Point (SDP) level (e.g., contraceptive availability).

After conducting a competitive bidding process according to USAID/Nigeria requirements, M2/Tulane contracted the Center for Research, Evaluation, and Resource Development (CRERD), a local research organization based in Ile-Ife and affiliated with Obafemi Awolowo University (OAU), Nigeria, to implement both the household and facility surveys in the 15 LGAs where the VISION Project operates. This report discusses the household survey only.

[1] Originally, VISION Project activities were scheduled to begin in September 2001, and to run for 30 months. Because of the events of September 11, 2001, the start of project activities was delayed until February 2002.

[2] Given the funding cycle for the MEASURE *Evaluation* Project, the baseline survey for the VISION evaluation will be conducted under the current phase of M2, but the final evaluation may be conducted by another project (since the current phase ends in December 2003).

Survey Objectives

The specific objectives of the baseline household survey include:

1) To collect quantitative data on family planning/reproductive health indicators among a representative sample of adults in 15 LGAs in Bauchi, Enugu, and Oyo states;
2) To obtain data that will be used as a baseline against which to measure changes in family planning/reproductive health indicators resulting from the VISION Project's interventions; and
3) To provide data for the refinement of strategies and target populations for VISION Project activities, as well as for other reproductive health programs in the region.

Methods

CRERD, in consultation with M2/Tulane, was responsible for sampling design, data collection (including recruiting and training of the field survey teams), data entry, and data cleaning. M2/Tulane, while responsible for all aspects of the baseline, developed the questionnaires, assisted with training of the supervisors and survey teams, conducted data analysis, and wrote the survey reports.

Sample Design and Size

A total sample size of 3,300 (1,100 per state) was calculated using power statistics to estimate the minimum necessary to show a statistically significant change in outcome indicators. The main indicator used for this estimate was the change in contraceptive prevalence. The sample size enables detection of changes of 10 percentage points (assuming a design effect of 2) in contraceptive prevalence as well as in other key indicators in each of the three states. An estimated non-response rate of 10 percent was used when calculating the sample size. The survey was restricted to the 15 LGAs targeted by the VISION Project.

A multi-stage stratified sampling strategy was used. In each state, 40 enumeration areas (EA) were randomly selected with probability of selection proportional to the population size (PPS) of the LGA (see Table 1.1). The State Office of the National Population Commission (NPC) provided a list of EAs in the project LGAs. From this list, the required number of EAs in each LGA were selected through systematic random sampling. In each selected EA, an average of between 27 and 28 households were selected through a systematic random sampling technique. The selection of households proceeded as follows:

1. In each selected EA, a complete household listing was prepared. In listing the households, the address and the name of the head of the household was recorded. All institutional households were excluded.
2. The number of eligible households in each EA was divided by 27 or 28 to obtain the sampling interval, k.
3. A number j between 1 and k was randomly selected using a ballot system. The household corresponding to this number in the list of households was the first household included in the sample.
4. To determine subsequent households to be included in the sample, k was added each time to the previous number. For example, j +k, j + 2k, j + 3k, and so on. The actual number of households selected per EA varied depending on the number of households in each EA.

Field staff visited each of the selected households and listed all men and women (aged 15 – 49) who were eligible to participate in the survey. A table of random numbers was used to determine the person to be interviewed in each household and one person per household was interviewed. A total of 3,196 individuals were interviewed. Table 1.1 presents the target and actual sample sizes by state and LGA.

To adjust for the fact that Oyo and Enugu were over-sampled relative to Bauchi, all indicators shown in this report are based on weighted data. The numbers of cases shown are the actual, unweighted numbers.

Questionnaire Development

M2/Tulane, in consultation with all VISION collaborating partners, developed the questionnaire.[3] The individual household questionnaire was adapted from the standard Demographic and Health Survey (DHS) instrument, and included sections on reproduction, contraception, pregnancy, antenatal care, media exposure, marriage and sexual activity, fertility preferences, partner's background, and HIV/AIDS and other STIs. The questionnaire was translated into the three major local languages of the three VISION states (Hausa, Ibo, and Yoruba), then back-translated into English. The questionnaire was interviewer-administered.

Geographic coordinates were collected using the Garmin eTrex® and downloaded using GPS Utility. For cross-checking purposes, interviewers also recorded the geographic coordinates on each questionnaire. Please see Appendix D for an overview on using geographic information systems (GIS).

Training of Field Survey Teams

Training of field staff was conducted in two stages. First, supervisors received centralized training at OAU. Subsequent regional trainings of the field teams were held in each of the three states. Field survey teams were recruited from each state. CRERD led all the trainings. M2/Tulane staff attended the training of supervisors and the first regional training of the Enugu data collection teams. Training consisted of a question-by-question review of the questionnaire, review of the sampling methodology, instruction in the use of the hand-held navigational units (e.g., Garmin eTrex®), role plays, and pretests of the questionnaire.

A total of 128 interviewers and 15 supervisors received training. Of these, 75 interviewers (25 interviewers per state; 5 interviewers per LGA), balanced evenly between men and women, and 6 supervisors (2 per state) were retained for the household survey[4].

Data Collection

Data collection began immediately after each regional training (Oyo state was first, followed by Enugu and Bauchi), and lasted from November 11th to December 10th. To encourage cooperation, Dr. Adetunji, Director of the VISION Project, wrote a letter of introduction which explained the purpose and timing of the survey, and which the supervisors presented to the Chairman of each LGA as well as to some local village heads before the implementation of the survey. Despite these efforts, field staff encountered some resistance to the project in some LGAs, especially those located in Bauchi state. This resistance was overcome by reaching out to local Imams and respected Muslim scholars as well as to the LGA Chairpeople, and explaining the purpose of the survey and the confidentiality of the responses.

To reduce non-response and reporting biases, interviews were conducted either in a private room or some location where others in the household could not overhear. When this arrangement was not possible, the interviewer set an appointment to return to the household at a time when other people would not be present in an effort to maintain confidentiality during the interview.

In Enugu, performance checks identified problems with a few of the interviewers. These interviewers were dismissed and replaced with the reserve interviewers who had participated in the training.

Fieldwork was complicated by difficulties in identifying the exact boundaries of some EAs. Either descriptions on the hand-drawn EA maps did not seem to match the current physical terrain, or major construction and development had rendered the descriptions obsolete. The EA maps were provided by the NPC and date back

[3] See Appendix A for a copy of the survey instrument.

[4] The total number of interviewers and supervisors trained include those who participated in the facility survey as well.

to the 1990 Census. Not only have many areas changed topographically since then, but redistricting in the late 1990s caused some LGAs to be split in two. As a result, it was occasionally unclear which EAs were contained within current LGA boundaries.

Limitations

As with all cross-sectional surveys, this survey is subject to response and recall biases. Self-reported data may reflect a perceived desirability of responses rather than actual knowledge or practices, and may be affected by response bias. Reponses to questions related to events in the past (such as ever use of an FP method, number of sexual partners in the last 12 months, use of condoms in last 12 months, for example) were subject to recall bias.

Because the survey sample is restricted to the 15 LGAs targeted by the VISION Project, the results from this survey may not be representative of the entire populations of Enugu, Oyo, and Bauchi, nor of other Nigerian states.

Sample Characteristics

Table 1.2 documents the background characteristics of survey respondents.[5] As can be seen from the table, almost three-quarters of women respondents are from Bauchi or Enugu (72%), while almost half (44%) of all male respondents are from Bauchi. A greater proportion of both women and men are from rural areas (58% and 55%, respectively) rather than urban areas. More than half (58%) of the women and men (54%) were under 30 years of age, while approximately one-quarter were between the ages of 30-39 (26% and 24%, respectively).

The majority of women respondents (70%) were married or in-union, while half (50%) of all male respondents reported the same. A greater percentage of men (27%) reported being virgins than women (16%). Roughly one-third (29%) of women reported having no living children at the time of the survey, while approximately one-quarter (27%) reported having one or two children. About one-fifth of female respondents reported having 3 to 4 living children; about the same number reported having 5 or more children living (22%). Consistent with their later age at marriage, males were more likely than females to report being childless. Half of all male respondents (52%) reported having no living children at the time of the survey, with roughly one-fifth (18%) reporting having 1 to 2 children. The large majority of respondents (81% of females and 90% of males) reported wanting more children. Despite growing concerns about the expanding HIV/AIDS epidemic in Nigeria (UNAIDS, 2002), reported levels of risky sexual behavior are quite low. Only 4% of all females and 10% of all males reported having two or more sexual partners in the year prior to the survey.

Nigeria has a four-tiered educational system known as the 6-3-3-4 system. Primary education is the first 6 years, followed by 3 years of junior secondary, 3 years of senior secondary, and 4 years of university or polytechnic education. Free education is compulsory up to the junior secondary school level (NPC, 2000). Among survey respondents, 40% of women had no formal schooling, while one-quarter (27%) of men reported the same. Almost half (48%) of all male respondents reported having at least a secondary or higher education.

Among female respondents, slightly more than half (54%) were Christian and 43% Muslim. Approximately half of all male respondents (49%) were Christian and the other half Muslim (49%).

[5] The table groups the results by state to ensure sufficient numbers of cases to give reliable estimates. However, the state data reflect only the results obtained from the five VISION LGAs per state.

Table 1.1 Population, number of EAs, and the proposed and actual sample sizes, by LGA

	1991 Population Size	Number of Selected EAs	Target Sample Size	Actual Sample Size
Bauchi				
Alkaleri	174,861	9	247	242
Bauchi	356,923	17	468	460
Giade	92,294	4	110	109
Kirfi	83,010	4	110	110
Tafawa Balewa	126,436	6	165	162
Total Bauchi	833,524	40	1,100	1,083
Enugu				
Enugu East	174,431	10	275	275
Enugu North	153,033	9	248	242
Igbo Etiti	138,401	8	220	212
Nkanu West	102,945	6	165	169
Udenu	111,647	7	192	183
Total Enugu	680,457	40	1,100	1,081
Oyo				
Afijio	82,792	6	165	144
Ibadan S.West	277,047	19	523	541
Ibarapa East	65,897	4	110	108
Ogbomoso South	65,959	4	110	102
Orire	103,611	7	192	137
Total Oyo	595,306	40	1,100	1,032
TOTAL				**3,196**

Table 1.2 Background characteristics of household survey respondents, by gender

Characteristic	Females (n=1814)	Males (n=1382)
VISION LGAs	**%**	**%**
Bauchi	35.8	44.4
Enugu	35.8	27.7
Oyo	28.4	28.0
Residence		
Urban	41.8	45.0
Rural	58.2	55.0
Age		
15-19	17.4	19.8
20-24	19.3	17.6
25-29	20.9	17.0
30-34	14.3	13.3
35-39	11.7	10.9
40-44	8.9	9.4
45-49	7.7	12.1
Marital Status		
Never married	9.5	21.3
Married	52.2	39.6
In-union[6]	69.5	49.9
Widowed/divorced/separated	5.5	1.9
Virgins	15.5	26.8
Number of living children		
None (0)	29.4	51.5
1-2	27.4	18.3
3-4	21.7	13.7
5 or more	21.5	16.5
Desire for more children		
Yes	80.9	89.7
No	19.1	10.3
Number of partners in last 12 months		
None (0)	32.8	37.8
1	63.7	52.1
2 or more	3.5	10.1
Education		
No formal schooling	40.2	27.2
Primary	22.1	24.7
Secondary or higher	37.7	48.1
Religion		
Christian	53.8	48.7
Muslim	42.9	48.9
Other	3.3	2.4

[6] Throughout the rest of the report, in-union refers to married and cohabitating respondents unless otherwise noted.

Chapter 2. Exposure to Mass Media, Family Planning and AIDS Messages

This chapter describes differentials in levels of exposure to mass media, including newspapers, television, and radio. Such differentials are important, as they provide information about the potential reach of mass media family planning and HIV/AIDS prevention campaigns. This chapter also examines recall of different radio programs and to specific AIDS prevention campaigns, and describes respondents' sources of information about HIV/AIDS.

Mass Media Exposure

Table 2.1 shows patterns of newspaper readership, television viewership, and radio listenership. Specifically, the results show the percentages of respondents who reported listening to the radio daily, watching TV daily, and who reported reading the newspaper at least once a week.[7] The results show that radio listenership is higher than television viewership or newspaper readership.

Overall, about one in five women (20%) and one in three (35%) men read a newspaper every week. Readership of newspapers was lowest among rural and uneducated respondents and in Bauchi. In Bauchi, 8% of women and 22% of men read a newspaper weekly, compared with more than 25% of women and more than 40% of men in Enugu and Oyo. In rural areas, only 13% of women and 23% of men read a newspaper weekly. By comparison, 30% of men and 50% of women in urban areas read a newspaper weekly. Education substantially increased newspaper readership: More than 40% of respondents with secondary or higher education compared to fewer than 10% of uneducated respondents read a newspaper weekly.

Exposure to television was fairly high: One in three respondents (31% of women, 37% of men) watched television daily. As with exposure to newspapers, television viewership was also lowest among rural, uneducated respondents and those living in Bauchi. In Bauchi, fewer than a quarter of respondents reported watching television daily (20% of females and 23% of males), in contrast with about half of respondents in Oyo. Fewer than 10% of rural respondents, compared with more than 60% of urban respondents, watched television daily. Fewer than 10% of uneducated respondents, compared with more than 55% of respondents with secondary or higher education, watched television daily.

Just under half of women (45%) and 7 out of ten men (71%) listened to the radio daily.
Among women, radio listenership was lowest in Bauchi (34%, compared with 41% in Enugu and 63% in Oyo), in rural areas (30% compared with 66% in urban areas) and among the uneducated (26%, compared with 66% for those with secondary or higher education). Radio listenership was generally much higher among men than women. However, radio exposure was lower among rural than urban men (64% vs. 79%), lower among uneducated than educated men (55% vs. 80%), and lower among men living in Bauchi than among those living in Enugu and Oyo (67%, 71%, and 77%, respectively).

Table 2.2 shows the percentage of respondents who had no exposure to any of these three mass media channels (radio, TV, newspapers). This group of respondents cannot be reached through the mainstream mass media, and may instead need to be targeted through other channels, such as billboards, mobile video units, or interpersonal communication. Women were much more likely to have no exposure to the main mass media (18%) than men (6%). Rural and uneducated respondents and those living in Bauchi were least likely to have mass media exposure. In Bauchi, 30% of women and 11% of men had no exposure to the mass media. By contrast, about 14% of women and 5% of men in

[7] Because newspaper readership is relatively rare, we show weekly rather than daily newspaper readership.

Enugu, and 6% of women and 1% of men in Oyo had no exposure to the mass media. In rural areas, 28% of women and 10% of men had no exposure to the mass media. By contrast, fewer than 5% of urban respondents had no exposure to the mass media. Uneducated respondents were much more likely to have no exposure to the mass media (36% of women and 17% of men), compared with respondents with secondary or higher education (3% of women and 2% of men).

Exposure to Specific Radio Programs

Tables 2.3a and 2.3b show listernership patterns for various radio programs on family planning and reproductive health. Respondents were asked whether they had listened to each of the seven different radio programs during the previous six months.

Overall, the radio drama programs with the highest reported levels of exposure in the six months prior to the survey were *Kasaurara* (13% of females and 20% of males), *Abule Olokemrin* (15% of females and 19% of males), and *Odenjinjin* (17% of females and 21% of males). Since *Kasaurara* was broadcast by selected radio stations with reach to northern states, reported levels of exposure were high in Bauchi (35% of females and 43% of males) and negligible in the other two states. The fact that some respondents in Enugu and Oyo reported hearing *Kasaurara* may have resulted either from misreporting or from migration and travel across state boundaries. Respondents who have secondary or higher education, and those who were childless were least likely to report hearing *Kasaurara*.

The radio jingles, *Dunniya J'atau* and *Gari Muna Fati,* were also broadcast in Bauchi. Overall listenership of these two messages was not high: About 8% of women and 11% of men had heard *Dunniya J'atau*, while 11% of women and 20% of men had heard *Gari Muna Fati,* and characteristics of respondents who heard these programs were similar to those of *Kasaurara* listeners: Respondents with no children and respondents with secondary or higher education were the least likely to have been exposed to *Dunniya J'atau* or *Gari Muna Fati*.

Recall of the radio dramas, "A New Dawn" and "One Thing at a Time," was low, reaching fewer than one in ten respondents. "A New Dawn" had significant reach only in Oyo (16% of females and 21% of males), and stayed below 15% listenership in most other population subgroups. Similarly, exposure to "One Thing at a Time" rarely exceeded 15%.

About 15% of women and 19% of men in the overall sample had listened to *Abule Olokemerin* during the previous six months. The program was broadcast in Oyo, where 51% of women and 63% of men had listened to it within the previous six months. Rural and uneducated respondents (5% of women and 10% of men in both groups) were least likely to have tuned in to the show.

The program with the highest reach was *Odenjinjin*, which was heard by 17% of females and 21% of males in the sample. The Igbo radio drama and its Yoruba adaptation were broadcast in the Southeast and Southwest. Breakdown by state shows that 42% of females and 63% of males in Enugu reported hearing the program. In Oyo, 9% of females and 10% of males also heard the program. In-union respondents and those with no education were the least likely to have heard *Odenjinjin*.

Sources of Information about HIV/AIDS

Table 2.4 documents the percentage of respondents who heard or read about HIV/AIDS through various media sources during the three months before the survey. Radio is the most frequently cited source of HIV/AIDS messages. About 73% of women and 82% of men heard an HIV/AIDS message on the radio, compared with four in ten women (41%) and nearly half of men (48%) who saw an HIV/AIDS message on television during that time. One in five women (22%) and one in three men (35%) had read about HIV/AIDS in a newspaper. These percentages are considerably higher than the percentage of respondents who reported daily

radio and TV exposure, and weekly newspaper reading. Together, these findings suggest that virtually all Nigerians who regularly listen to the radio, watch TV, or read the newspaper, are exposed at some point to information about HIV/AIDS. In addition, about one in five women (20%) and one in six men (15%) had heard of HIV/AIDS through community health workers.

Rural and uneducated respondents and those living in Bauchi were least likely to have heard an HIV/AIDS message on the radio. Though more than half of women (56%) and nearly three out of four men (74%) in Bauchi had heard an HIV/AIDS message on the radio, more than three out of four women and eight out of ten men in Enugu and Oyo had heard an HIV/AIDS message by this means. About 65% of rural women and 76% of rural men heard about HIV/AIDS on the radio, compared to 86% of urban women and 89% of urban men. Education increased this likelihood: 54% of women and 67% of men, compared with about 88% of respondents with secondary or higher education had heard an HIV/AIDS message on the radio within the three months before the survey.

Exposure to HIV/AIDS information through television was lowest in Bauchi, in rural areas, and among the uneducated. In Bauchi, 23% of women and 28% of men had heard of HIV/AIDS through television, in contrast with 44% of women and 64% of men in Enugu and 60% of women and 63% of men in Oyo. About one in five respondents in rural areas (18% of women and 22% of men), compared with three in four respondents in urban areas (73% of women and 79% of men) had heard of HIV/AIDS through television in the previous three months. Fewer than 15% of respondents without education, compared with 75% of respondents with secondary or higher education, had heard of HIV/AIDS through television.

A relatively small proportion of respondents from Bauchi had read about HIV/AIDS in the newspaper (7% of women and 19% of men), in contrast with more than 28% of women and more than 44% of men in Enugu and Oyo who had read about HIV/AIDS through this medium. Rural respondents were much less likely to have read about HIV/AIDS through a newspaper (12% of women and 18% of men) than urban respondents (36% of women and 55% of men). And, more than 50% of respondents with secondary or higher education, compared to fewer than 10% of uneducated respondents, had read about HIV/AIDS in the newspaper during the three months previous to the survey.

Respondents least likely to have heard of HIV/AIDS from a community health worker during the three months before the interview were those who lived in Bauchi and those without formal education. In Bauchi, fewer than 10% of respondents had heard about HIV/AIDS from a community health worker, compared with more than 20% in Enugu and Oyo. Education increased that likelihood: Fewer than 10% of respondents with no education had heard of HIV/AIDS from a community health worker, compared with more than 20% of respondents with secondary or higher education.

Exposure to HIV/AIDS Prevention Campaigns on Television

Table 2.5 shows the percentage of respondents who had seen either of the television campaigns on HIV/AIDS prevention featuring Femi Kuti or Fati Mohammed. About 17% of women and 29% of men had seen the Femi Kuti campaign, while about 16% of women and 25% of men had seen the campaign featuring Fati Mohammed.

Rural and uneducated respondents and those living in Bauchi were the least likely to have seen the campaign featuring Femi Kuti. In Bauchi, about 10% of women and 17% of men had seen it, while 15% of women and 37% of men in Enugu, and 26% of women and 40% of men in Oyo, had seen the campaign. Fewer than 10% of rural respondents, compared with more than 30% of urban respondents, had seen the Femi Kuti campaign. Education substantially increased the probabilities: More than 30% of respondents with secondary or higher education, compared with fewer than 5% of respondents with no formal education, had seen the Femi Kuti campaign.

Rural respondents and those living in Enugu were the least likely to have seen the HIV/AIDS prevention campaign featuring Fati Mohammed. In Enugu, only 3% of women and 12% of men had seen the Fati Mohammed campaign, but respondents in Oyo (13% of women and 21% of men) and in Bauchi (32% of women and 35% of men) were more likely to have been exposed. Fati Mohammed's campaign was less likely to reach rural respondents (6% of women and 13% of men) than urban respondents (31% of women and 39% of men).

Exposure to Specific RH Campaign Topics

Table 2.6 shows the percentage of respondents who had seen advertisements about sexual abstinence, family planning and condom use, or HIV/AIDS in the six months before the interviews. About four in ten women (40%) and nearly half of men (49%) had seen the advertisements during this time, with rural and uneducated respondents and those in Bauchi the least likely to have seen them. In Bauchi, 24% of women and 37% of men saw the ads, compared with more than 45% of respondents in Enugu and Oyo. Rural respondents were less likely to have seen the advertisements (24% of women and 35% of men) than urban respondents (61% of women and 67% of men), and again, education increased the likelihood of having seen them: In the six months before the interviews, fewer than 20% of uneducated respondents had seen the advertisements, but more than 60% of respondents with secondary or higher education had.

Lack of Awareness of HIV/AIDS

Despite the growing HIV prevalence and the above-noted mass media information about HIV/AIDS a significant fraction of Nigerians have never heard of HIV/AIDS. Table 2.7 shows the percentage of respondents who never heard about HIV/AIDS. About one in seven women (14%) and one in eleven men (9%) have still not heard of HIV/AIDS. Rural and uneducated respondents and those living in Bauchi were the most likely to have not heard of HIV/AIDS. In Bauchi, 28% of women and 13% of men compared with fewer than 10% of respondents in Enugu and Oyo had never heard of HIV/AIDS. Rural respondents were more likely not to have heard of HIV/AIDS (20% of women and 12% of men) than urban respondents (5%). Education decreased the likelihood that a respondent had not heard of HIV/AIDS: 29% of uneducated women and 19% of uneducated men had not heard of HIV/AIDS, compared with fewer than 5% of respondents with secondary or higher education.

Table 2.1 Percent of respondents who read a newspaper weekly, percent who watch television daily, and percent who listen to radio daily, by gender

	Reads newspaper weekly		Watches television daily		Listens to radio daily		n	
	F	M	F	M	F	M	F	M
VISION LGAs	**%**	**%**	**%**	**%**	**%**	**%**	**n**	**n**
Bauchi	7.9	21.5	19.9	23.1	34.2	66.5	552	531
Enugu	25.6	48.2	26.0	43.9	41.4	71.3	676	405
Oyo	27.3	43.8	49.3	49.7	63.3	76.7	586	446
Location								
Urban	29.9	50.1	61.8	71.2	65.8	79.1	785	645
Rural	12.5	22.9	8.0	7.8	30.2	63.8	1029	737
Age								
15-19	24.6	30.1	32.3	37.3	44.9	56.7	309	271
20-24	26.1	41.1	33.1	44.3	48.0	71.5	346	246
25-29	21.3	38.2	35.4	40.3	50.5	77.0	379	234
30-34	17.1	30.8	36.3	35.7	48.2	73.4	261	182
35-39	14.3	34.2	24.3	28.3	38.6	72.4	214	148
40-44	16.1	36.6	23.8	34.4	40.6	76.3	162	130
45-49	6.5	34.9	12.3	27.4	32.6	73.4	143	171
Marital Status								
Never married	39.8	54.9	44.4	57.9	55.0	77.8	184	314
In-union	14.1	29.8	26.8	28.4	43.8	72.0	1232	678
Widowed/Div/Sep	6.1	33.3	16.3	42.3	25.3	73.1	104	29
Virgin	38.0	29.7	43.7	33.6	52.0	62.6	288	360
Living Children								
None	36.0	41.6	40.9	44.6	50.4	68.5	546	723
1-2	17.2	29.8	34.4	32.9	49.0	74.5	496	249
3-4	12.3	27.7	27.4	22.9	44.2	68.6	395	187
5 or more	8.3	27.0	14.2	25.2	33.6	75.2	377	223
Desire More Child.								
No	12.3	41.3	22.5	38.7	41.8	73.4	353	149
Yes	21.6	34.5	32.3	36.2	45.7	70.4	1449	1228
Partners in 12 mths								
None	25.8	32.6	32.3	34.5	43.3	64.5	618	521
One	16.5	34.5	30.0	35.2	45.9	73.9	1132	715
Two or more	22.6	47.5	22.6	49.6	46.0	77.3	64	146
Education								
No formal	2.2	5.3	7.7	7.4	26.4	55.1	679	347
Primary	13.3	24.3	26.3	21.2	43.4	69.8	414	343
Secondary +	42.4	57.5	57.1	60.6	66.0	79.9	721	692
TOTAL	**19.8**	**35.2**	**30.5**	**36.5**	**45.1**	**70.7**	**1814**	**1382**

Table 2.2 Percent of respondents who are not exposed to mass media, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	30.1	552	11.0	531
Enugu	14.4	676	4.7	405
Oyo	5.9	586	0.8	446
Location				
Urban	3.3	785	1.4	645
Rural	27.7	1029	10.3	737
Age				
15-19	16.9	309	8.7	271
20-24	14.1	346	4.5	246
25-29	13.9	379	2.9	234
30-34	17.1	261	8.1	182
35-39	18.6	214	10.5	148
40-44	26.1	162	3.8	130
45-49	27.5	143	7.1	171
Marital Status				
Never married	5.2	184	2.0	314
In-union	19.8	1232	7.6	678
Widowed/Div/Sep	32.7	104	3.7	29
Virgin	9.7	288	7.5	360
Living Children				
None	11.5	546	4.9	723
1-2	13.6	496	6.7	249
3-4	16.9	395	9.9	187
5 or more	31.5	377	7.4	223
Desire More Child.				
No	22.2	353	2.8	149
Yes	16.4	1449	6.7	1228
Partners in 12 mths				
None	16.6	618	7.0	521
One	18.5	1132	6.3	715
Two or more	9.5	64	3.5	146
Education				
No formal	35.8	679	17.4	347
Primary	9.8	414	3.8	343
Secondary +	2.5	721	1.5	692
TOTAL	**17.6**	**1814**	**6.4**	**1382**

Table 2.3a Percent of respondents who report listening to radio programs in the last six months, by gender and type of program

	Kasaurara		Dunniya J'atau		A New Dawn		n	
	F	M	F	M	F	M	F	M
VISION LGAs	**%**	**%**	**%**	**%**	**%**	**%**	**n**	**n**
Bauchi	35.1	43.1	21.2	23.7	1.9	4.8	552	531
Enugu	0.9	2.3	0.8	1.6	3.1	7.0	675	405
Oyo	1.2	1.3	1.0	1.0	16.0	20.6	585	445
Location								
Urban	12.4	17.4	8.9	11.6	11.5	15.6	784	644
Rural	13.8	22.4	7.5	10.9	2.7	5.1	1028	737
Age								
15-19	13.1	18.1	7.3	8.3	4.8	5.1	309	271
20-24	17.3	18.0	10.7	10.2	6.1	9.4	346	246
25-29	11.7	21.4	8.0	11.8	7.5	10.5	378	234
30-34	10.5	19.0	6.2	10.3	7.4	11.4	261	181
35-39	15.3	26.3	8.1	17.1	8.6	10.5	213	148
40-44	11.3	20.8	8.1	13.7	6.3	9.2	162	130
45-49	11.6	19.5	7.3	10.1	1.4	15.4	143	171
Marital Status								
Never married	4.1	8.4	3.5	5.1	9.9	13.5	184	314
In-union	16.8	26.0	10.0	15.4	6.1	11.2	1232	678
Widowed/Div/Sep	3.1	7.4	2.0	0.0	3.1	14.8	104	29
Virgin	6.5	19.5	5.0	9.4	6.1	4.0	288	360
Living Children								
None	7.3	15.7	5.1	8.1	7.4	8.3	546	723
1-2	15.5	23.1	8.8	15.3	7.9	12.6	494	248
3-4	15.6	23.0	10.2	11.5	7.7	7.3	395	187
5 or more	16.3	28.3	9.3	16.5	1.6	13.5	377	223
Desire More Child.								
No	10.8	8.5	7.3	4.2	5.8	11.2	353	149
Yes	13.9	21.5	8.4	12.1	6.5	9.7	1449	1228
Partners in 12 mths								
None	5.9	16.7	4.9	8.4	5.8	7.0	616	520
One	16.4	23.4	9.9	13.6	6.5	11.0	1132	715
Two or more	24.2	16.3	7.9	9.9	9.5	14.9	64	146
Education								
No formal	22.5	31.6	11.9	15.6	1.7	3.4	678	347
Primary	9.3	17.4	6.8	9.3	6.0	7.0	414	343
Secondary +	5.6	15.1	4.9	9.8	11.4	14.9	720	691
TOTAL	**13.3**	**20.2**	**8.2**	**11.3**	**6.4**	**9.9**	**1812**	**1381**

Table 2.3b Percent of respondents who report listening to radio programs in the last six months, by gender and type of program

	One Thing At A Time		Gari Muna Fati		Abule Olokemerin		Odenj-injin		n	
	F	M	F	M	F	M	F	M	F	M
VISION LGAs	%	%	%	%	%	%	%	%	n	n
Bauchi	2.5	5.7	27.7	41.2	0.9	2.3	0.0	2.3	552	531
Enugu	6.1	16.8	0.9	2.8	0.5	1.0	41.5	63.0	675	405
Oyo	4.7	6.2	2.0	2.3	50.5	62.7	8.8	10.3	585	445
Location										
Urban	6.5	13.4	9.9	13.9	29.2	30.0	17.4	26.2	784	644
Rural	3.0	5.2	11.5	24.6	4.5	9.6	17.3	17.3	1028	737
Age										
15-19	3.8	6.5	10.6	13.4	10.9	15.6	17.6	25.7	309	271
20-24	6.6	10.6	13.0	16.7	13.8	20.8	18.7	28.0	346	246
25-29	5.6	10.1	11.0	21.0	18.1	20.3	19.5	16.0	378	234
30-34	4.3	9.2	9.8	25.5	20.2	16.3	14.5	14.7	261	181
35-39	3.3	7.9	9.1	27.6	14.8	14.5	12.4	13.1	213	148
40-44	3.1	12.2	11.3	22.1	11.8	19.8	23.0	26.0	162	130
45-49	1.4	6.5	8.7	17.8	11.6	24.3	13.8	23.7	143	171
Marital Status										
Never married	13.5	16.8	4.1	6.4	23.4	26.9	36.8	36.7	184	314
In-union	2.8	7.8	14.1	28.0	14.0	18.2	13.2	14.2	1232	678
Widowed/Div/Sep	3.1	14.8	1.0	0.0	6.1	22.2	19.4	33.3	104	29
Virgin	6.8	4.3	3.6	16.6	16.1	12.8	23.3	21.7	288	360
Living Children										
None	7.5	10.0	6.6	13.4	17.7	18.9	24.0	27.9	546	723
1-2	4.1	9.4	12.0	25.2	16.9	20.5	14.9	12.2	494	248
3-4	3.6	4.7	10.0	26.2	18.7	18.3	13.8	13.1	395	187
5 or more	1.6	8.3	15.5	28.3	4.4	17.0	14.7	17.8	377	223
Desire More Child.										
No	4.4	10.6	9.4	12.6	16.7	25.9	17.3	32.4	353	149
Yes	4.5	8.7	11.2	20.6	14.4	17.9	17.4	20.0	1449	1228
Partners in 12 mths										
None	4.4	6.5	4.2	14.1	13.4	15.0	20.9	24.3	616	520
One	4.4	10.0	14.4	25.3	15.0	19.6	15.3	18.4	1132	715
Two or more	6.3	12.8	4.8	12.1	25.4	28.4	20.6	25.5	64	146
Education										
No formal	1.1	1.8	18.1	31.9	4.7	9.5	6.9	4.7	678	347
Primary	3.5	4.7	8.0	23.8	13.8	11.6	20.8	23.0	414	343
Secondary +	8.6	15.1	4.4	10.9	26.3	27.7	26.4	29.8	720	691
TOTAL	**4.5**	**9.0**	**10.8**	**19.8**	**14.9**	**19.2**	**17.4**	**21.4**	**1812**	**1381**

Table 2.4 Percent of respondents who heard or read about HIV/AIDS, by gender and source

	Radio		Television		Newspaper		Community Health Worker		n	
	F	M	F	M	F	M	F	M	F	M
VISION LGAs	%	%	%	%	%	%	%	%	n	n
Bauchi	56.2	74.2	22.5	27.9	7.3	19.1	4.7	5.8	552	531
Enugu	84.1	88.8	43.8	64.3	31.2	50.6	26.3	20.3	673	403
Oyo	78.3	86.4	60.2	63.0	28.7	44.0	29.9	24.2	581	445
Location										
Urban	86.2	88.5	73.4	78.8	35.5	55.2	22.1	18.8	779	644
Rural	65.2	76.0	17.6	22.3	12.2	17.9	17.8	11.9	1027	735
Age										
15-19	68.4	73.5	40.7	46.4	25.0	27.6	14.7	12.3	309	271
20-24	72.9	84.5	44.4	56.6	26.2	44.9	15.5	16.3	346	245
25-29	75.2	85.7	48.0	53.4	25.1	38.7	20.8	16.8	378	234
30-34	70.6	82.0	44.9	41.5	19.7	35.0	20.5	12.6	258	180
35-39	79.4	82.2	34.0	42.1	17.7	28.9	25.4	13.8	213	148
40-44	69.8	88.5	32.5	50.4	18.2	36.6	24.4	21.4	161	130
45-49	69.1	79.3	25.0	39.1	9.6	29.0	22.8	14.2	141	171
Marital Status										
Never married	90.1	91.2	70.2	76.0	51.5	62.7	32.7	23.7	184	312
In-union	70.5	83.3	35.7	38.6	15.0	27.4	18.7	13.8	1229	678
Widowed/Div/Sep	63.3	84.6	24.5	48.1	11.2	38.5	17.3	22.2	104	29
Virgin	73.1	70.9	51.3	42.0	38.1	25.9	15.8	9.9	288	360
Living Children										
None	76.0	81.6	53.8	56.5	39.8	41.6	19.4	16.3	546	722
1-2	74.0	81.1	45.2	42.1	18.5	28.5	20.2	11.4	494	247
3-4	72.0	78.0	36.0	34.6	16.3	24.5	21.0	13.1	390	187
5 or more	66.1	84.8	22.0	37.4	7.0	28.3	17.6	16.5	376	223
Desire More Child.										
No	73.4	89.5	35.9	58.5	17.5	42.3	21.9	17.5	353	149
Yes	72.2	80.7	42.0	46.5	22.9	33.9	18.9	14.6	1448	1227
Partners in 12 mths										
None	71.5	75.7	42.3	45.2	26.2	28.5	18.9	11.6	612	520
One	72.7	83.7	40.1	46.1	19.8	35.7	20.3	16.6	1130	713
Two or more	76.2	93.6	39.7	64.5	20.6	53.2	11.3	19.9	64	146
Education										
No formal	54.3	67.0	11.0	12.7	2.2	5.5	9.3	7.1	675	347
Primary	79.6	83.7	37.7	33.4	10.6	18.1	23.3	13.4	414	342
Secondary +	87.6	88.8	74.5	74.9	49.5	59.9	28.4	20.3	717	690
TOTAL	**72.5**	**81.7**	**40.8**	**47.7**	**21.9**	**34.7**	**19.7**	**15.1**	**1806**	**1379**

Table 2.5 Percent of respondents who saw the campaign by Femi Kuti or campaign by Fati Mohammed on television, by gender

	Femi Kuti		Fati Mohammed		n	
	F	M	F	M	F	M
VISION LGAs	**%**	**%**	**%**	**%**	**n**	**n**
Bauchi	10.1	17.1	32.0	35.4	552	531
Enugu	15.1	36.8	3.0	11.7	675	405
Oyo	26.2	40.1	12.9	21.1	585	445
Location						
Urban	32.1	53.7	30.6	38.9	784	644
Rural	5.2	8.7	5.8	13.4	1028	737
Age						
15-19	17.9	26.4	19.5	21.7	309	271
20-24	19.6	40.2	18.2	30.9	346	246
25-29	19.2	32.4	17.1	26.9	378	234
30-34	17.1	21.7	14.8	26.1	261	181
35-39	12.0	25.5	14.8	23.7	213	148
40-44	15.0	28.2	14.9	26.0	162	130
45-49	5.8	23.7	6.6	17.2	143	171
Marital Status						
Never married	35.7	53.0	15.8	25.5	184	314
In-union	12.3	20.5	16.1	23.6	1232	678
Widowed/Div/Sep	7.1	38.5	7.1	22.2	104	29
Virgin	26.6	24.6	20.1	26.9	288	360
Living Children						
None	26.6	36.4	17.9	26.6	546	723
1-2	16.5	23.9	18.3	27.8	494	248
3-4	15.4	18.3	15.9	16.8	395	187
5 or more	3.6	20.0	11.4	22.6	377	223
Desire More Child.						
No	12.0	33.6	11.7	20.4	353	149
Yes	17.6	28.4	17.3	25.4	1449	1228
Partners in 12 mths						
None	18.6	27.8	13.6	24.1	616	520
One	15.3	27.0	17.6	25.1	1132	715
Two or more	17.5	43.3	14.3	26.2	64	146
Education						
No formal	3.7	4.2	13.8	19.5	678	347
Primary	9.8	17.4	11.8	18.0	414	343
Secondary +	34.1	48.7	21.3	31.3	720	691
TOTAL	**16.5**	**29.0**	**16.2**	**24.9**	**1812**	**1381**

Table 2.6 Percent of respondents who saw adverts about sexual abstinence, family planning, condom use or HIV/AIDS in the last six months, by gender

	Females		Males	
	%	n	%	N
VISION LGAs				
Bauchi	24.4	552	36.7	531
Enugu	46.3	675	67.1	405
Oyo	50.9	585	51.2	445
Location				
Urban	61.3	784	66.8	644
Rural	24.3	1028	34.8	737
Age				
15-19	39.9	309	48.2	271
20-24	43.5	346	53.1	246
25-29	45.9	378	54.2	234
30-34	40.6	261	44.6	181
35-39	34.4	213	44.1	148
40-44	36.0	162	58.0	130
45-49	23.9	143	40.8	171
Marital Status				
Never married	65.7	184	71.4	314
In-union	34.2	1232	43.0	678
Widowed/Div/Sep	29.3	104	63.0	29
Virgin	52.5	288	42.1	360
Living Children				
None	52.9	546	54.5	723
1-2	38.6	494	47.5	248
3-4	37.6	395	38.7	187
5 or more	25.3	377	43.5	223
Desire More Child.				
No	35.7	353	56.3	149
Yes	41.0	1449	48.4	1228
Partners in 12 mths				
None	41.7	616	44.5	520
One	38.7	1132	48.8	715
Two or more	41.3	64	68.8	146
Education				
No formal	15.4	678	19.0	347
Primary	38.6	414	43.5	343
Secondary +	66.5	720	69.2	691
TOTAL	**40.0**	**1812**	**49.2**	**1381**

Table 2.7 Percent of respondents who have never heard about HIV/AIDS

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	28.3	552	12.9	531
Enugu	3.4	673	2.6	403
Oyo	8.9	581	8.7	445
Location				
Urban	5.0	779	4.9	644
Rural	20.2	1027	12.3	735
Age				
15-19	16.9	309	13.8	271
20-24	13.8	346	7.8	245
25-29	11.8	378	4.6	234
30-34	15.7	258	10.4	180
35-39	11.5	213	9.9	148
40-44	13.1	161	6.9	130
45-49	14.0	141	7.7	171
Marital Status				
Never married	2.3	184	2.7	312
In-union	15.7	1229	8.5	678
Widowed/Div/Sep	16.3	104	11.1	29
Virgin	12.2	288	14.7	360
Living Children				
None	11.3	546	9.5	722
1-2	12.4	494	9.1	247
3-4	15.0	390	8.9	187
5 or more	18.1	376	7.4	223
Desire More Child.				
No	12.6	353	6.3	149
Yes	14.2	1448	9.4	1227
Partners in 12 mths				
None	12.8	612	13.3	520
One	14.7	1130	7.2	713
Two or more	9.5	64	2.1	146
Education				
No formal	28.6	675	19.2	347
Primary	5.3	414	7.0	342
Secondary +	3.3	717	4.2	690
TOTAL	**13.9**	**1806**	**9.1**	**1379**

Chapter 3. Initiation of Sex and Childbearing

This chapter describes the initiation of sexual activity and childbearing as well as polygamous unions. Early sexual initiation is often considered undesirable, particularly for women, as it increases the length of exposure to the risk of pregnancy and STI infection. Early childbearing is equally undesirable as it increases the risk of pregnancy complications.

Age at First Intercourse

Table 3.1 shows the percentage of respondents who had first sexual intercourse by age 15. Women first engaged in sexual activity at younger ages than men: 26% of women compared to 10% of men had first sex by age 15. Among women, however, there is considerable variation in the timing of sexual initiation. The proportion of women who engaged in sex early is significantly higher in Bauchi, in rural areas, among the uneducated, and among Muslims. In Bauchi, 52% of women had first sex by age 15. By contrast, 13% of women in Enugu and 11% in Oyo had first sex by age 15. About 34% of rural compared to 15% of urban women had first sex by age 15. Uneducated women were also more likely to have first sex at an earlier age: 47% of women with no formal education compared to 6% of women with secondary or higher education had sexual intercourse for the first time by age 15. Muslim women also engaged in sex at earlier ages: 45% of Muslim women had first sex by 15, compared to 12% of Christian women.

The pattern of men's sexual initiation contrasted with women's. Men in Bauchi were less likely to have engaged in sex by age 15 (6%) compared to men in Enugu (11%) or in Oyo (15%). The proportion of men who began having sexual intercourse by age 15 was higher in urban (12%) than in rural areas (8%). Education speeds up the initiation of sexual activity for men: 11% of men with secondary or higher education compared to 7% of men with no formal education had first sex by 15. A higher proportion of Christian men had first sex by age 15 (12%), compared to Muslim men (8%). Please see Appendix C, Map 1 for a geographic presentation of the percentage of in-union women and men who had first sex by age 15.

Table 3.2 shows the percentage of respondents who had first sex by age 18. Slightly more than half of women (52%) and three in ten men (31%) had first sex by 18. For women, the pattern of first sex by age 18 was similar to the pattern for first sex by age 15. A higher proportion of women in Bauchi (78%) than in Enugu (40%) or Oyo (37%) had first sex by 18. Rural women were more likely to have first sex by 18 (59%) than urban women (41%). The proportion of uneducated women who had first sex by 18 was higher (72%) than the proportion of women with secondary or higher education (29%). Muslim women were also more likely to have first sex by age 18 (71%) than Christian women (37%).

Men's pattern of first sex by age 18 was similar to the pattern of first sex by age 15. Men in Oyo (41%) were more likely to have engaged in sexual activity by 18 than men in Enugu (33%) or Bauchi (22%). A higher proportion of urban (33%) compared to rural men (29%) initiated sexual activity by 18. Education and being Christian increased the likelihood that men would have had sex by age 18: 35% of men with secondary or higher education compared to 26% of men with no formal education had sex by age 18; 35% of Christian men compared with 27% of Muslims had had sex by age 18.

Age at First Birth

Early childbearing is undesirable because it increases the likelihood of delivery problems, low birthweight infants, and infant and maternal mortality. Table 3.3 shows the percentage of respondents who had their first child by age 15. As expected, the proportion of women who gave birth to their first child by age 15 (14%) was greater than the proportion of men who fathered their first child by age 15 (2%). Consistent with the data on age at first sex, rural and uneducated

women, Muslim women and women in Bauchi were more likely to have first birth by age 15. There are also considerable variations across states. In Bauchi, 30% of women had had their first birth by age 15. By contrast, 7% of women in Enugu and 3% in Oyo had given first birth by that age. About 20% of rural compared with 5% of urban women had given birth by 15. Uneducated women were more likely to give birth by age 15: 27% of uneducated women, compared to 1% of women with secondary or higher education, gave first birth by age 15. Muslim women were also more likely to have their first birth at an earlier age: 24% of Muslim compared to 6% of Christian women gave first birth by age 15.

With the exception of education, there was little difference by socio-demographic characteristics in the proportion of men who had fathered their first child by age 15. This finding may reflect the small proportion of men who became fathers by age 15. However, education was associated with age at first birth: 5% of men with no education had fathered a first child by age 15, while none of the men with secondary or higher education had done so by that age.

Table 3.4 shows that 38% of women and 7% of men had their first child by age 18 (also see Appendix C, Map 2). Muslims, rural and uneducated respondents, and respondents from Bauchi were most likely to have their first birth by age 18. In Bauchi, 71% of women gave first birth and 11% of men had a first child by age 18. By contrast, 24% of women and 1% of men in Enugu and 16% of women and 5% of men in Oyo became a parent for the first time by 18. Rural respondents (48% of women and 9% of men) were more likely than urban respondents (23% of women and 3% of men) to give first birth or father a first child by age 18. Uneducated respondents tended to have a first child earlier: 63% of women without education gave first birth and 16% of men without education fathered a first child by 18, compared to 11% of women and 2% of men with secondary or higher education. Muslims were more likely to have had a first child earlier (60% of women and 10% of men) than Christians (20% of women and 3% of men).

Polygyny

Table 3.5 shows the percentage of women who reported that their spouse/partner had another spouse at the time of the interview. A quarter of women (25%) reported that their spouse was polygamous. Women with no formal education and Muslim women were more likely to report that their spouse/partner had another spouse. About 30% of women with no formal education, compared with 18% of women with secondary or higher education, reported that their spouse had another partner. About 31% of Muslim women compared to 18% of Christian women reported that their spouse was polygamous.

Table 3.1 Percent of respondents who had first sex by age 15, by gender[1]

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	51.9	482	5.8	485
Enugu	13.1	640	10.9	386
Oyo	11.2	561	14.7	427
Location				
Urban	14.9	736	11.9	614
Rural	33.5	947	8.0	684
Age				
15-19	22.1	230	10.0	219
20-24	23.8	335	13.5	237
25-29	27.5	364	8.2	228
30-34	27.3	254	12.8	177
35-39	25.4	206	8.1	144
40-44	26.3	157	7.3	124
45-49	28.0	137	6.6	169
Education				
No formal	46.7	618	6.6	319
Primary	23.5	382	10.0	321
Secondary +	5.5	683	11.4	658
Religion				
Christian	11.6	974	11.9	684
Muslim	44.5	654	7.8	581
Other	18.9	55	6.1	33
TOTAL	**25.7**	**1683**	**9.8**	**1298**

[1]Among respondents 16 and older.

Table 3.2 Percent of respondents who had first sex by age 18[1], by gender

	Females		Males	
	%	**n**	**%**	**n**
VISION LGAs				
Bauchi	78.2	418	21.5	419
Enugu	40.0	580	33.2	328
Oyo	36.6	509	41.3	380
Location				
Urban	40.6	656	32.6	526
Rural	59.4	851	28.8	601
Age				
15-19	58.5	54	39.6	48
20-24	53.0	335	36.0	237
25-29	48.6	364	29.0	228
30-34	51.4	254	32.2	177
35-39	46.3	206	29.7	144
40-44	55.5	157	29.0	124
45-49	55.7	137	22.2	169
Education				
No formal	71.7	576	25.6	292
Primary	52.4	346	28.3	298
Secondary +	28.6	585	34.7	537
Religion				
Christian	37.1	871	34.6	593
Muslim	70.9	584	26.6	502
Other	46.0	52	25.0	32
TOTAL	**51.5**	**1507**	**30.5**	**1127**

[1]Among respondents 19 and older.

Table 3.3 Percent of respondents who had a first child by age 15[1], by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	30.1	521	2.9	506
Enugu	7.0	645	0.0	383
Oyo	2.8	572	2.1	435
Location				
Urban	5.2	758	0.8	625
Rural	20.2	980	2.9	699
Age				
15-19	9.1	242	0.9	223
20-24	15.0	345	0.8	246
25-29	14.1	378	1.3	233
30-34	14.1	260	2.7	181
35-39	17.4	211	4.6	146
40-44	11.9	160	1.6	127
45-49	16.8	142	2.4	168
Education				
No formal	27.0	649	5.3	330
Primary	12.4	395	1.9	322
Secondary +	1.1	694	0.0	672
Religion				
Christian	5.8	989	0.6	690
Muslim	24.0	691	3.2	602
Other	16.1	58	0.0	32
TOTAL	**13.9**	**1738**	**1.9**	**1324**

[1]Among respondents 16 and older.

Table 3.4 Percent of respondents who had a first child by age 18[1], by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	71.0	450	10.7	439
Enugu	23.7	585	1.3	324
Oyo	16.4	516	4.7	388
Location				
Urban	23.3	670	2.9	537
Rural	48.2	881	9.4	614
Age				
15-19	32.7	55	2.0	50
20-24	36.7	345	3.7	246
25-29	34.7	378	4.2	233
30-34	39.8	260	7.1	181
35-39	38.2	211	11.9	146
40-44	41.5	160	9.4	127
45-49	42.3	142	6.7	168
Education				
No formal	62.5	604	15.5	303
Primary	35.5	353	4.4	298
Secondary +	10.9	594	2.1	550
Religion				
Christian	20.4	885	2.8	598
Muslim	59.9	611	10.1	522
Other	37.7	55	3.2	31
TOTAL	**37.8**	**1551**	**6.5**	**1151**

[1]Among respondents 19 and older.

Table 3.5 Percent of women who reported that their spouse/partner has another spouse

	%	n
VISION LGAs		
Bauchi	29.3	485
Enugu	17.5	353
Oyo	25.9	394
Location		
Urban	24.1	504
Rural	25.9	728
Age		
15-19	23.9	99
20-24	20.1	194
25-29	22.9	290
30-34	21.9	227
35-39	35.0	186
40-44	31.6	134
45-49	25.0	102
Education		
No formal	30.3	572
Primary	23.1	313
Secondary +	17.5	347
Religion		
Christian	18.1	573
Muslim	31.0	619
Other	25.6	40
TOTAL	**25.2**	**1232**

Chapter 4. Knowledge and Use of Family Planning Methods

This chapter describes respondents' knowledge and use of family planning methods. It is important to know the level of knowledge of family planning to determine which groups should be reached by informational materials/campaigns. Knowledge of family planning methods is necessary (but not sufficient) to enable individuals to use family planning methods.

Knowledge of Family Planning Methods

Table 4.1 shows the percentage of respondents who are aware of family planning methods. Overall, more than half of women (52%) and men (57%) spontaneously reported awareness of at least one family planning method. Unmarried respondents (66% of women and 80% of men) were more likely to report awareness of one or more family planning methods. Half of women (50%) and four out of ten men (42%) who were not sexually active reported spontaneous awareness of family planning methods.

In the total sample, spontaneous awareness was highest for male condoms (33%) of females and 44% of males), followed by the pill (29% of females and 25% of males) and the injection (22% of females and 19% of males). For only two other methods, the IUD (12% of females and 10% of males) and females sterilization (9% of females and 8% of males) was spontaneous knowledge close to 10%. Spontaneous knowledge was below 10% for any specific traditional method.

Among those in-union, the pattern of spontaneous knowledge was similar to the pattern for the total sample. Although spontaneous awareness of methods generally followed the same pattern among unmarried, sexually active respondents, their spontaneous awareness of the male condom was considerably higher (50% of females and 70% of males) than for respondents currently in-union (29% of females and 36% of males). Spontaneous awareness of rhythm/abstinence was also somewhat higher among unmarried respondents (11% of females and 8% of males) than in-union respondents (6% of females and males).

Knowledge of Modern Contraceptives

Table 4.2 shows the percentage of respondents who (spontaneously) knew at least one method of modern contraception, which included more than half of both women (51%) and men (58%). Among youth (15-24 years of age), half of women (50%) and more than half of men (57%) knew at least one method of modern contraception. Rural and uneducated respondents and those living in Bauchi were less likely to know of at least one modern method. In Bauchi, 29% of women and 34% of men could cite at least one modern method, compared with more than 50% of respondents in Enugu and more than 80% in Oyo. Rural respondents were considerably less likely (36% of women and 43% of men) than urban respondents (73% of women and 76% of men) to know of at least one modern method. Education increased the likelihood that respondents would know at least one modern method: Fewer than one in three respondents with no education (28% of women and 31% of men), compared to more than 7 in ten respondents with secondary or higher education (73% of women and 76% of men), could name at least one modern method.

Table 4.3 reports the percentage of respondents who knew at least two modern methods—about one in three respondents overall (34% of women and 36% of men). Knowledge of two or more methods was lowest in Bauchi, and among rural and uneducated respondents. In Bauchi, about one in five respondents (18% of women and 20% of men) could cite two or more modern methods, while more than 30% of respondents in Enugu and more than 50% in Oyo had this knowledge. Rural respondents were less likely to

know of two or more methods (22% of women and 25% of men) than urban respondents (50% of women and 48% of men). Uneducated respondents were less likely to know of two or more methods (17% of women and 19% of men) than respondents with secondary or higher education (52% of women and 46% of men).

Ever Use of Family Planning Methods

Table 4.4 shows the percentage of respondents who reported ever having used a family planning method. Overall, 22% of women and 27% of men reported having used a family planning method at some time. These numbers were higher among unmarried respondents (40% of women and 56% of men) than among those in-union (21% of women and 23% of men). The higher levels of modern method use among unmarried respondents mainly reflects higher levels of condom use among unmarried men (47%) and women (28%), compared to men in-union (13%) and women in-union (10%). Unmarried women were also more likely to use rhythm or abstinence compared to women in-union (7% vs. 3%).

Current Use of Family Planning Methods

Table 4.5 shows current use of family planning. Overall, only 11% of women and 16% of men currently used any family planning method. Use was higher among unmarried respondents (20% of women and 41% of men) compared to those in-union (11% of women and 13% of men). Both in-union and unmarried respondents most frequently used the male condom: 4% of women in-union and 7% of men in-union, and 15% of unmarried women and 37% of unmarried men used this method.

Table 4.6 documents patterns of current use of family planning methods (also see Appendix C, Map 3). Use of any modern method was lowest among rural and uneducated respondents, those who live in Bauchi, and those who desired more children. In Bauchi, 1% of women and 2% of men used a modern method. By contrast, a higher proportion of respondents in Enugu (6% of women and 15%) and Oyo (19% of women and 20% of men) used a modern method. Use of modern methods was also lower in rural areas (3% of women and 6% of men), compared to urban areas (14% of women and 17% of men). Respondents who desired more children were less likely to use condoms (less than 7%) compared with respondents who did not want more children (more than 12%). Education increased modern contraceptive use: 19% of women and 17% of men with secondary or higher education used a modern method, compared with 2% of women and 3% of men with no formal education.

Because condoms were the most commonly used modern method, the pattern of current use of condoms was similar to the pattern of modern method use. Use of condoms was lowest among rural respondents, among those who desired more children, among the uneducated, and in Bauchi. Fewer than 1% of women in Bauchi used the condom, compared to 3% in Enugu and 9% in Oyo. Similarly, fewer than 1% of men in Bauchi, compared to 12% in Enugu and 16% in Oyo used the condom. Condom use was particularly low in rural areas: About 2% of women in rural compared to 6% in urban areas use the condom; 3% of men in rural compared to 13% in urban areas used that method. Respondents who desired more children were less likely to use a condom: 3% of women and 6% of men who desired more children used condoms, compared to 6% of women and 18% of men who did not want more children. Among sexually active youth (15-24 years of age), 14% of women and 36% of men reported having ever used a condom. Condom use increased with education: Fewer than 2% of respondents with no formal education compared to more than 8% of respondents with secondary or higher education used the condom.

Approval and Discussion of Family Planning Methods

Table 4.7 shows the percentage of respondents who approve of family planning. Fewer than four in ten respondents (36% of women and 37% of men) approved of family planning at the time of the interview. Among married respondents, one-third of both women and men

(33% and 34%, respectively) approved of family planning. Rural and uneducated respondents, respondents who did not want more children, and those living in Bauchi were least likely to approve. In Bauchi, only 16% of women and 21% of men approved of family planning. By contrast, more than 40% of respondents in Enugu and more than 60% in Oyo approved of family planning. Rural respondents were less likely to approve (fewer than 30%) than urban respondents (more than 50%). Respondents who wanted more children were less likely to approve of family planning (34%), compared with respondents who did not want more children (more than 40%). Education increased this likelihood: More than 50% of respondents with secondary or higher education, compared with fewer than 20% of respondents with no formal education, approved of family planning.

Table 4.8 shows the percentage of respondents in-union who discussed family planning with their partner or spouse once or twice, or more than twice during the previous year. Among women in-union, one in seven (14%) had discussed family planning once or twice, and one in eight (12%) had discussed family planning more than twice during the last year. Among men in-union, one in six (16%) had talked about family planning once or twice with his partner or spouse, and one in seven (15%) had done so more than twice. Among married women, 13% had discussed family planning once or twice in the last year and 10% had discussed family planning more than twice during the last year. Among married men, 15% had discussed family planning once or twice in the previous year and 11% had discussed family planning more than twice in the previous year. Rural and uneducated respondents, as well as respondents in Bauchi, were less likely to discuss family planning. In Bauchi, fewer than 10% of respondents had discussed family planning once or twice or more than twice. By contrast, more than 20% of respondents in Oyo had discussed family planning once or twice or more than twice. Rural respondents were also less likely to have discussed family planning (fewer than 12%) compared with those in urban areas (more than 20%). Education increased the likelihood: Fewer than 10% of respondents with no education discussed family planning once or twice or more than twice with a partner or spouse, compared with more than 20% of respondents with secondary or higher education.

Table 4.1 Percent of respondents who report spontaneous awareness of specific family planning methods, by marital status and gender

	All		Currently In-union		Unmarried (sexually experienced)		Virgins	
	F (n=1814)	M (n=1382)	F (n=1232)	M (n=678)	F (n=288)	M (n=343)	F (n=288)	M (n=360)
Any method	52.1	57.0	49.5	54.5	65.8	79.5	50.2	42.1
Any mod. meth.	50.2	55.6	47.9	52.6	62.7	78.1	48.5	41.5
Pill	28.5	24.9	30.1	29.1	26.0	28.3	24.1	14.2
IUD	11.9	9.5	13.2	9.8	10.5	14.6	7.4	4.5
Injection	22.1	19.4	25.0	24.0	16.8	21.5	14.5	9.2
Emerg. Contrac.	2.6	2.7	2.8	3.4	1.4	2.7	2.9	1.5
Implant	3.9	2.9	4.4	3.7	2.0	2.5	3.5	1.8
Diaphragm	2.6	2.6	2.4	2.9	2.0	3.6	3.8	1.2
Foam/jelly	2.5	2.9	2.5	2.7	2.0	4.2	2.9	2.0
Male condom	33.4	43.9	28.7	36.4	49.8	69.7	38.5	35.4
Female cond.	4.7	4.6	4.4	5.0	4.9	5.8	5.4	2.9
Female steriliz.	8.5	7.6	8.6	9.3	9.1	8.0	7.7	3.9
Male steriliz.	3.9	5.3	3.9	5.9	3.3	5.3	5.1	4.2
Any trad. meth.	13.1	11.9	12.6	12.4	18.3	17.8	10.7	6.0
Rhythm/ abstin.	7.2	5.7	6.1	6.3	11.2	8.2	8.0	2.5
Withdrawal	6.4	6.4	6.6	7.0	7.2	9.6	4.7	2.7
Lactation amen.	2.1	1.5	2.4	2.3	0.7	0.5	2.5	1.0
Other methods	2.4	2.8	2.3	2.8	3.6	3.9	1.5	2.0

Table 4.2 Percent of respondents who (spontaneously) know at least one method of modern contraception, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	28.6	552	33.7	531
Enugu	50.5	676	67.6	405
Oyo	80.3	586	87.9	446
Location				
Urban	72.8	785	76.4	645
Rural	35.7	1029	43.3	737
Age				
15-19	43.3	309	50.0	271
20-24	55.2	346	64.9	246
25-29	54.8	379	56.7	234
30-34	57.2	261	58.9	182
35-39	48.6	214	53.9	148
40-44	48.1	162	64.9	130
45-49	44.9	143	62.1	171
Marital Status				
Never married	77.3	184	83.6	314
In-union	48.5	1232	54.9	678
Widowed/Div/Sep	41.8	104	85.2	29
Virgin	50.2	288	42.0	360
Living Children				
None	57.4	546	61.6	723
1-2	54.5	496	55.9	249
3-4	53.2	395	56.0	187
5 or more	36.4	377	52.6	223
Desire More Child.				
No	52.5	353	71.3	149
Yes	50.8	1449	56.7	1228
Partners in 12 mths				
None	50.3	618	51.8	521
One	51.3	1132	58.6	715
Two or more	57.1	64	80.9	146
Education				
No formal	28.2	679	30.5	347
Primary	55.1	414	54.1	343
Secondary +	73.3	721	76.0	692
TOTAL	**51.2**	**1814**	**58.2**	**1382**

Table 4.3 Percent of respondents who (spontaneously) know two or more methods of modern contraception, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	17.5	552	20.0	531
Enugu	31.1	676	34.6	405
Oyo	57.5	586	61.0	446
Location				
Urban	50.1	785	47.8	645
Rural	22.1	1029	25.4	737
Age				
15-19	23.3	309	24.6	271
20-24	39.5	346	33.9	246
25-29	37.0	379	35.4	234
30-34	38.9	261	40.2	182
35-39	32.9	214	34.9	148
40-44	33.8	162	46.6	130
45-49	26.8	143	42.3	171
Marital Status				
Never married	49.7	184	49.8	314
In-union	32.7	1232	36.7	678
Widowed/Div/Sep	23.5	104	48.1	29
Virgin	32.3	288	20.9	360
Living Children				
None	37.0	546	34.6	723
1-2	35.3	496	35.5	249
3-4	35.8	395	36.1	187
5 or more	25.4	377	37.4	223
Desire More Child.				
No	34.8	353	47.9	149
Yes	33.4	1449	34.1	1228
Partners in 12 mths				
None	32.6	618	27.7	521
One	34.3	1132	37.2	715
Two or more	36.5	64	55.3	146
Education				
No formal	16.9	679	19.3	347
Primary	34.2	414	33.0	343
Secondary +	51.5	721	45.8	692
TOTAL	**33.8**	**1814**	**35.5**	**1382**

Table 4.4 Percent of respondents who report ever use of specific family planning methods, by marital status and gender

	All		Currently In-union		Unmarried (sexually experienced)	
	F (n=1814)	M (n=1382)	F (n=1232)	M (n=678)	F (n=288)	M (n=343)
Any method	22.4	26.8	21.3	22.8	40.4	55.7
Any modern meth.	18.5	23.5	17.3	18.2	34.9	52.5
Pill	4.3	2.8	5.0	2.3	4.5	5.8
IUD	2.2	1.2	2.2	1.1	3.4	1.4
Injection	2.5	2.6	3.1	3.2	1.4	2.8
Emerg. Contrac.	0.4	0.4	0.4	0.4	0.4	0.6
Implant	0.6	0.3	0.6	0.7	1.0	0.0
Diaphragm	0.2	0.3	0.3	0.3	0.0	0.5
Foam/jelly	0.4	0.2	0.5	0.3	0.0	0.3
Male condom	12.0	18.9	10.1	13.0	27.7	46.7
Female condom	0.5	0.2	0.3	0.5	1.7	0.0
Female steriliz.	0.2	0.2	0.3	0.4	0.3	0.0
Male steriliz.	0.0	0.0	0.0	0.0	0.0	0.0
Any trad. meth.	7.0	5.2	7.0	6.1	12.0	8.0
Rhythm/abst.	3.5	2.1	3.1	2.8	7.3	2.7
Withdrawal	3.4	2.7	3.7	2.9	4.5	5.1
Lactation amen.	0.9	0.4	1.2	0.8	0.4	0.0
Other methods	0.6	0.7	0.6	0.8	1.3	1.1

Table 4.5 Percent of respondents who report current use of specific family planning methods, by marital status and gender

	All		Currently in-union		Unmarried (sexually experienced)	
	F (n=1814)	M (n=1382)	F (n=1232)	M (n=678)	F (n=288)	M (n=343)
Any method	10.5	15.7	10.6	12.5	20.4	40.5
Any modern meth.	7.7	13.8	7.5	9.7	15.9	38.2
Pill	1.5	0.6	1.8	0.6	1.7	1.4
IUD	0.8	0.3	1.1	0.4	0.3	0.5
Injection	0.8	1.0	1.1	1.5	0.3	1.1
Implant	0.1	0.0	0.1	0.0	0.0	0.0
Diaphragm	0.1	0.0	0.1	0.0	0.0	0.0
Foam/jelly	0.0	0.1	0.1	0.0	0.0	0.3
Male condom	4.7	12.3	3.5	7.2	14.5	37.4
Female condom	0.0	0.1	0.0	0.2	0.0	0.0
Female steriliz.	0.2	0.2	0.3	0.4	0.3	0.0
Male steriliz.	0.0	0.0	0.0	0.0	0.0	0.0
Any trad. meth.	3.5	2.9	3.6	3.3	6.6	5.2
Rhythm/abst.	1.9	1.4	1.7	1.6	4.5	2.4
Withdrawal	1.4	1.2	1.7	1.1	1.7	2.8
Lactation amen.	0.2	0.1	0.2	0.2	0.4	0.0
Other methods	0.3	0.3	0.4	0.4	0.3	0.3

Table 4.6 Percent of respondents who currently use any modern family planning method and percentage who use condoms, by gender

	Any modern method		Condoms		n	
	F	M	F	M	F	M
VISION LGAs						
Bauchi	1.4	2.4	0.4	0.5	485	317
Enugu	6.2	15.2	3.0	11.5	353	138
Oyo	18.8	19.6	9.0	16.4	394	223
Location						
Urban	14.0	16.8	6.0	13.3	504	259
Rural	3.3	5.7	2.0	3.4	728	419
Age						
15-19	0.0	-	0.0	-	99	11
20-24	5.4	4.7	2.9	4.7	194	38
25-29	7.2	5.0	4.1	5.0	290	113
30-34	10.2	10.8	5.3	9.2	227	126
35-39	9.3	7.1	3.3	4.7	186	123
40-44	11.9	18.1	5.3	10.3	134	115
45-49	6.1	11.4	0.0	8.7	102	152
Living Children						
None	1.9	5.0	1.9	5.0	102	78
1-2	6.1	10.5	3.1	8.7	446	223
3-4	13.0	8.1	5.4	8.1	356	170
5 or more	5.6	12.1	2.6	5.6	328	207
Desire More Child.						
No	12.3	26.9	6.2	18.3	266	97
Yes	6.0	6.7	2.8	5.5	960	578
Partners in 12 mth						
None	3.3	8.5	1.6	7.0	193	76
One	8.2	8.4	3.7	6.4	992	527
Two or more	10.4	20.3	6.4	12.2	47	75
Education						
No formal	2.3	3.4	0.6	1.5	572	241
Primary	6.3	10.2	3.6	7.4	313	216
Secondary +	18.7	16.5	8.6	13.3	347	221
TOTAL	**7.5**	**9.8**	**3.4**	**7.3**	**1232**	**678**

Table 4.7 Percent of respondents in-union who approve of family planning, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	15.7	485	20.5	317
Enugu	43.6	353	50.0	138
Oyo	60.5	394	61.0	223
Location				
Urban	54.0	504	53.1	259
Rural	23.8	728	28.4	419
Age				
15-19	18.2	99	-	11
20-24	27.0	194	23.8	38
25-29	39.0	290	37.0	113
30-34	45.5	227	39.2	126
35-39	43.2	186	33.9	123
40-44	32.3	134	38.3	115
45-49	30.0	102	43.3	152
Living Children				
None	21.5	102	30.0	78
1-2	40.2	446	39.7	223
3-4	41.0	356	37.6	170
5 or more	28.5	328	37.6	207
Desire More Child.				
No	41.5	266	55.9	97
Yes	33.9	960	34.2	578
Partners in 12 mths				
None	26.5	193	40.3	76
One	37.5	992	34.4	527
Two or more	29.8	47	56.8	75
Education				
No formal	16.3	572	19.0	241
Primary	42.2	313	43.1	216
Secondary +	66.0	347	54.1	221
TOTAL	**35.6**	**1232**	**37.4**	**678**

Table 4.8 Percent of respondents in-union who discussed family planning, by gender

	Females			Males		
	Once or twice %	More than twice %	n	Once or twice %	More than twice %	n
VISION LGAs						
Bauchi	4.8	3.7	485	8.1	6.2	317
Enugu	23.1	13.8	350	24.2	20.3	133
Oyo	21.5	23.8	390	26.6	28.1	220
Location						
Urban	20.8	19.4	499	23.9	24.3	254
Rural	10.1	7.2	726	11.9	9.6	416
Age						
15-19	6.4	2.7	99	-	-	11
20-24	11.3	8.3	194	7.5	5.0	36
25-29	15.1	13.7	289	12.8	16.2	112
30-34	18.6	14.5	223	14.2	16.5	123
35-39	16.9	16.4	186	11.0	16.5	123
40-44	9.7	14.2	134	26.7	10.3	115
45-49	19.4	7.1	100	18.9	18.9	150
Living Children						
None	7.5	4.7	102	9.3	13.3	72
1-2	16.0	11.7	444	16.7	16.7	222
3-4	16.6	16.3	352	15.7	14.5	169
5 or more	12.1	10.0	327	18.8	14.1	207
Desire More Child.						
No	17.4	18.6	264	25.3	28.6	95
Yes	13.4	10.1	957	14.8	12.6	572
Partners in 12 mths						
None	13.2	9.3	190	17.1	12.9	74
One	14.5	12.5	989	15.5	14.6	523
Two or more	13.0	10.9	46	20.8	19.4	73
Education						
No formal	7.8	3.9	570	7.3	7.3	239
Primary	18.0	12.3	310	18.7	14.5	213
Secondary +	23.4	27.1	345	24.7	24.7	218
TOTAL	**14.3**	**12.0**	**1225**	**16.3**	**14.9**	**670**

Chapter 5. Knowledge of and Attitudes Toward STIs/HIV/AIDS

This chapter describes the respondents' level of awareness of HIV/AIDS, their knowledge of the ways they can avoid getting infected, the extent to which they have discussed HIV/AIDS prevention, their HIV/AIDS risk awareness, and their attitudes toward people who are HIV positive.

HIV/AIDS Knowledge

Table 5.1 shows the extent to which respondents were aware of the HIV/AIDS epidemic and knew how to prevent being infected. The results indicate that despite the growing HIV/AIDS epidemic in Nigeria, many people lack information. Specifically, the results show that nearly one in seven women (14%) and one in eleven men (9%) in the sample had never heard of AIDS. In addition, nearly one out of every four women (23%) and one out of every five men (18%) had heard about HIV/AIDS but did not know what to do to prevent infection.

Table 5.1 further shows substantial variation in the percentage of respondents who had not heard of HIV/AIDS at the time of the interview. Rural and uneducated respondents, as well as those living in Bauchi, were most likely to report not knowing about HIV/AIDS. In Bauchi, 28% of women and 13% of men had not heard of HIV/AIDS, but only 9% of respondents in Oyo and 3% of respondents in Enugu had not heard of it. Rural respondents were much more likely than urban respondents to report not knowing about HIV/AIDS. Specifically, 20% of rural women had never heard of AIDS, compared to 5% of urban women. For men, the corresponding percentages are 12% and 5%, respectively. Breakdown by level of education further shows that respondents who lack formal education were most likely to report not knowing about AIDS (29% of women and 19% of men). By contrast, there is little difference between respondents with primary and secondary or higher education. Finally, it is noteworthy that among the never married, who are expected to have an elevated HIV/AIDS risk, awareness of HIV/AIDS was nearly universal. Fewer than 3% of the unmarried report not knowing about HIV/AIDS.

In addition to those who were unaware of HIV/AIDS, an even larger fraction of respondents did not know how to prevent infection even though they had heard about HIV/AIDS. In some cases, the groups that were least likely to have heard of HIV/AIDS were also least likely to know how to prevent getting infected. For example, respondents in Bauchi were most likely to lack knowledge about how to prevent infection (28% of women and 22% of men). Surprisingly, awareness of how to prevent infection was also limited in Oyo: 25% of women and 24% of men reported not knowing how to prevent infection. As anticipated, respondents in rural areas were more likely than those in urban areas to report that they did not know how to prevent infection (26% vs. 18% for women, and 23% vs. 13% for men). About one third of uneducated respondents (32% of women and men) did not know how to prevent infection. However, information on how to prevent infection was also lacking among the educated. Among those with primary education, 25% of women and 19% of men did not know how to prevent infection. Even among those with secondary or higher education, one in ten (12% of women and 10% of men) did not know how HIV infection can be prevented.

The remainder of the population had heard of HIV/AIDS and knew at least one way to prevent it. Overall, about 63% of women and 73% of men reported knowing how to avoid HIV/AIDS infection. Rural and uneducated respondents as well as respondents living in Bauchi were less likely to know how to avoid AIDS. About 4 out of 10 women (43%) and 65% of men in Bauchi knew how to prevent infection, compared to more than 8 out of 10 women and men in Enugu. In rural areas, 54% of women and 65% of men knew how to avoid AIDS, a lower percentage than in urban areas, where 77% of women and

82% of men knew how to avoid AIDS. Uneducated respondents had the least knowledge of how to avoid HIV infection: Only 40% of women and 49% of men with no formal education knew how to avoid AIDS.

Knowledge of Other STIs

Table 5.2 shows the percentage of women and men who had heard of STIs besides AIDS: Nearly half of women (48%) and six out of 10 men (62%). Rural and uneducated respondents as well as those living in Bauchi were less likely to have heard of other STIs. Only 23% of women in Bauchi, compared to 69% of women in Enugu, had heard of other STIs. Similarly, 49% of men in Bauchi, compared to 80% of men in Enugu, had heard of other STIs. In rural areas, 43% of women and 56% of men had heard of other STIs, in contrast with 56% of women and 70% of men in urban areas. Knowledge of other STIs increased with education: 27% of women with no formal education had heard of other STIs, compared with 68% of women with secondary or higher education; 42% of men with no formal education had heard of STIs compared to 73% of men with secondary or higher education.

Table 5.3 shows the percentage of sexually experienced women and men who had contracted an STI within the 12 months before the survey. About 4% of women and men reported having had an STI. Respondents with two more partners in the previous 12 months were more likely to have had an STI in those months: 14% of women and 10% of men with two or more partners, compared to 4% of women and 3% of men with one partner in the previous 12 months.

HIV/AIDS Risk Awareness

Table 5.4 shows the percentage of women and men who believed it possible for a healthy looking person to be HIV positive or to have AIDS. Only half (49%) of women and 59% of men believed that a healthy looking person could be infected. This awareness was lowest in Bauchi, in rural areas, and among the uneducated. In Bauchi, only 24% of women and 45% of men were aware that a healthy looking person can be HIV positive. Similarly, only 39% of rural women and 45% of rural men realized this. Awareness that an HIV positive person can appear healthy increases with education: Among women, the percentage ranges from 23% for the uneducated to 74% for those with secondary or higher education; among men, it ranges from 31% to 77%, respectively. There is no clear variation in awareness that a healthy looking person can be HIV positive by age group or by sexual risk behavior.

Discussion of HIV/AIDS Prevention with Partners

Table 5.5 documents discussion between sexual partners of ways to prevent HIV infection. Only one in three women (37%) and half of men (48%) had discussed ways of preventing AIDS. Discussion of HIV prevention was especially low among residents of Bauchi, those living in rural areas, and among men and women without formal education. In Bauchi, only 12% of women and 31% of men had discussed AIDS prevention with a partner. By contrast, in Enugu, 55% of women and 67% of men had discussed prevention methods. In rural areas, 30% of women and 38% of men had talked about how to prevent AIDS (compared to 46% of women and 62% of men in urban areas). Respondents who lack formal education were also substantially less likely to discuss AIDS prevention (16% of women and 22% of men), compared to respondents with secondary or higher education (65% of women and 66% of men).

Attitudes Toward HIV Positive People

Table 5.6 shows the percentage of women and men who would like to maintain secrecy if a family member were to become infected. One in four respondents (24% of women and 26% of men) reported this desire, with respondents in Enugu (39% of women and 42% of men) most likely to want to maintain secrecy. Education also appears to make individuals more inclined to keep AIDS infection a secret: 31% of women and 28% of men with secondary or higher education, compared to 17% of women and 20%

of men with no formal education, were inclined to conceal AIDS infection.

Attitudes Toward HIV/AIDS Education

Table 5.7 shows the percentage of respondents who believed that children 12-14 should be taught about using a condom to avoid AIDS. Fewer than half of respondents (40% of women and 45% of men) believed that children should be taught about using a condom. Rural and uneducated respondents and those from Bauchi were less likely to want children to be taught about condom use. In Bauchi, 18% of women and 28% of men believed that children should be taught about condoms. By contrast, 55% of women and 60% of men in Enugu felt the same way. Rural respondents (38% of women and 41% of men) were less likely than urban respondents (44% of women and 51% of men) to believe that children should be taught about condoms. Education increased respondents' willingness to have children taught about condom use: 26% of uneducated women, compared with 51% of women with secondary or higher education, would like children to be taught about condoms; 28% of uneducated men, compared with 54% of men with secondary or higher education, would like 12- to 14-year-olds taught to use a condom.

HIV/AIDS Testing

Table 5.8 shows the percentage of women and men who had been tested for the HIV virus (also see Appendix C, Map 5). Only one in ten respondents have been tested for HIV infection. Respondents in Bauchi and Oyo were less likely to have been tested for HIV than respondents in Enugu. Only 2% of women in Bauchi and 6% in Oyo had been tested for HIV, compared to 21% in Enugu. Similarly, only 4% of men in Bauchi and 6% in Oyo had been tested, compared to 24% in Enugu. Rural and uneducated respondents were also unlikely to have been tested: 7% of rural respondents, compared to 15% of urban respondents had been tested for HIV; fewer than 2% of uneducated respondents, compared to more than 16% of respondents with secondary or higher education, had been tested for HIV.

Table 5.9 shows the percentage of women and men who wanted to be tested for the AIDS virus, among those not already tested (also see Appendix C, Map 6). About 38% of women and 47% of men reported that they would like to be tested for HIV. Respondents in Bauchi and rural areas, and those without formal education were less likely to want an HIV test. In Bauchi, only18% of women and 34% of men wanted an HIV test, but 49% of women and 58% of men in Enugu wanted to be tested. Rural respondents were also less likely to want an HIV test (31% of women and 40% of men) than urban respondents (48% of women and 57% of men). Respondents with no formal education were also less likely (21% of women and 32% of men) than those with secondary or higher education (54% of women and 57% of men) to want an HIV test.

Table 5.1 Percent of respondents who have not heard of AIDS, have heard of AIDS but do not know how to avoid it, have heard of AIDS and know how to avoid it, by gender

	Have not heard of AIDS		Have heard of AIDS but do not know how to avoid it		Have heard of AIDS and know how to avoid it		n	
	F	**M**	**F**	**M**	**F**	**M**	**F**	**M**
VISION LGAs								
Bauchi	28.3	12.9	28.4	22.0	43.3	65.0	552	531
Enugu	3.4	2.6	15.4	6.8	81.2	90.6	673	403
Oyo	8.9	8.7	24.8	24.2	66.3	67.1	581	445
Location								
Urban	5.0	4.9	18.1	13.1	76.9	82.0	779	644
Rural	20.2	12.3	26.1	22.6	53.7	65.1	1027	735
Age								
15-19	16.9	13.8	21.7	20.4	61.3	65.8	309	271
20-24	13.8	7.8	21.3	14.3	64.8	77.9	346	245
25-29	11.8	4.6	19.8	20.2	68.4	75.2	378	234
30-34	15.7	10.4	22.0	16.4	62.2	73.2	259	180
35-39	11.4	9.9	30.0	17.1	58.6	73.0	213	148
40-44	13.1	6.9	23.8	22.1	63.1	71.0	161	130
45-49	14.0	7.7	25.7	18.9	60.3	73.4	141	171
Marital Status								
Never married	2.3	2.7	12.2	10.5	85.5	86.8	184	312
In-union	15.7	8.5	25.2	19.7	59.1	71.9	1229	678
Widowed/Div/Sep	16.3	10.7	24.5	17.9	59.2	71.4	104	29
Virgin	12.2	14.7	17.6	22.2	70.3	63.1	288	360
Partners in 12 mths								
None	12.8	13.3	20.8	21.3	66.4	65.4	612	520
One	14.7	7.2	23.3	16.3	62.0	76.6	1130	713
Two or more	9.7	2.1	30.6	18.3	59.7	79.6	64	146
Education								
No formal	28.6	19.3	31.8	31.9	39.6	48.8	675	347
Primary	5.3	7.0	24.6	19.0	70.2	74.1	414	342
Secondary +	3.3	4.2	12.1	10.3	84.6	85.5	717	690
TOTAL	**13.9**	**9.0**	**22.7**	**18.3**	**63.4**	**72.7**	**1806**	**1379**

Table 5.2 Percent of respondents who have heard of other STIs, besides AIDS, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	23.2	552	49.4	531
Enugu	69.1	673	79.9	403
Oyo	53.7	581	65.8	445
Location				
Urban	55.6	779	69.9	644
Rural	43.0	1027	56.3	735
Age				
15-19	35.8	309	43.3	271
20-24	46.4	346	66.1	245
25-29	55.2	378	63.9	234
30-34	51.0	258	65.0	180
35-39	50.7	213	66.4	148
40-44	51.6	161	71.5	130
45-49	50.0	141	72.8	171
Marital Status				
Never married	78.5	184	79.0	312
In-union	44.1	1229	64.8	678
Widowed/Div/Sep	59.2	104	80.8	29
Virgin	43.7	288	43.6	360
Partners in 12 mths				
None	48.8	612	51.1	520
One	48.0	1130	66.3	713
Two or more	47.6	64	84.4	146
Education				
No formal	26.9	675	42.2	347
Primary	52.8	414	64.7	342
Secondary +	68.3	717	72.6	690
TOTAL	**48.3**	**1806**	**62.4**	**1379**

Table 5.3 Percent of sexually experienced respondents who had an STI in the last 12 months, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	2.9	497	4.1	357
Enugu	6.2	523	4.4	287
Oyo	4.1	477	3.1	364
Location				
Urban	5.8	616	3.9	473
Rural	3.4	881	4.0	535
Age				
15-19	5.4	142	1.5	67
20-24	4.7	272	4.4	161
25-29	5.0	345	5.8	190
30-34	2.9	242	3.7	162
35-39	5.0	204	4.9	138
40-44	4.6	154	3.2	124
45-49	2.2	138	2.5	166
Marital Status				
Never married	10.1	180	4.8	306
In-union	3.6	1214	3.6	673
Widowed/Div/Sep	4.1	103	7.4	29
Partners in 12 mths				
None	5.0	318	2.6	159
One	3.6	1115	3.2	705
Two or more	14.3	64	10.0	144
Education				
No formal	2.8	635	2.8	262
Primary	3.2	360	3.4	266
Secondary +	7.4	502	5.0	480
TOTAL	**4.3**	**1497**	**4.1**	**1008**

Table 5.4 Percent of respondents who believe that it is possible for a healthy-looking person to have AIDS or the virus that causes AIDS, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	24.3	552	44.8	531
Enugu	67.3	673	78.4	403
Oyo	58.5	581	62.5	445
Location				
Urban	64.1	779	75.8	644
Rural	38.9	1027	45.3	735
Age				
15-19	43.5	309	52.2	271
20-24	52.2	346	65.6	245
25-29	53.5	378	63.9	234
30-34	50.0	258	59.0	180
35-39	47.8	213	53.9	148
40-44	51.6	161	63.4	130
45-49	43.4	141	55.0	171
Marital Status				
Never married	74.9	184	76.6	312
In-union	43.9	1229	56.1	678
Widowed/Div/Sep	49.0	104	59.3	29
Virgin	58.1	288	50.5	360
Partners in 12 mths				
None	52.9	612	53.6	520
One	47.9	1130	61.3	713
Two or more	44.4	64	67.4	146
Education				
No formal	22.6	675	30.6	347
Primary	55.3	414	56.4	342
Secondary +	74.4	717	76.5	690
TOTAL	**49.4**	**1806**	**59.0**	**1379**

Table 5.5 Percent of sexually experienced respondents who have ever discussed with a partner ways of preventing the virus that causes AIDS, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	12.1	497	30.5	357
Enugu	55.1	535	66.9	295
Oyo	47.5	486	55.6	367
Location				
Urban	46.1	626	61.6	479
Rural	30.3	892	37.5	540
Age				
15-19	25.3	143	47.1	70
20-24	38.1	276	50.6	163
25-29	38.9	349	53.1	193
30-34	38.7	246	45.5	163
35-39	39.4	207	45.1	138
40-44	35.3	158	50.4	126
45-49	32.6	139	45.4	166
Marital Status				
Never married	64.0	184	61.7	312
In-union	33.3	1229	43.1	678
Widowed/Div/Sep	28.6	104	42.3	29
Partners in 12 mths				
None	32.6	324	45.4	160
One	37.3	1130	47.5	713
Two or more	41.3	64	58.9	146
Education				
No formal	15.7	641	21.8	263
Primary	38.5	366	45.1	268
Secondary +	64.7	511	66.3	488
TOTAL	**36.5**	**1518**	**48.4**	**1019**

Table 5.6 Percent of respondents who would want to maintain secrecy if a family member got infected with the virus that causes AIDS, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	18.5	552	21.6	531
Enugu	38.5	673	42.4	403
Oyo	13.4	581	15.2	445
Location				
Urban	26.4	779	24.4	644
Rural	22.6	1027	26.5	735
Age				
15-19	24.3	309	24.3	271
20-24	30.3	346	27.5	245
25-29	25.3	378	25.7	234
30-34	20.5	258	30.1	180
35-39	21.1	213	24.8	148
40-44	23.3	161	21.4	130
45-49	18.4	141	23.7	171
Marital Status				
Never married	35.5	184	31.9	312
In-union	21.1	1229	25.0	678
Widowed/Div/Sep	20.4	104	18.5	29
Virgin	32.7	288	22.2	360
Partners in 12 mths				
None	29.4	612	25.7	520
One	21.9	1130	25.1	713
Two or more	19.0	64	27.7	146
Education				
No formal	16.5	675	19.5	347
Primary	26.4	414	28.0	342
Secondary +	31.1	717	27.6	690
TOTAL	**24.2**	**1806**	**25.6**	**1379**

Table 5.7 Percent of respondents who believe that children 12-14 should be taught about using a condom to avoid AIDS, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	17.5	552	27.6	531
Enugu	54.7	673	59.7	403
Oyo	50.6	581	58.6	445
Location				
Urban	43.9	779	50.7	644
Rural	37.6	1027	40.7	735
Age				
15-19	36.1	309	39.5	271
20-24	39.9	346	50.2	245
25-29	43.0	378	46.8	234
30-34	39.8	258	42.1	180
35-39	44.5	213	45.8	148
40-44	36.3	161	47.7	130
45-49	41.9	141	46.2	171
Marital Status				
Never married	62.6	184	64.1	312
In-union	37.1	1229	41.8	678
Widowed/Div/Sep	45.9	104	48.1	29
Virgin	38.4	288	36.4	360
Partners in 12 mths				
None	38.9	612	39.2	520
One	40.6	1130	45.9	713
Two or more	46.0	64	63.8	146
Education				
No formal	25.7	675	27.9	347
Primary	47.6	414	47.8	342
Secondary +	51.3	717	53.7	690
TOTAL	**40.2**	**1806**	**45.2**	**1379**

Table 5.8 Percent of women and men who have ever been tested for the AIDS virus

	Females		Males	
	%	**n**	**%**	**n**
VISION LGAs				
Bauchi	2.2	552	3.9	531
Enugu	20.6	673	24.2	403
Oyo	6.3	581	6.2	445
Location				
Urban	14.7	779	14.5	644
Rural	6.5	1027	6.7	735
Age				
15-19	5.8	309	3.6	271
20-24	10.7	346	10.7	245
25-29	18.4	378	14.3	234
30-34	11.4	258	14.2	180
35-39	5.7	213	13.2	148
40-44	5.6	161	9.2	130
45-49	2.2	141	7.7	171
Marital Status				
Never married	21.1	184	17.6	312
In-union	9.6	1229	9.6	678
Widowed/Div/Sep	7.1	104	25.9	29
Virgin	5.7	288	4.0	360
Partners in 12 mths				
None	5.9	612	7.2	520
One	12.1	1130	11.6	713
Two or more	11.1	64	13.5	146
Education				
No formal	1.3	675	1.3	347
Primary	9.0	414	8.2	342
Secondary +	19.7	717	16.1	690
TOTAL	**9.9**	**1806**	**10.2**	**1379**

Table 5.9 Percent of respondents who want to be tested for the AIDS virus, among those not already tested, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	18.3	540	34.1	510
Enugu	48.6	535	58.1	305
Oyo	51.3	544	59.3	418
Location				
Urban	47.5	663	57.1	551
Rural	31.2	956	39.6	682
Age				
15-19	32.7	290	43.0	260
20-24	42.6	307	50.9	217
25-29	41.6	305	54.9	199
30-34	34.2	227	47.5	154
35-39	41.1	200	33.3	128
40-44	35.1	152	49.2	117
45-49	31.6	138	48.1	158
Marital Status				
Never married	63.7	146	67.9	257
In-union	35.0	1104	43.9	610
Widowed/Div/Sep	31.5	97	-	22
Virgin	37.0	271	38.2	344
Partners in 12 mths				
None	36.5	577	41.2	480
One	37.8	985	48.1	627
Two or more	42.9	57	64.8	126
Education				
No formal	21.4	666	31.8	342
Primary	45.0	376	47.5	313
Secondary +	53.9	577	56.9	578
TOTAL	**37.6**	**1619**	**47.0**	**1233**

Chapter 6. Sexual Activity and AIDS Prevention Strategies

This chapter describes respondents' high-risk sexual activity, including the number of partners and sex for money or gifts. In order to target AIDS prevention activities to those at greatest risk of infection, it is important to learn both about the risks of infection among different population sub-groups as well as the prevalence of risk prevention behaviors. We calculated the number of partners each respondent had had in the previous year, and examined respondents' ability to obtain condoms and their practice of condom use.

Number of Sexual Partners

Table 6.1 shows the number of partners respondents had had in the previous 12 months. The results indicate that a larger proportion of men (10%) compared to women (4%) had two or more sexual partners in that time. About one in three women (33%) and four in ten men (38%) had no sexual partner in the previous year. The majority of women (64%) and men (52%) had one sexual partner during this period.

There is significant variation in the proportion of women who had no partner. Only 16% of women in Bauchi did not have a sexual partner in the year before the survey, compared to 47% of women in Enugu and 36% in Oyo. Most women in Bauchi had one sexual partner (81%) and this was their marital partner. In comparison, 51% of women in Enugu and 59% in Oyo had one sexual partner in the last year. Women with more education were less likely to be sexually active: 41% of women with secondary education had no sexual partner in the previous year, compared with 26% of uneducated women. There was less variation among men in the proportion with no partner.

Risky Sexual Behavior

Among women, having more than one partner in the previous year varied only by marital status: Never married women (9%) were more likely to have had two or more partners in the previous twelve months than women in-union (4%). Having more than one partner in the last year among men varied by state, by location, by marital status, and by education. About 15% of men in Oyo had two or more partners, compared to 12% of men in Enugu and 6% in Bauchi. A higher proportion of urban men had two or more partners (12%) than rural men (9%). Never married men were more likely to have had more than one partner in the previous year (21%) than men in-union (11%). Education increased multiple sexual partnerships among men: 13% of men with secondary or higher education, compared with 6% of men with no formal education had two or more partners in the last year.

Table 6.2 documents the extent to which sexually experienced men and women exchanged gifts or money for sex. About 5% of women and 9% of men engaged in transactional sex. Transactional sex varied by state, by marital status, and by the number of partners. Transactional sex was highest in Enugu (8% of women and 14% of men) and lowest in Bauchi (2% of women and 6% of men). Respondents with two or more partners were more likely to have engaged in transactional sex (19% of women and 24% of men) over the previous year than respondents with only one partner (4% of women and 7% of men). Respondents with secondary education (9% of women and 12% of men) were more likely to exchange gifts or money for sex than uneducated respondents (1% of women and 4% of men).

Condom Use

Table 6.3 shows condom use at last sex (also see Appendix C, Map 7). Overall, a minority of women (8%) and men (22%) reported condom use at last sex. Condom use was particularly low in Bauchi, in rural areas, and among in-union and uneducated respondents. In Bauchi, fewer than 1% of women used a condom, in contrast with 14% of women in Enugu and 15% in Oyo. Similarly, 4% of men in Bauchi, compared with 40% in Enugu and 33% in Oyo, used a condom. In rural areas, 5% of women and 14% of men

used condoms. The percentage using condoms at last sex was higher for urban women (13%) and particularly for urban men (32%). Fewer than 10% of in-union respondents used a condom, compared to more than 40% of never married respondents. Condom use increased with education: Fewer than 2% of uneducated respondents used a condom at last sex compared with more than 20% of respondents with secondary or higher education.

Condom Access

Table 6.4 shows whether a person knows where to obtain condoms. The majority of respondents were still not aware of a source of condoms. Fewer than one in three women (29%) and fewer than half of men (46%) knew where to get condoms. Knowledge of a condom source was especially low in Bauchi, in rural areas, and among uneducated respondents. Only 7% of women and 22% of men in Bauchi knew where to get condoms, compared with more than 35% of women and 60% of men in Enugu and Oyo. Far fewer rural women (18%) and men (29%) knew where to get condoms than urban women (45%) and men (67%). Knowledge of condom source increased with the number of partners: 37% of women and 70% of men with two or more partners knew where to get condoms compared with 30% of women and 46% of men with only one partner. Education increased knowledge of a condom source: 58% of women with secondary or higher education knew where to get condoms, compared to 6% of women without formal education; 71% of men with secondary or higher education know where to get condoms, compared to 9% of uneducated men.

Table 6.5 shows the percentage of respondents who felt that they could get a condom if they wanted to—a small proportion of women (19%) and fewer than half of men (44%). Perceived access to condoms was low in Bauchi, in rural areas, and among those with no formal education. In Bauchi, 9% of women and 21% of men felt that they had access to condoms. By contrast, more than 20% of women and 60% of men in Enugu and Oyo felt that they had access. Rural respondents had lower perceived access to condoms (15% of women and 31% of men) than urban respondents (25% of women and 59% of men). Respondents with two or more partners in the last month had higher perceived ability to get condoms (34% of females and 71% of males) than respondents with one partner during the same period (20% females and 47% of males). Education increased perceived ability to get condoms: 34% of women with secondary or higher education perceived that they could obtain condoms if they wanted, compared to 8% of women without education; 63% of men with secondary or higher education felt that they could obtain condoms, compared to 15% of men without education.

Knowledge of the Female Condom

Table 6.6 shows the percentage of respondents who had heard of the female condom. About one in ten women (9%) and one in six men (15%) had heard of the female condom. Awareness of the female condom was lower in Bauchi, among rural residents, and among the uneducated. In Bauchi, 5% of women and 10% of men were aware of the female condom. By contrast, 8% or more of women in Enugu and Oyo and 17% or more of men in Enugu or Oyo had heard of the female condom. About 4% of rural compared with 17% of urban women had heard of the female condom. Similarly, 7% of rural compared with 25% of urban men had heard of it. Awareness of the female condom increased with education: 20% or more of respondents with secondary education, compared with fewer than 4% of respondents with no education, had heard of the female condom.

Table 6.1 Percent of respondents who had none, one, two or more partners in the last 12 months, by gender

	None (%)		One (%)		Two or more (%)		n	
	F	M	F	M	F	M	F	M
VISION LGAs								
Bauchi	16.1	37.3	80.6	56.5	3.3	6.1	552	531
Enugu	46.9	42.2	50.5	45.9	2.6	11.9	676	405
Oyo	36.2	34.1	59.1	51.3	4.7	14.6	586	446
Location								
Urban	34.0	37.6	62.5	50.6	3.5	11.8	785	645
Rural	32.0	37.9	64.4	53.3	3.5	8.7	1029	737
Age								
15-19	57.1	81.8	41.3	15.6	1.6	2.5	309	271
20-24	33.4	49.8	62.5	39.6	4.0	10.6	346	246
25-29	19.9	27.7	75.8	58.0	4.3	14.3	379	234
30-34	19.8	20.0	75.1	68.1	5.1	11.9	261	182
35-39	25.1	17.1	71.1	70.4	3.8	12.5	214	148
40-44	29.8	13.1	68.3	76.9	1.9	10.0	162	130
45-49	51.4	19.5	45.7	68.0	2.9	12.4	143	171
Marital Status								
Never married	27.5	23.2	63.7	56.0	8.8	20.8	184	314
In-union	14.8	10.3	81.5	79.0	3.8	10.6	1232	678
Widowed/Div/Sep	77.6	42.3	22.4	38.5	0.0	19.2	104	29
Virgin	100.0	100.0	-	-	-	-	288	360
Education								
No formal	25.8	35.4	70.7	58.8	3.5	5.8	679	347
Primary	31.8	33.1	64.7	56.7	3.5	10.2	414	343
Secondary +	40.9	41.4	55.5	46.1	3.5	12.5	721	692
TOTAL	**32.9**	**37.8**	**63.7**	**52.1**	**3.5**	**10.1**	**1814**	**1382**

Table 6.2 Percent of sexually experienced respondents who ever exchanged/or received money or gifts for sex, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	2.1	497	5.5	357
Enugu	8.3	534	14.1	297
Oyo	3.3	487	10.3	367
Location				
Urban	3.5	627	9.7	479
Rural	5.0	891	9.2	542
Age				
15-19	8.6	143	14.7	70
20-24	9.6	275	10.6	164
25-29	3.4	349	12.9	193
30-34	4.1	246	7.3	164
35-39	2.0	207	7.0	138
40-44	0.6	158	7.9	126
45-49	1.5	140	7.9	166
Marital Status				
Never married	20.3	184	15.1	314
In-union	2.6	1230	6.6	678
Widowed/Div/Sep	1.0	104	19.2	29
Partners in last 12m				
None	4.6	324	5.3	160
One	3.7	1130	7.4	715
Two or more	19.0	64	24.1	146
Education				
No formal	1.3	641	3.9	263
Primary	4.8	366	11.2	269
Secondary +	8.8	511	11.9	489
TOTAL	**4.5**	**1518**	**9.4**	**1021**

Table 6.3 Percent of respondents who used a condom at last sex, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	0.6	463	4.4	333
Enugu	13.7	359	40.2	234
Oyo	15.0	373	32.6	295
Location				
Urban	12.5	514	32.1	404
Rural	5.2	681	13.6	458
Age				
15-19	9.0	126	50.0	51
20-24	12.1	226	45.2	126
25-29	11.9	301	29.7	170
30-34	6.4	206	20.9	146
35-39	3.2	158	6.3	121
40-44	3.5	111	7.1	112
45-49	1.5	67	9.6	136
Marital Status				
Never married	44.0	134	61.0	243
In-union	4.0	1038	7.1	602
Widowed/Div/Sep	-	23	-	17
Partners in last 12m				
None	-	1	-	1
One	7.8	1130	18.5	715
Two or more	17.5	64	40.1	146
Education				
No formal	0.6	488	1.6	222
Primary	5.1	280	13.9	232
Secondary +	20.8	427	39.2	408
TOTAL	**8.3**	**1195**	**22.0**	**862**

Table 6.4 Percent of respondents who know where a person can get condoms, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	7.3	552	22.0	531
Enugu	36.3	672	70.5	405
Oyo	46.9	584	60.9	445
Location				
Urban	44.6	782	67.0	644
Rural	17.7	1026	29.3	737
Age				
15-19	23.6	309	43.1	271
20-24	35.7	345	57.6	246
25-29	36.8	378	51.7	234
30-34	33.2	260	45.1	181
35-39	24.4	213	37.5	148
40-44	20.6	161	43.5	130
45-49	10.2	142	39.1	171
Marital Status				
Never married	71.9	184	86.2	314
In-union	23.2	1232	35.7	678
Widowed/Div/Sep	21.4	104	63.0	29
Virgin	30.6	288	32.9	360
Partners in last 12m				
None	25.9	612	39.7	520
One	30.0	1132	46.4	715
Two or more	36.5	64	69.5	146
Education				
No formal	5.5	676	8.7	347
Primary	22.6	414	40.3	343
Secondary +	57.5	718	70.6	691
TOTAL	**28.9**	**1808**	**46.3**	**1381**

Table 6.5 Percent of respondents who could get a condom if they wanted to, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	9.2	552	20.7	531
Enugu	21.2	672	61.4	405
Oyo	27.8	584	62.2	445
Location				
Urban	24.7	782	59.0	644
Rural	14.5	1026	31.0	737
Age				
15-19	15.4	309	33.8	271
20-24	22.0	345	54.3	246
25-29	21.9	378	52.5	234
30-34	21.5	260	42.4	181
35-39	18.8	213	38.2	148
40-44	14.5	161	41.2	130
45-49	9.5	142	39.1	171
Marital Status				
Never married	40.9	184	84.6	314
In-union	16.4	1232	36.1	678
Widowed/Div/Sep	14.3	104	63.0	29
Virgin	17.6	288	23.5	360
Partners in last 12m				
None	15.0	612	32.1	520
One	19.9	1132	46.5	715
Two or more	33.9	64	70.9	146
Education				
No formal	7.9	676	14.5	347
Primary	13.0	414	37.1	343
Secondary +	33.9	718	63.3	691
TOTAL	**18.8**	**1808**	**43.6**	**1381**

Table 6.6 Percent of respondents who have heard of the female condom, by gender

	Females		Males	
	%	n	%	n
VISION LGAs				
Bauchi	4.7	552	10.0	531
Enugu	8.4	672	22.3	405
Oyo	16.6	584	17.0	445
Location				
Urban	16.8	782	25.2	644
Rural	4.1	1026	7.3	737
Age				
15-19	7.3	309	6.9	271
20-24	12.1	345	19.1	246
25-29	12.0	378	19.3	234
30-34	10.5	260	16.8	181
35-39	8.1	213	15.0	148
40-44	6.9	161	17.7	130
45-49	3.6	142	14.8	171
Marital Status				
Never married	24.0	184	30.2	314
In-union	6.7	1232	12.5	678
Widowed/Div/Sep	6.1	104	37.0	29
Virgin	14.0	288	7.5	360
Partners in last 12m				
None	10.8	612	11.2	520
One	8.5	1132	15.5	715
Two or more	14.3	64	29.8	146
Education				
No formal	1.8	676	3.9	347
Primary	5.3	414	8.7	343
Secondary +	20.0	718	25.2	691
TOTAL	**9.4**	**1808**	**15.4**	**1381**

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Appendix A. Supervisors and Fieldworkers

OYO SURVEY TEAM	
SUPERVISORS	**FIELDWORKERS**
1. Okeronbi Wale 2. Adelakun Olusegun 3. Adeyeye Opeyemi 4. Babatunde Akeem 5. Olanrewaju F.O 6. Dr. I.I. Adeoye 7. Adeyemi Olusola	1. Akinloye Oyetunde 2. Adekunle Solomon 3. Odiba Augustine 4. Ogunbayo Funmilola 5. Olanrewaju Frank 6. agboola Modupe 7. Ale A.V 8. Oyeboade A.A 9. Akinbiyi K.O 10. Olasode Iyabo 11. Adewolu Titi 12. Joseph Toyin 13. Aloba Abisodun 14. Akande Sunday 15. Oladoju M.T 16. Mojoyinola R.A 17. Aderinto I.A 18. Oladokun J.S 19. Kolawole O.I 20. Onawola R.M 21. Oguntokun N 22. Adetola A. I 23. Asanlu K.O 24. Mkainde Jumoke 25. Olasunkanbi B.E 26. Oladipo J.A 27. Afonja A.A 28. Ayannusi S.A 29. Atilola M.O 30. Adeniyi I. 31. Olatunji Wahab 32. Adetibigbe M.A 33. Salako H.O. 34. Adefioye P.I 35. Ayinde B.O

ENUGU SURVEY TEAM	
SUPERVISORS 1. Sina Bamiwuye 2. Adisa Titus 3. Chris Okemgbo 4. Okunneye Wale 5. Egbe C.E 6. Ezeh Martins 7. Ejim Patricia	**FIELD WORKERS** 1. Victory Eseohen J. 2. Abiodun Jones A. 3. Nkechi Eucharia O. 4. Sitria Abanah 5. Onigbo Jane 6. Ugwuanyi Charles 7. Dare Oduwole 8. Sonny Adeoye 9. Ohis Adeoye 10. Mba Chinwe 11. Onyia Crescent 12. Ezema Gladys 13. Ezeh paul 14. Efidi Edith 15. Udoh Francis 16. Mrs. Nwobodo 17. Nnenna Ide 18. Okoye Joanes 19. Japhet Ilo 20. Okereke K.C. 21. Olenyi Ngozi 22. Ozoh Augustina 23. Ukwueze Jonas 24. Okafor Lazarus 25. Ada Egwuibe 26. Phina Okafor 27. Ene Sitvester 28. Joe Martin 29. Ohia Caro 30. Adenuga Shola 31. Iberekuru 32. Eloke Chizobam 33. Dr. Onuora 34. Florence Chukwu 35. Chuckwuma Obi

BAUCHI SURVEY TEAM	
SUPERVISORS	**FIELD WORKERS**
1. Sani Ali Gar 2. Mr. Ajala 3. Christy Pawa 4. Orimogunje Pelumi 5. Shola Asa 6. Mr. Ajibola 7. Mr. Adelodun 8. Mr. Dami Anthony	1. Sadiz Yusuf 2. Idris B. Musa 3. Nagyal Iliya 4. Halima Jatau 5. Catherine Wakili 6. Saratu Bukar 7. Abubakar Isah Baraza 8. Bilhatu Izang 9. Janet Yerima 10. Mary Adebisi 11. Rabo Islifanus 12. Sukar Kanawa 13. Rahila Dutse 14. Na'omi Yarda 15. Hajiya Tijani 16. Sani Yinusa 17. Musa Moh'd U. 18. Abububakar D. I 19. Regina Wakama 20. Asabe Simon 21. Hajara Moses 22. Rebecca Adamu 23. Stella Yusuf 24. Hajiya Hadiza 25. Elmina Maina 26. Ayo Alabi 27. Mayowa Adesina 28. Gbenga Ajayi 29. Christy Adeyefa 30. Paul Daniel 31. Jummai Joshua 32. Abigail Yusuf 33. Sarah Yakubu 34. Lois E. Daniel 35. Daniel Gadzama

Appendix B: Questionnaires

MEASURE *EVALUATION* BASELINE SURVEY
for VISION PROJECT 2002
INDIVIDUAL MAN'S AND WOMAN'S QUESTIONNAIRE

QUESTIONNAIRE IDENTIFICATION NUMBER ☐☐☐☐

COMMUNITY NAME _____

NAME OF HOUSEHOLD HEAD _____

EA NUMBER ☐☐☐

HOUSEHOLD NUMBER ☐☐

LGA ☐☐

Bauchi:		Enugu:		Oyo:	
Alkaleri	01	En. East	06	Afijio	11
Bauchi	02	En. North	07	Iba. SW	12
Giade	03	Igbo Etiti	08	Ibarapa E.	13
Kirfi	04	Nkanu West	09	Ogb. So.	14
Taf. Bal	05	Udenu	10	Orire	15

URBAN/PERI-URBAN/RURAL (URBAN=1, PERI-URBAN = 2, RURAL=3) ☐

SEX (MALE=1, FEMALE=2) ☐

FIRST NAME OF MAN OR WOMAN _____

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				

*RESULT CODES:
1 COMPLETED 4 REFUSED
2 NOT AT HOME 5 PARTLY COMPLETED 7 OTHER _____ (SPECIFY)
3 POSTPONED 6 INCAPACITATED

	HAUSA	YORUBA	IBO	ENGLISH	OTHER
LANGUAGE OF INTERVIEW	1	2	3	4	6
NATIVE LANGUAGE OF RESPONDENT	1	2	3	4	6

SUPERVISOR	OFFICE EDITOR	KEYED BY
NAME _____ ☐☐	☐☐	☐☐
DATE _____		

TABLE OF RANDOM NUMBERS

SELECTION CRITERIA

SELECTION GIRD

	ELIGIBLE RESPONDENTS	SEX											
1.	----------	--------	8	6	0	2	7	0	6	5	9	9	0
2.	----------	--------	6	5	5	1	5	0	5	3	2	1	9
3.	----------	--------	1	6	8	1	8	2	5	4	4	3	9
4.	----------	--------	4	4	2	8	8	0	9	9	5	6	2
5.	----------	--------	7	2	9	0	5	5	6	0	4	3	0
6.	----------	--------	1	2	2	3	4	9	0	5	1	1	3
7.	----------	--------	3	7	0	3	9	8	3	2	2	0	9
8.	----------	--------	9	4	2	9	9	3	9	6	9	5	2
9.	----------	--------	6	3	6	9	2	7	3	7	8	8	9
10.	----------	-------	7	4	3	3	4	5	8	3	3	3	2

HOUSEHOLD Survey GPS Log

CHECKLIST

- ☐ TURN GARMIN ON
- ☐ WAIT UNTIL ACCURACY AT LEAST WITHIN 15 METERS (NO MORE THAN 15 METERS)
- ☐ PRESS *PAGE* BUTTON UNTIL YOU REACH *MENU* SCREEN AND SELECT **MARK**
- ☐ SAVE WAYPOINT
- ☐ RECORD ALTITUDE
- ☐ COPY WAYPOINT POSITION FROM THE *WAYPOINT* PAGE
- ☐ PRESS *PAGE* BUTTON TO REACH *MENU* SCREEN AND SELECT *WAYPOINT*
- ☐ VERIFY THAT COORDINATE IS LISTED
- ☐ TURN UNIT OFF

POSITION			
GPS UNIT NUMBER……..	☐☐☐		
WAYPOINT NUMBER	☐☐☐		
ALTITUDE (ELEV)	☐☐☐☐☐☐		
	N/S/W/E	DEGREES	DECIMAL DEGREES
LATITUDE (N/S)	☐	☐☐	☐☐☐☐☐
LONGITUDE (W/E).....	☐	☐☐☐	☐☐☐☐☐

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____ and I am working with the Centre for Research, Evaluation Resources and Development on a MEASURE *Evaluation* Project. We are conducting a survey about the health of women and men. We would very much appreciate your participation in this survey. I would like to ask you some questions about your health. This information will help the VISION Project to plan health services. The VISION Project is a family planning and reproductive health project working in Bauchi, Enugu, and Oyo states. The survey usually takes between 20 and 45 minutes to complete. Whatever information you provide will be kept strictly confidential.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, 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
V

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME (START OF INTERVIEW).	HOUR..... ☐☐ MINUTES ..... ☐☐	
102	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS ..... ☐☐ ALWAYS..... 95 VISITOR 96	
103	In what month and year were you born?	MONTH ..... ☐☐ DON'T KNOW MONTH ..... 98 YEAR ..... ☐☐☐☐ DON'T KNOW YEAR..... 9998	
104	How old were you at your last birthday? COMPARE AND CORRECT 103 AND/OR 104 IF INCONSISTENT.	AGE IN COMPLETED YEARS ☐☐	
105	Have you ever attended school?	YES ..... 1 NO 2	⟶108
106	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY ..... 1 SECONDARY..... 2 HIGHER..... 3	>107A →107B
107A	What is the highest grade you completed at that level?	GRADE ..... ☐☐	
107B	How many years of Higher Education did you complete?	NUMBER OF YEARS..... ☐☐	
108	Are you currently working?	YES ..... 1 NO 2	⟶111
109	Have you done any work in the last 12 months?	YES ..... 1 NO 2	⟶111

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
110	What have you been doing for most of the time over the last 12 months?	GOING TO SCHOOL/STUDYING ..... 1 LOOKING FOR WORK ..... 2 INACTIVE ..... 3 COULD NOT WORK/HANDICAPPED ..... 4 OTHER_____ 6 (SPECIFY)	▲114
111	As you know, some people 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	→▲114
112	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	→▲114
113	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?	ALMOST NONE ..... 1 LESS THAN HALF ..... 2 ABOUT HALF ..... 3 MORE THAN HALF ..... 4 ALL 5	
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	From which sources do you normally obtain information on health? DO NOT READ THE LIST. RECORD ALL THAT IS MENTIONED.	NO SOURCE ..... A GOVT. HEALTH CARE WORKER ..... B PRIVATE DOCTOR OR NURSE ..... C COMMUNITY HEALTH WORKER ..... D FP CLINIC PROVIDER ..... E HUSBAND/WIFE (SPOUSE) ..... F OTHER RELATIVES ..... G FRIENDS ..... H RADIO ..... I TV ..... J PRINT MATERIALS (E.G.,NEWSPAPERS, POSTERS) ..... K SCHOOL, LIBRARY OR OTHER ACADEMIC SOURCE ..... L COMMUNITY/PUBLIC MEETINGS ..... M OTHER (SPECIFY)_____ ... X	
118	Of the sources you mentioned in the preceding question, which one do you consider to be the **most** credible? RECORD ONLY ONE RESPONSE.	GOVT. HEALTH CARE WORKER ..... 1 PRIVATE DOCTOR OR NURSE ..... 2 COMMUNITY HEALTH WORKER ..... 3 FP CLINIC PROVIDER ..... 4 HUSBAND/WIFE (SPOUSE) ..... 5 OTHER RELATIVES ..... 6 FRIENDS ..... 7 RADIO ..... 8 TV ..... 9 PRINT MATERIALS (E.G.,NEWSPAPERS, POSTERS) ..... 10 SCHOOL, LIBRARY OR OTHER ACADEMIC SOURCE ..... 11 COMMUNITY/PUBLIC MEETINGS ..... 12 OTHER (SPECIFY)_____ ... 96	
119	What is your religion?	CATHOLIC ..... 1 PROTESTANT ..... 2 OTHER CHRISTIAN ..... 3 ISLAM ..... 4 TRADITIONALIST ..... 5 OTHER _____ 6 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
120	What is your ethnic group? RECORD THE ETHNIC GROUP MENTIONED.	_____ ⌜ ⌝ ⌞ ⌟	

SECTION 2: REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had/fathered during your life. Have you ever given birth/fathered a child?	YES ..... 1 NO 2	→205
202	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME ..... ☐☐ DAUGHTERS AT HOME ..... ☐☐	
203	How many sons live elsewhere? And how many daughters live elsewhere? IF NONE, RECORD '00'.	SONS ELSEWHERE ..... ☐☐ DAUGHTERS ELSEWHERE ... ☐☐	
204	Now, I would like to ask you something very painful but the information is very important. How many boys did you have that were born alive but later died? And how many girls did you have that were born alive but later died? IF NONE, RECORD '00'.	BOYS DEAD ..... ☐☐ GIRLS DEAD..... ☐☐	
205	SUM ANSWERS TO 202, 203, AND 204, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL..... ☐☐	
206	CHECK 205: Just to make sure that I have this right: you have had/fathered in TOTAL _____ births during your life. Is that correct? YES ☐ V NO ☐ ▲ PROBE AND CORRECT 201-205 AS NECESSARY.		
207	CHECK 205: ONE OR MORE BIRTHS ☐ V NO BIRTHS WOMAN ☐		▲218
	NO BIRTHS MAN ☐		→ 221
208	How old were you when your (first) child was born?	AGE IN YEARS..... ☐☐	

Now I would like to record the names of your children born in the past five years, whether still alive or not, starting with the one who was born LAST.
RECORD NAMES OF ALL THE BIRTHS IN 209. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.

209 What name was given to your baby? (NAME)	210 Were any of these births twins?	211 Is (NAME) a boy or a girl?	212 In what month and year was (NAME) born? PROBE: What is his/her birthday?	213 Is (NAME) still alive?	214 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COM-PLETED YEARS.	215 IF ALIVE Is (NAME) living with you?	216 IF DEAD: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	217 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)?
01-LAST BORN	SING....1 MULT...2	BOY.. 1 GIRL . 2	MONTH ☐☐ YEAR ☐☐☐☐	YES.....1 NO.....2 V 216	AGE IN YEARS ☐☐	YES..... 1 NO ..... 2 > 209(02)	DAYS.....1 ☐☐ MONTHS .2 ☐☐ YEARS ....3 ☐☐	
02 - SECOND TO LAST BORN	SING....1 MULT...2	BOY.. 1 GIRL . 2	MONTH ☐☐ YEAR ☐☐☐☐	YES.....1 NO.....2 V 216	AGE IN YEARS ☐☐	YES..... 1 NO ..... 2 >217	DAYS.....1 ☐☐ MONTHS .2 ☐☐ YEARS ....3 ☐☐	YES..... 1 NO..... 2
03- THIRD TO LAST BORN	SING....1 MULT...2	BOY.. 1 GIRL . 2	MONTH ☐☐ YEAR ☐☐☐☐	YES.....1 NO.....2 V 216	AGE IN YEARS ☐☐	YES..... 1 NO ..... 2 > 217	DAYS.....1 ☐☐ MONTHS .2 ☐☐ YEARS ....3 ☐☐	YES..... 1 NO..... 2
04 - FOURTH TO LAST BORN	SING....1 MULT...2	BOY.. 1 GIRL . 2	MONTH ☐☐ YEAR ☐☐☐☐	YES.....1 NO.....2 V 216	AGE IN YEARS ☐☐	YES..... 1 NO ..... 2 > 217	DAYS.....1 ☐☐ MONTHS .2 ☐☐ YEARS ....3 ☐☐	YES..... 1 NO..... 2
05- FIFTH TO LAST BORN	SING....1 MULT...2	BOY.. 1 GIRL . 2	MONTH ☐☐ YEAR ☐☐☐☐	YES.....1 NO.....2 V 216	AGE IN YEARS ☐☐	YES..... 1 NO ..... 2 > 217	DAYS.....1 ☐☐ MONTHS .2 ☐☐ YEARS ....3 ☐☐	YES..... 1 NO..... 2
06 - SIXTH TO LAST BORN	SING....1 MULT...2	BOY.. 1 GIRL . 2	MONTH ☐☐ YEAR ☐☐☐☐	YES.....1 NO.....2 V 216	AGE IN YEARS ☐☐	YES..... 1 NO ..... 2 > 217	DAYS.....1 ☐☐ MONTHS .2 ☐☐ YEARS ....3 ☐☐	YES..... 1 NO..... 2
07 - SEVENTH TO LAST BORN	SING....1 MULT...2	BOY.. 1 GIRL . 2	MONTH ☐☐ YEAR ☐☐☐☐	YES.....1 NO.....2 V 216	AGE IN YEARS ☐☐	YES..... 1 NO ..... 2 > 217	DAYS.....1 ☐☐ MONTHS .2 ☐☐ YEARS ....3 ☐☐	YES..... 1 NO..... 2

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
FOR MEN RESPONDENTS SKIP TO Q221			
218	Are you pregnant now?	YES ..... 1 NO ..... 2 UNSURE 8	▲220
219	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	
220	In addition to the pregnancies that resulted in live births, did you have any pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES ..... 1 NO 2	
221	Now, I would like to ask you some questions about a woman's fertility. 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	▲301
222	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. FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302.

301	Which ways or methods have you heard about? RECORD ALL METHODS MENTIONED SPONTANEOUSLY. Anything else? KEEP ASKING THE RESPONDENT "ANYTHING ELSE?" UNTIL SHE/HE RESPONDS "NOTHING ELSE."		302 Have you or your partner 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	MALE 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?	YES.....1 _____ (SPECIFY) _____ (SPECIFY) NO 2	YES.....1 NO.....2 YES.....1 NO.....2

303	CHECK 302:	
	NOT A SINGLE "YES" (NEVER USED) ☐ v	AT LEAST ONE "YES" (EVER USED) ☐ _____ —▲306

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES.....1 NO.....2	—▲320
305	What have you used or done? CORRECT 302 AND 303 (AND 301 IF NECESSARY).		
306	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..... ☐☐	
307	CHECK 302 (01): CHECK 218: STERILIZED ☐ V310b NOT STERILIZED AND NOT PREGNANT ☐		–▲309
308	CHECK 218: NOT PREGNANT OR UNSURE ☐ v PREGNANT ☐		—▲320
309	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES.....1 NO.....2	—▲318
310A 310B	Which method are you currently using? CIRCLE ALL METHODS MENTIONED BUT FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD ON LIST. CIRCLE 'A' FOR FEMALE STERILIZATION. CIRCLE 'B' FOR MALE STERILIZATION.	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)	▲312 →311a → 312 → 311b → 312 → 311c ▲312
311A	What brand of pills are you using? ASK TO SEE THE PACKAGE IF RESPONDENT DOES NOT REMEMBER NAME OF BRAND.	DUO-FEM .....01 MICROGYNON.....02 MICROLUT .....03 EUGYNON.....04 LOGYNON .....05 NORDETTE .....06 OVRETTE……..07 NEOGYNON……..08 CONFIDENCE……09 EXCLUTON……10 OTHER_____96 (SPECIFY) PACKAGE NOT SEEN/DK 98	
311B	What brand of injectables are you using?	DEPO-PROVERA (EVERY 3 MONTHS).....01 NORISTERAT (EVERY 2 MONTHS)……02 OTHER……..04 DON'T KNOW……..98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
311C	What brand of condoms are you using? ASK TO SEE THE PACKAGE IF RESPONDENT DOES NOT REMEMBER NAME OF BRAND.	GOLD CIRCLE……..01 COOL……..02 TWIN LOTUS……...03 ROUGH RIDER……....04 DUREX……05 ROMANTIC……....06 EXOTICA……....07 INTIMATE……...08 NO LOGO/FREE……09 OTHER……...10 DON'T KNOW……98	
312	**IF STERILIZED, ASK:** In what month and year were you sterilized? **IF NOT STERILIZED, ASK:** For how long have you been using (CURRENT METHOD) now without stopping? **PROBE:** In what month and year did you start using (CURRENT METHOD) continuously?	MONTH …… ☐☐ YEAR …… ☐☐☐☐	
313	Where did you obtain (CURRENT METHOD) when you started using it?	PUBLIC SECTOR GOVT. HOSPITAL....1 GOVT. HEALTH CENTER....2 FAMILY PLANNING CLINIC....3 MOBILE CLINIC ....4 COMMUNITY HEALTH WORKER ....5 OTHER PUBLIC_____6 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC....7 PHARMACY/PMS....8 PRIVATE DOCTOR....9 MOBILE CLINIC ....10 COMMUNITY HEALTH WORKER ....11 OTHER PRIVATE MEDICAL _____ 12 (SPECIFY) OTHER SOURCE SHOP....13 CHURCH ....14 FRIEND/RELATIVE ....15 NGO....16 OTHER _____ 17 (SPECIFY)	
314	You first obtained (CURRENT METHOD FROM 310A) from (SOURCE OF METHOD FROM 313). At that time, were you told about side effects or problems you might have with the method?	YES....1 NO....2	—▲316
315	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	—▲317
316	Were you told what to do if you experienced side effects or problems?	YES....1 NO....2	
317	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	
318	Do you know of a place where you can obtain a method of family planning?	YES....1 NO....2	—▲320

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
319	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 PLACES MENTIONED	PUBLIC SECTOR GOVT. 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/PMS ..... H PRIVATE DOCTOR ..... I MOBILE CLINIC ..... J COMMUNITY HEALTH WORKER ..... K OTHER PRIVATE MEDICAL _____ L (SPECIFY) OTHER SOURCE SHOP ..... M CHURCH ..... N FRIEND/RELATIVE ..... O NGO ..... P OTHER _____ X (SPECIFY)	
320	In the last 12 months, were you visited by a fieldworker or family planning provider who talked to you about family planning?	YES ..... 1 NO 2	
321	In the last 12 months, have you visited a health facility for care for yourself (or your children)?	YES ..... 1 NO 2	—▲401
322	Did any staff member at the health facility speak to you about family planning methods?	YES ..... 1 NO 2	

SECTION 4A. PREGNANCY, POSTNATAL CARE AND BREASTFEEDING

401	FOR MEN RESPONDENTS SKIP TO 424 CHECK 209:ONE OR MORE BIRTHS ☐ ▼ NO BIRTHS ☐ MEN ☐	>424
402	Now I am going to ask you some questions about the **last** child you had. At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all?	THEN ..... 1 LATER ..... 2 NOT AT ALL 3
403A	Did you see anyone for antenatal care for this pregnancy? IF YES: Whom did you see? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN.	HEALTH PROFESSIONAL DOCTOR ..... A NURSE..... B MIDWIFE ..... C AUXILIARY NURSE..... D OTHER PERSON TRADITIONAL BIRTH ATTENDANT..... E COMMUNITY HTLH EXT. WORKER..... F OTHER _____ (SPECIFY) X NO ONE ..... Y (SKIP TO 411) ▸
403B	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 CENTER ..... D GOVT. HEALTH POST ..... E MOBILE CLINIC ..... F OTHER PUBLIC _____ (SPECIFY) G PRIVATE MEDICAL SECTOR PVT. HOSPITAL/CLINIC..... H MOBILE CLINIC ..... I OTHER PVT. MEDICAL _____ (SPECIFY) J OTHER _____ (SPECIFY) X
404	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS ..... ☐☐ DON'T KNOW 98
405	How many times did you receive antenatal care during this pregnancy?	NO. OF TIMES ..... ☐☐ DON'T KNOW 98
406	CHECK 405: NUMBER OF TIMES RECEIVED ANTENATAL CARE	ONCE ☐ V (SKIP TO 408) MORE THAN ONCE OR DK ☐ V

407	How many months pregnant were you the last time you received antenatal care?	MONTHS ..... ☐☐ DON'T KNOW 98
408A	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
408B	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
409	Were you told about the signs of pregnancy complications?	YES ..... 1 NO ..... 2 (SKIP TO 411)▸ DON'T KNOW 8
410	Were you told where to go if you had these complications?	YES ..... 1 NO ..... 2 DON'T KNOW 8
411	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.....B MIDWIFE.....C AUXILIARY NURSE.....D OTHER PERSON TRADITIONAL BIRTH ATTENDANT.....E RELATIVE/FRIEND.....F COMMUNITY HLTH EXT. WORKER.....G OTHER _____ X (SPECIFY) NO ONE .....Y
412	Where did you give birth to (NAME)? 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)	HOME YOUR HOME ..... 1 OTHER HOME ..... 2 PUBLIC SECTOR GOVT. HOSPITAL ..... 3 GOVT. HEALTH CENTER ..... 4 GOVT. HEALTH POST ..... 5 OTHER PUBLIC _____ 6 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... 7 OTHER PRIVATE MEDICAL _____ 8 (SPECIFY) OTHER _____ 96 (SPECIFY)
413	After (NAME) was born, did a health professional or a traditional birth attendant check on your health?	YES ..... 1 NO ..... 2 (SKIP TO 415)▸

414	Where did this first check 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)	HOME YOUR HOME ..... 1 OTHER HOME ..... 2 PUBLIC SECTOR GOVT. HOSPITAL ..... 3 GOVT. HEALTH CENTER ..... 4 GOVT. HEALTH POST ..... 5 OTHER PUBLIC _____ 6 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... 7 OTHER PRIVATE MEDICAL_____8 (SPECIFY) OTHER _____ 96 (SPECIFY)
415	Has your period returned since the birth of (NAME)?	YES ..... 1 (SKIP TO 417)▸ NO ..... 2 (SKIP TO 418)▸
416	**CHECK 218:** **IS RESPONDENT PREGNANT?**	NOT PREGNANT PREG- OR UNSURE NANT (SKIP TO 418) v
417	Did your period return between the birth of (NAME) and your next pregnancy?	YES ..... 1 NO ..... 2 (SKIP TO 420)▸
418	For how many months after the birth of (NAME) did you not have a period?	MONTHS ..... ☐☐ DON'T KNOW 98
419	Have you resumed sexual relations since the birth of (NAME)?	YES ..... 1 NO ..... 2 (SKIP TO 421)▸
420	For how many months after the birth of (NAME) did you not have sexual relations?	MONTHS ..... ☐☐ IF LESS THAN 1 MONTH.....00 DON'T KNOW 98
421	Did you ever breastfeed (NAME)?	YES ..... 1 NO ..... 2 (SKIP TO 424)▸
422	Are you still breastfeeding (NAME)?	YES ..... 1 (SKIP TO 424)▸ NO 2
423	For how many months did you breastfeed (NAME)?	MONTHS ..... ☐☐ DON'T KNOW 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
424	Now I would like to ask you some questions about medical care. Many different factors can prevent women and men from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not?	BIG PROBLEM / NOT A BIG PROBLEM	
	Knowing where to go.	1 / 2	
	Getting permission to go.	1 / 2	
	Getting money needed for treatment.	1 / 2	
	The distance to a health facility.	1 / 2	
	Having to take transport.	1 / 2	
	Not wanting to go alone.	1 / 2	
	Concern that there may not be a female/male health provider.	1 / 2	
	Waiting time spent at health facility	1 / 2	
	Fear of surgical procedures	1 / 2	
425A	Have you ever taken an alcoholic drink?	YES ..... 1 NO 2	—▲ 426
425B	In the last 3 months, on how many days did you take an alcoholic drink? IF EVERY DAY: RECORD '90'.	NUMBER OF DAYS..... ☐☐ NONE ..... 95 DON'T KNOW.....98	
425C	Have you ever gotten "drunk" from taking an alcoholic drink?	YES ..... 1 NO 2	—▲426
425D	CHECK 425B DRANK ALCOHOL ON AT LEAST ONE DAY ☐ V	NONE ☐	—▲426
425E	In the last 3 months, on how many occasions did you get "drunk"?	NUMBER OF TIMES..... ☐☐ NONE/NEVER..... 95 DON'T KNOW.....98	
426	Now I would like to ask some questions about condom use, either for family planning or prevention of sexually transmitted infections. Have you or your partner ever used a condom?	YES ..... 1 NO 2	→ 428

427	Have you ever experienced any problems when using condoms? IF YES: What problems have you or your partner experienced? PROBE: Any other problems? RECORD ALL PROBLEMS MENTIONED.	DIFFICULT TO DISPOSE OF..... A DIFFICULT TO PUT ON/TAKE OFF ..... B SPOILS THE MOOD..... C DIMINISHES PLEASURE..... D WIFE/PARTNER OBJECTS/DOES NOT LIKE..... E WIFE/PARTNER GOT PREGNANT..... F INCONVENIENT TO USE/MESSY..... G CONDOM BROKE..... H CONDOM SLIPPED OFF……I OTHER _____ X (SPECIFY) NO PROBLEM.....Z	

428	I will now read you some statements about condom use. Please tell me if you agree of disagree with each.		AGREE	DISAGREE	DK	
	a) Condoms diminish a man's sexual pleasure.	a)	1	2	8	
	b) A condom is very inconvenient to use.	b)	1	2	8	
	c) A condom can be reused.	c)	1	2	8	
	d) A condom protects against disease.	d)	1	2	8	
	e) Buying condoms is embarrassing.	e)	1	2	8	
	f) A woman has no right to tell a man to use a condom.	f)	1	2	8	

SECTION 4B. MEDIA EXPOSURE

429	Have you ever heard of an oral contraceptive pill called Duo-Fem?	YES.....1 NO.....2 NOT SURE 8	
430	In the last six months, have you listened to the following programs on the radio? Kusaurara Dunniya J'atau A New Dawn (Ayedotun) One thing At A Time Gari Muna Fati Abule Olokemerin Odenjinjin	YES NO KASAURARA..... 1 2 DUNNIYA J'ATAU..... 1 2 A NEW DAWN ..... 1 2 ONE THING AT A TIME ..... 1 2 GARI MUNA FATI……..1 2 ABULE OLOKEMERIN……..…..1 2 ODENJINJIN……...1 2	
431	In the last six months, have you seen any of the following programs on television? Campaign by Femi Kuti Campaign by Fati Mohammed	YES NO CAMPAIGN FEMI KUTI..... 1 2 CAMPAIGN FATI MOHAMMED ... 1 2	
432	In the last six months, have you seen any adverts about sexual abstinence, family planning, condom use or HIV/AIDS?	YES..... 1 NO..... 2 DON'T KNOW/NOT SURE 8	┐ └>501
433	Can you describe the messages/advice of the advertisements? DO NOT READ RESPONSES TO RESPONDENT. RECORD ALL MENTIONED.	COOL GUYS/ABSTAIN SEX.....A COOL BABES/ABSTAIN SEX……B FUTURE DEPENDS ON ME/THINK SEX/THINK CONDOM…….....C SPACE PREG 2-3 YEARS……D MODERN FP EFFECTIVE & SAFE……..E PLANNED FAMILY MAN'S PRIDE……F SUPPORT WIFE IN CHILD SPACING....G AIDS REAL/MEN BE FAITHFUL ……..H OTHER_____X (SPECIFY) DON'T KNOW……Y	

SECTION 5. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	Are you currently married or living with a partner?	YES, CURRENTLY MARRIED ..... 1 YES, LIVING WITH A PARTNER ..... 2 NO, NOT IN UNION 3	▲504
502	Have you ever been married or lived with a partner?	YES, FORMERLY MARRIED ..... 1 YES, LIVED WITH A PARTNER ..... 2 NO 3	▲506 ▲509A
503	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED ..... 1 DIVORCED ..... 2 SEPARATED 3	▲506
504	Is your spouse/partner living with you now or is he/she staying elsewhere?	LIVING WITH HER/HIM.....1 STAYING ELSEWHERE 2	
505	Does your spouse/partner have any other spouses besides yourself?	YES ..... 1 NO ..... 2 DON'T KNOW.....3	
506	Have you been married or lived with a man/woman only once, or more than once?	ONCE ..... 1 MORE THAN ONCE 2	
507	CHECK 506: MARRIED/ LIVED WITH A MAN/ WOMAN ONLY ONCE ☐ → In what month and year did you start living with your spouse/partner? MARRIED/ LIVED WITH A MAN/ WOMAN MORE THAN ONCE ☐ → Now we will talk about your first spouse/partner. In what month and year did you start living with him/her?	MONTH ..... ☐☐ DON'T KNOW MONTH ..... 98 YEAR ..... ☐☐☐☐ DON'T KNOW YEAR 9998	
508	How old were you when you started living with him/her?	AGE ..... ☐☐	
509A	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 ..... ☐☐ FIRST TIME WHEN STARTED LIVING WITH (FIRST) SPOUSE/PARTNER 95	▲525
509B	The first time you had sexual intercourse, was a condom used?	YES.....1 NO.....2	
510	Under which circumstances do you normally use a condom? PROBE: Any other time? RECORD ALL SITUATIONS MENTIONED.	NEVER.....0 ON WIFE'S/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 SPOUSE/REGULAR PARTNER.....F WITH SPOUSE/REGULAR PARTNER….G OTHER_____X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
511a	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 [ ][ ] WEEKS AGO .....2 [ ][ ] MONTHS AGO.....3 [ ][ ] YEARS AGO .....4 [ ][ ]	—▲521
511b	If you yourself had wanted to use a condom the last time you had sex, how confident are you that you could have done so? Did you feel very confident, fairly confident or not at all confident?	VERY CONFIDENT……1 FAIRLY CONFIDENT……2 NOT CONFIDENT……3	
512A	The last time you had sexual intercourse, was a condom used?	YES ..... 1 NO..... 2	–▲513A
512B	What brand of condoms did you use last time?	GOLD CIRCLE……01 COOL……02 TWIN LOTUS……03 ROUGH RIDER……04 DUREX……05 ROMANTIC……06 EXOTICA……07 INTIMATE……08 NO LOGO/FREE……09 OTHER……10 DON'T KNOW……98	
512C	What was the main reason you used a condom on that occasion?	RESPONDENT WANTED TO PREVENT STD/HIV..... 01 RESPONDENT WANTED TO PREVENT PREGNANCY ..... 02 RESPONDENT WANTED TO PREVENT BOTH STD/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	
512D	How often do you use a condom with this partner?	EVERY TIME……1 SOMETIMES……2 ONCE……3 NOT AT ALL……4	
513A	What is your relationship to the man/woman with whom you last had sex? IF MAN/WOMAN IS "BOYFRIEND," "GIRLFRIEND" OR "FIANCÉ", ASK: Was your boy/girlfriend/fiancé living with you when you last had sex? IF YES, CIRCLE '01'. IF NO, CIRCLE '02'.	SPOUSE/COHABITING PARTNER..... 01 MAN/WOMAN IS BOYFRIEND/GIRLFRIEND/FIANCÉ .... 02 OTHER FRIEND ..... 03 CASUAL ACQUAINTANCE ..... 04 RELATIVE..... 05 COMMERCIAL SEX WORKER ..... 06 OTHER _____ 96 (SPECIFY)	–▲515A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
513B	About how old would you say s/he was?	<15 ..... 1 15-19 ..... 2 20-24 ..... 3 25-29 ..... 4 30-34 ..... 5 35-39 ..... 6 40-44 ..... 7 45-49 ..... 8 50+ ..... 9 DON'T KNOW 98	
514	For how long have you had sexual relations with this partner?	DAYS ..... 1 ☐☐ WEEKS ..... 2 ☐☐ MONTHS ..... 3 ☐☐ YEARS ..... 4 ☐☐	
515A	Have you had sex with any other partner in the last 12 months?	YES ..... 1 NO 2	—▲520
515b	To what extent did you feel confident that you would be able to use a condom that time you had sex? Did you feel very confident, fairly confident or not at all confident?	VERY CONFIDENT……1 FAIRLY CONFIDENT……2 NOT CONFIDENT……3	
516A	The last time you had sexual intercourse with another partner, was a condom used?	YES ..... 1 NO 2	–▲517A
516B	What brand of condoms did you use last time?	GOLD CIRCLE……01 COOL……02 TWIN LOTUS……03 ROUGH RIDER……04 DUREX……05 ROMANTIC……06 EXOTICA……07 INTIMATE……08 NO LOGO/FREE……09 OTHER……10 DON'T KNOW……98	
516C	What was the main reason you used a condom on that occasion?	RESPONDENT WANTED TO PREVENT STD/HIV ..... 01 RESPONDENT WANTED TO PREVENT PREGNANCY ..... 02 RESPONDENT WANTED TO PREVENT BOTH STD/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	
516D	How often do you use a condom with this partner?	EVERY TIME……1 SOMETIMES……2 ONCE……3 NOT AT ALL……4	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
517A	What is your relationship to this partner? IF MAN/WOMAN IS "BOYFRIEND" "GIRLFRIEND" OR "FIANCÉ", ASK: Was your boyfriend/girlfriend/fiancé living with you when you last had sex with him/her? IF YES, CIRCLE '01'. IF NO, CIRCLE '02'.	SPOUSE/COHABITING PARTNER..... 01 MAN/WOMAN IS BOYFRIEND/GIRLFRIEND/FIANCÉ ..... 02 OTHER FRIEND ..... 03 CASUAL ACQUAINTANCE ..... 04 RELATIVE..... 05 COMMERCIAL SEX WORKER ..... 06 OTHER _____ 96 (SPECIFY)	▲518B
517B	About how old would you say s/he was?	<15 ..... 1 15-19 ..... 2 20-24 ..... 3 25-29 ..... 4 30-34 ..... 5 35-39 ..... 6 40-44 ..... 7 45-49 ..... 8 50+ ..... 9 DON'T KNOW 98	
518A	For how long have you had sexual relations with this partner?	DAYS .....1 ☐☐ WEEKS .....2 ☐☐ MONTHS.....3 ☐☐ YEARS .....4 ☐☐	
518B	Other than these two men/women, have you had sex with any other man/woman in the last 12 months?	YES ..... 1 NO..... 2	▲521
518C	To what extent did you feel confident that you would be able to use a condom that time you had sex? Did you feel very confident, fairly confident or not at all confident?	VERY CONFIDENT……1 FAIRLY CONFIDENT……2 NOT CONFIDENT……3	
518D	The last time you had sexual intercourse with this partner, was a condom used?	YES ..... 1 NO..... 2	▲519A
518E	What brand of condoms did you use last time?	GOLD CIRCLE……01 COOL……02 TWIN LOTUS……03 ROUGH RIDER……04 DUREX……05 ROMANTIC……06 EXOTICA……07 INTIMATE……08 NO LOGO/FREE……09 OTHER……10 DON'T KNOW……98	
518F	What was the main reason you used a condom on that occasion?	RESPONDENT WANTED TO PREVENT STD/HIV..... 01 RESPONDENT WANTED TO PREVENT PREGNANCY ..... 02 RESPONDENT WANTED TO PREVENT BOTH STD/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
518g	How often do you use a condom with this partner?	EVERY TIME……1 SOMETIMES……2 ONCE……3 NOT AT ALL……4	
519A	What is your relationship to this partner? IF MAN IS "BOYFRIEND," "GIRLFRIEND" OR "FIANCÉ", ASK: Was your boyfriend/girlfriend/fiancé living with you when you last had sex with him/her? IF YES, CIRCLE '01'. IF NO, CIRCLE '02'.	SPOUSE/COHABITING PARTNER..... 01 MAN/WOMAN IS BOYFRIEND/GIRLFRIEND/FIANCÉ ..... 02 OTHER FRIEND ..... 03 CASUAL ACQUAINTANCE ..... 04 RELATIVE..... 05 COMMERCIAL SEX WORKER ..... 06 OTHER _____ 96 (SPECIFY)	→520
519B	How old would you say s/he was?	<15 ..... 1 15-19 ..... 2 20-24 ..... 3 25-29 ..... 4 30-34 ..... 5 35-39 ..... 6 40-44 ..... 7 45-49 ..... 8 50+ ..... 9 DON'T KNOW 98	
519C	For how long have you had sexual relations with this partner?	DAYS .....1 ☐☐ WEEKS .....2 ☐☐ MONTHS.....3 ☐☐ YEARS .....4 ☐☐	
520	In total, with how many different partners have you had sex in the last 12 months?	NUMBER OF PARTNERS ☐☐ ☐☐	
521	Have you ever exchanged/or received money or gifts for sex?	YES ..... 1 NO……2	→525
522A	How long ago was the last time you exchanged/received money or gifts for sex?	DAYS AGO ..... 1 ☐☐ WEEKS AGO .....2 ☐☐ MONTHS AGO.....3 ☐☐ YEARS AGO .....4 ☐☐	
522B	To what extent did you feel confident that you would be able to use a condom that time you exchanged/received money or gifts for sex? Did you feel very confident, fairly confident or not at all confident?	VERYCONFIDENT……1 FAIRLY CONFIDENT……2 NOT CONFIDENT……3	
523	The last time that you exchanged money or gifts for sex, was a condom used on that occasion?	YES ..... 1 NO..... 2	
524	What is your relationship to this partner? IF MAN/WOMAN IS "BOYFRIEND" "GIRLFRIEND" OR "FIANCÉ", ASK:Was your boyfriend/girlfriend/fiancé living with you when you last had sex with him/her? 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)	
525	Do you know of a place where a person can get condoms?	YES……1 NO……2	>527

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
526	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/PMS.....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)	
527	If you wanted to, could you yourself get a condom?	YES..... 1 NO..... 2 DON'T KNOW/UNSURE..... 8	→529
528	Why not?	NO MONEY/TOO EXPENSIVE……1 TOO EMBARRASED……2 NO TRANSPORT……..3 OTHER_____6 (SPECIFY)	
529	Do you think you could ask your partner to use a condom?	YES……..1 NO……2 DON'T KNOW/UNSURE……..3	
530A	Have you heard of female condoms?	YES..... 1 NO..... 2 DON'T KNOW/UNSURE……..3	—▲601
530B	Which brand of female condom have you heard of?	CARE……A FEMIDOM……B NONE……C OTHER_____X (SPECIFY)	—▲532
531	Where have you seen or heard messages about the CARE female condom? RECORD ALL MENTIONED.	RADIO…….. A TV……B SHOP……..C LEAFLET/BOOKLET……. D POSTER…….. E COMMUNITY-BASED AGENT/HEALTH WORKER……F OTHER_____X (SPECIFY)	
532	Do you know of a place where a person can get female condoms?	YES..... 1 NO..... 2	—▲534

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
533	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/PMS..... 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)	
534	If you wanted to, could you yourself get a female condom?	YES..... 1 NO..... 2 DON'T KNOW/UNSURE..... 8	

SECTION 6. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	CHECK 310A: NEITHER STERILIZED ☐ V HE OR SHE STERILIZED ☐		▲611
602	CHECK 218: -NOT PREGNANT OR UNSURE ☐ V -MEN 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? PREGNANT ☐ V 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 ▲611 ▲607 ▲604
603	CHECK 218: -NOT PREGNANT OR UNSURE ☐ V -MEN How long would you like to wait from now before the birth of (a/another) child? PREGNANT ☐ V 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	 ▲611 ▲606 ≈607
604	CHECK 310A: USING A CONTRACEPTIVE METHOD? NOT ASKED ☐ V NO, NOT CURRENTLY USING ☐ V NO, ☐ NOT CURRENTLY USING & WANT CHILD SOON (CHECK 603) YES, CURRENTLY ☐		▲608 ▲611

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
605	CHECK 602: WANTS TO HAVE A/ANOTHER CHILD ☐ V 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? Any other reason? RECORD ALL REASONS MENTIONED. WANTS NO MORE/ NONE ☐ V 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? Any other reason?	NOT MARRIED ..... A FERTILITY-RELATED REASONS NOT HAVING SEX ..... B INFREQUENT SEX ..... C MENOPAUSAL/HYSTERECTOMY ..... D SUBFECUND/INFECUND ..... E POSTPARTUM AMENORRHEIC ..... F BREASTFEEDING ..... G FATALISTIC ..... H OPPOSITION TO USE RESPONDENT OPPOSED ..... I HUSBAND/PARTNER OPPOSED ..... J OTHERS OPPOSED ..... K RELIGIOUS PROHIBITION ..... L LACK OF KNOWLEDGE KNOWS NO METHOD ..... M KNOWS NO SOURCE ..... N METHOD-RELATED REASONS HEALTH CONCERNS ..... O FEAR OF SIDE EFFECTS ..... P LACK OF ACCESS/TOO FAR ..... Q COSTS TOO MUCH ..... R INCONVENIENT TO USE ..... S INTERFERES WITH BODY'S NATURAL PROCESSES ..... T OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	
606	Would you ever use a contraceptive method if you were married?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
607	In the next few weeks, if you discovered that you/your partner were pregnant, would that be a big problem, a small problem, or no problem for you?	BIG PROBLEM ..... 1 SMALL PROBLEM ..... 2 NO PROBLEM ..... 3 SAYS SHE CAN'T GET PREGNANT/ NOT HAVING SEX 4	
608	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES ..... 1 NO ..... 2 DON'T KNOW 8	▲610
609	Which contraceptive method would you prefer to use?	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 _____ 96 (SPECIFY) UNSURE 98	▲611

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
610	What is the main reason that you think you will not use a contraceptive method at any time in the future?	NOT MARRIED ..... 1 FERTILITY-RELATED REASONS INFREQUENT SEX/NO SEX ..... 2 MENOPAUSAL/HYSTERECTOMY..... 3 SUBFECUND/INFECUND ..... 4 WANTS AS MANY CHILDREN AS POSSIBLE ..... 5 OPPOSITION TO USE RESPONDENT OPPOSED..... 6 HUSBAND OPPOSED ..... 7 OTHERS OPPOSED..... 8 RELIGIOUS PROHIBITION ..... 9 LACK OF KNOWLEDGE KNOWS NO METHOD..... 10 KNOWS NO SOURCE ..... 11 METHOD-RELATED REASONS HEALTH CONCERNS..... 12 FEAR OF SIDE EFFECTS ..... 13 LACK OF ACCESS/TOO FAR ..... 14 COSTS TOO MUCH ..... 15 INCONVENIENT TO USE..... 16 INTERFERES WITH BODY'S NORMAL PROCESSES ..... 17 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
611	CHECK 213: HAS LIVING CHILDREN ☐ ▼ If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ ▼ If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NUMBER..... ☐☐ OTHER _____ 96 (SPECIFY)	▲613
612	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 ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	
613	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	
614	Do you think that a few, some, most or almost all the women in this community are in favor of the use of modern family planning?	NONE..... 1 A FEW ..... 2 SOME ..... 3 MOST ..... 4 ALL 5	
615A	Have your ever encouraged someone to use a modern family planning method?	YES ..... 1 NO ..... 2 DON'T KNOW..... 8	
615B	Have you ever been encouraged by someone to use a modern family planning method?	YES ..... 1 NO ..... 2 DON'T KNOW..... 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
616	In the last 3 months have you heard or read about family planning: On the radio? On the television? In a newspaper or magazine? From a home visit by a Community Health Worker? At the clinic?	YES NO RADIO ... 1 2 TELEVISION ... 1 2 NEWSPAPER OR MAGAZINE ... 1 2 COMMUNITY HLTH WKR ... 1 2 CLINIC ... 1 2 OTHER_____ 6 (SPECIFY)	
617	In the last few months, have you discussed the practice of family planning with your friends, neighbors, or relatives?	YES ... 1 NO ... 2	▲619
618	With whom? Anyone else? RECORD ALL PERSONS MENTIONED.	SPOUSE/PARTNER ... A MOTHER ... B FATHER ... C SISTER(S) ... D BROTHER(S) ... E DAUGHTER ... F SON ... G MOTHER-IN-LAW ... H FRIENDS/NEIGHBORS ... I OTHER _____ X (SPECIFY)	
619	CHECK 501: YES, CURRENTLY MARRIED ☐ v YES, LIVING TOGETHER ☐ v NO, NOT IN UNION ☐		▲626A
620	CHECK 310A: ANY CODE CIRCLED ☐ v NO CODE CIRCLED ☐		▲622
621	You have told me that you are currently using contraception. Would you say that using contraception is mainly your decision, mainly your spouse's/partner's decision or did you both decide together?	MAINLY RESPONDENT ... 1 MAINLY SPOUSE/PARTNER ... 2 JOINT DECISION ... 3 OTHER _____ 6 (SPECIFY)	
622	Now I want to ask you about your spouse's/partner's views on family planning. Do you think that your spouse/partner approves or disapproves of couples using a contraceptive method to avoid pregnancy?	APPROVES ... 1 DISAPPROVES ... 2 DON'T KNOW ... 8	
623	How often have you talked to your spouse/partner about family planning in the past year?	NEVER ... 1 ONCE OR TWICE ... 2 MORE OFTEN ... 3	
624	CHECK 310A: NEITHER STERILIZED ☐ v HE OR SHE STERILIZED ☐		▲626A
625	Do you think your spouse/partner wants the same number of children that you want, or does s/he want more or fewer than you want?	SAME NUMBER ... 1 MORE CHILDREN ... 2 FEWER CHILDREN ... 3 DON'T KNOW ... 8	
626A	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?	YES NO DK HAS STI ... 1 2 8 OTHER WOMEN ... 1 2 8 RECENT BIRTH ... 1 2 8 TIRED/MOOD ... 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
626B	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. PARTNER'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 501 AND 502: CURRENTLY MARRIED/ LIVING WITH A PARTNER V FORMERLY MARRIED/ LIVED WITH A PARTNER NEVER MARRIED AND NEVER LIVED WITH A PARTNER		▲703 ▲707
702	How old was your spouse/partner on his/her last birthday? IF POLYGYMOUS, ASK ABOUT LAST WIFE.	AGE IN COMPLETED YEARS ☐☐	
703	Did your (last) spouse/partner ever attend school?	YES .....1 NO 2	▲706
704	What was the highest level of school he/she attended: primary, secondary, or higher?	PRIMARY .....1 SECONDARY .....2 HIGHER .....3 DON'T KNOW 8	▲705A ▲705B ▲706
705 A	What was the highest grade he/she completed at that level?	GRADE..... ☐☐ DON'T KNOW 98	
705 B	How many years of Higher education did you complete?	NUMBER OF YEARS COMPLETED ☐☐	
706	CHECK 701: CURRENTLY MARRIED/ LIVING WITH A PARTNER ▼ What is your spouse's/partner's main occupation? That is, what kind of work does he/she mainly do? FORMERLY MARRIED/ LIVED WITH A PARTNER ▼ What was your (last) spouse's/ partner's main occupation? That is, what kind of work did he/she mainly do?	☐☐ _____ _____ _____	
707	Who in your family usually has the final say on the following decisions:	RESPONDENT = 1 SPOUSE/PARTNER = 2 RESPONDENT & SPOUSE/PARTNER JOINTLY = 3 SOMEONE ELSE = 4 RESPONDENT & SOMEONE ELSE JOINTLY = 5 DECISION NOT MADE/NOT APPLICABLE = 6	
	Your own health care?	1 2 3 4 5 6	
	Making large household purchases?	1 2 3 4 5 6	
	Making household purchases for daily needs?	1 2 3 4 5 6	
	Visits to family or relatives?	1 2 3 4 5 6	
	What food should be cooked each day?	1 2 3 4 5 6	
	Your children's education?	1 2 3 4 5 6	
	Your children's health?	1 2 3 4 5 6	

SECTION 8: AIDS AND OTHER SEXUALLY TRANSMITTED INFECTIONS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801a	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES ..... 1 NO 2	▲817
801b	In the last 3 months have you heard ore read about AIDS or the virus that causes AIDS (HIV) or any other sexually transmitted infections: On the radio? On the television? In a newspaper or magazine? From a home visit by a Community Health Worker? At the clinic?	YES NO RADIO ..... 1 2 TELEVISION ..... 1 2 NEWSPAPER OR MAGAZINE .... 1 2 COMMUNITY HLTH WKR..... 1 2 CLINIC ..... 1 2 OTHER_____ 6 (SPECIFY)	
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 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	
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 people reduce their chance of getting the AIDS virus by not having sex at all?	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	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
812A	Can the virus that causes AIDS be transmitted from a mother to a child: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREG ..... 1 2 8 DURING DELIVERY... 1 2 8 BREASTFEEDING 1 2 8	
812B	Are there 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	Have you ever talked with your partner about ways to prevent getting the virus that causes AIDS?	YES ..... 1 NO ..... 2 NA (VIRGIN) 8	
814A	Have you ever encouraged someone to use a condom to avoid getting HIV or other sexually transmitted infections?	YES ..... 1 NO ..... 2 DON'T KNOW..... 8	
814B	Have you ever been encouraged by someone to use a condom to avoid getting HIV or other sexually transmitted infections?	YES ..... 1 NO ..... 2 DON'T KNOW..... 8	
815	In your opinion, is it acceptable or unacceptable for AIDS to be discussed: On the radio? On the TV? In newspapers?	ACCEPTABLE / NOT ACCEPTABLE ON THE RADIO..... 1 2 ON THE TV ..... 1 2 IN NEWSPAPERS..... 1 2	
816	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 ..... 1 NO ..... 2 DK/NOT SURE 8	
817	Should children age 12-14 be taught about using a condom to avoid AIDS?	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS..... 8	
818	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	▲822
819	When was the last time you were tested?	LESS THAN 12 MONTHS ..... 1 12-23 MONTHS..... 2 2 YEARS OR MORE 3	
820	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	
821	I don't want to know the results, but did you get the results of the test?	YES ..... 1 NO 2	→824B
822	Would you want to be tested for the AIDS virus?	YES ..... 1 NO ..... 2 DK/NOT SURE/DEPENDS..... 8	
823	Do you know a place where you could go to get an AIDS test?	YES ..... 1 NO 2	▲825

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
824A	Where can you go for the test? RECORD ONLY FIRST RESPONSE GIVEN. 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 GOVERNMENT HOSPITAL ..... 1 GOVT. HEALTH CENTER ..... 2 FAMILY PLANNING CLINIC ..... 3 MOBILE CLINIC ..... 4 DISPENSARY ..... 5 OTHER PUBLIC _____ 6 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC ..... 7 PHARMACY/PMS ..... 8 PRIVATE DOCTOR ..... 9 MOBILE CLINIC ..... 10 OTHER PRIVATE MEDICAL _____ 11 (SPECIFY) OTHER SOURCE SHOP ..... 12 CHURCH ..... 13 FRIENDS/RELATIVES ..... 14 OTHER _____ 96 (SPECIFY)	**IF ANSWERED 824A → 825**
824B	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)		
825	Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact?	YES ..... 1 NO 2	▲ 828
826	If a man has a sexually transmitted infection, what symptoms might he have? DO NOT READ LIST. Any others? RECORD ALL SYMPTOMS MENTIONED BY RESPONDENT.	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	
827	If a woman has a sexually transmitted infection, what symptoms might she have? DO NOT READ LIST. Any others? RECORD ALL SYMPTOMS MENTIONED BY RESPONDENT.	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 CHILD ..... L OTHER _____ W (SPECIFY) OTHER _____ X (SPECIFY) NO SYMPTOMS ..... Y DON'T KNOW ..... Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
828	CHECK 509A: HAS HAD SEXUAL INTERCOURSE ☐ V	HAS NOT HAD SEXUAL INTERCOURSE ☐	→839
829	CHECK 825: KNOWS STI ☐ V	DOES NOT KNOW STI ☐	→831
830	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	
831	Sometimes, men/women experience a bad-smelling, abnormal genital discharge. During the last 12 months, have you had a bad-smelling, abnormal genital discharge?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
832	Sometimes men/women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
833	CHECK 830, 831, 832: HAS HAD AN INFECTION ☐ ▼	HAS NOT HAD AN INFECTION OR DOES NOT KNOW ☐	→839
834	The last time you had (PROBLEM FROM 830/831/832), did you seek any kind of advice or treatment?	YES ..... 1 NO 2	→836
835	The last time you had (PROBLEM FROM 830/831/832), did you do any of the following? Did you.... 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?	YES NO CLINIC/HOSPITAL ..... 1 2 TRADITIONAL HEALER 1 2 SHOP/PHARMACY ..... 1 2 FRIENDS/RELATIVES . 1 2	
836	When you had (PROBLEM FROM 830/831/832), did you inform the person with whom you were having sex?	YES ..... 1 NO ..... 2 SOME/NOT ALL ..... 3 DID NOT HAVE PARTNER 4	→839
837	When you had (PROBLEM FROM 830/831/832), did you do something to avoid infecting your sexual partner(s)?	YES ..... 1 NO ..... 2 PARTNER ALREADY INFECTED 3	→839
838	What did you do to avoid infecting your partner(s)? Did you.... Use medicine? Stop having sex? Use a condom when having sex?	YES NO USE MEDICINE..... 1 2 STOP SEX..... 1 2 USE CONDOM..... 1 2	
839	RECORD THE TIME.	HOUR ..... ☐☐ MINUTES ..... ☐☐	

READ THE FOLLOWING THANK YOU STATEMENT:

Thank you very much for your time. I greatly appreciate the time you spent with me answering these questions. The information you provided to me will be very helpful in improving the activities of the VISION Project and health services for your community. If you have any questions about anything I asked you about, please contact Professor Adewuyi at 080-3-719-3284.

INTERVIEWER: CHECK TO MAKE SURE YOU HAVE COLLECTED A GPS COORDINATE FOR THE HOUSEHOLD.

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF THE SUPERVISOR:_____ DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR:_____ DATE: _____

HOUSEHOLD SCHEDULE

Now we would like some information about the people who usually live in your household or who are staying with you how

Serial No.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD*	RESIDENCE		SEX	AGE	ELIGIBILITY
(1)	Please give me names of the persons who usually live in you household and guests of the household who stayed here last night, staring with the head of the household. (2)	What is the relationship of (NAME: to the head of the household? (3)	Does (NAME) usually live here? (4)	Did (NAME) sleep here last night? (5)	Is (NAME) male or female? (6)	How old is (NAME)? (7)	Circle line number of persons eligible for individual interview (8)
			Yes No	Yes No	M F	In Years	
01			1 2	1 2	1 2		801
02			1 2	1 2	1 2		802
03			1 2	1 2	1 2		803
04			1 2	1 2	1 2		804
05			1 2	1 2	1 2		805
06			1 2	1 2	1 2		806

Serial No.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD*	RESIDENCE		SEX	AGE	ELIGIBILITY
(1)	Please give me names of the persons who usually live in you household and guests of the household who stayed here last night, staring with the head of the household. (2)	What is the relationship of (NAME: to the head of the household? (3)	Does (NAME) usually live here? (4)	Did (NAME) sleep here last night? (5)	Is (NAME) male or female? (6)	How old is (NAME)? (7)	Circle line number of persons eligible for individual interview (8)
07			1 2	1 2	1 2		807
08			1 2	1 2	1 2		808
09			1 2	1 2	1 2		809
10			1 2	1 2	1 2		810
11			1 2	1 2	1 2		811
12			1 2	1 2	1 2		812
13			1 2	1 2	1 2		813

Serial No.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD*	RESIDENCE		SEX	AGE	ELIGIBILITY
(1)	Please give me names of the persons who usually live in you household and guests of the household who stayed here last night, staring with the head of the household. (2)	What is the relationship of (NAME: to the head of the household? (3)	Does (NAME) usually live here? (4)	Did (NAME) sleep here last night? (5)	Is (NAME) male or female? (6)	How old is (NAME)? (7)	Circle line number of persons eligible for individual interview (8)
14			1 2	1 2	1 2		814
15			1 2	1 2	1 2		815
16			1 2	1 2	1 2		816
17			1 2	1 2	1 2		817
18			1 2	1 2	1 2		818

Codes for Q3 Relationship to Head of Household

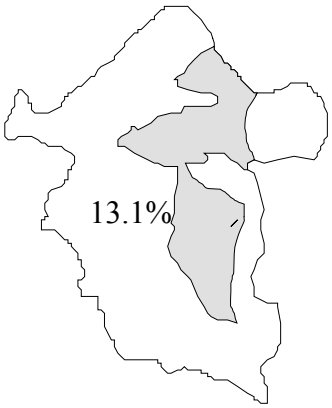
01 = Head
02 = wife or Husband
03 = Son or Daughter
04 = Son or Daughter – in- law
05 = Grandchild
06 = Parent
07 = Parent-in-law
08 = Brother or Sister
09 = Other, specify.
10 = Adopted, Foster or Stepchild
11 = Not Related, 12 = DK

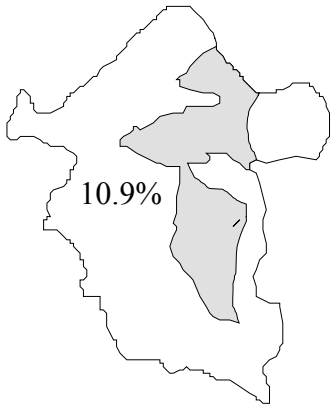
Appendix C: Maps

Map 1: Percentage of women and men who had first sex by age 15.

Female Male

Enugu





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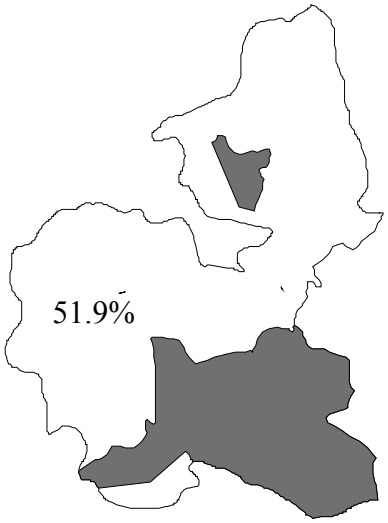

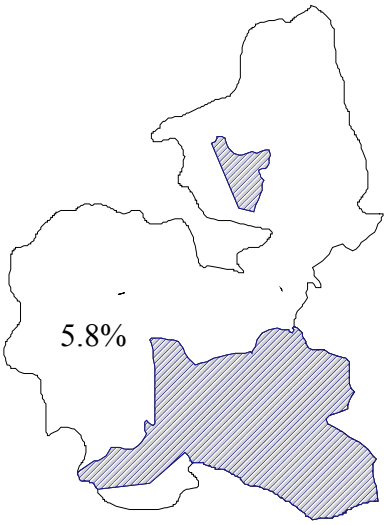

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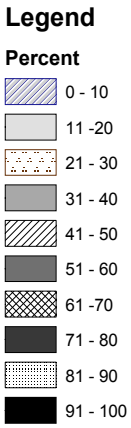
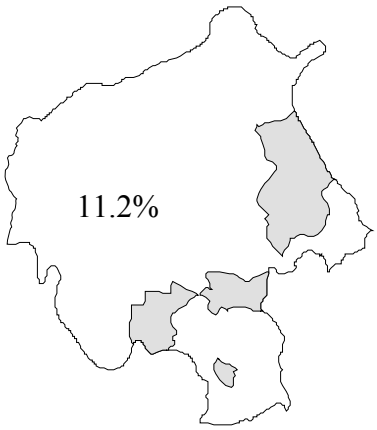
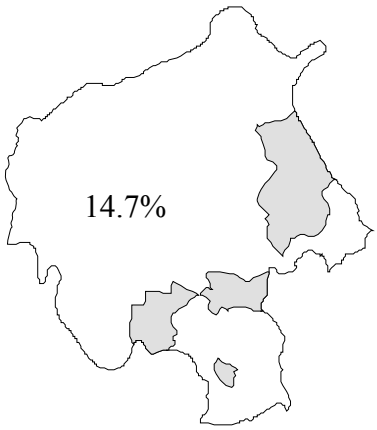


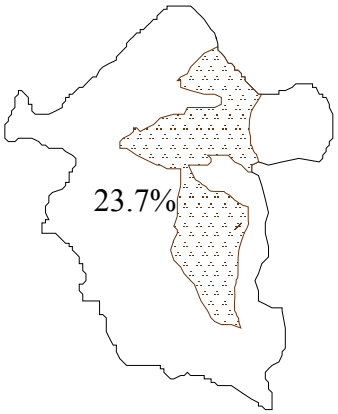


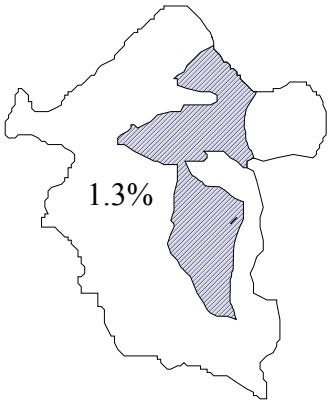


Map 2: Percentage of women and men who had first birth by age 18.

Female Male

Enugu





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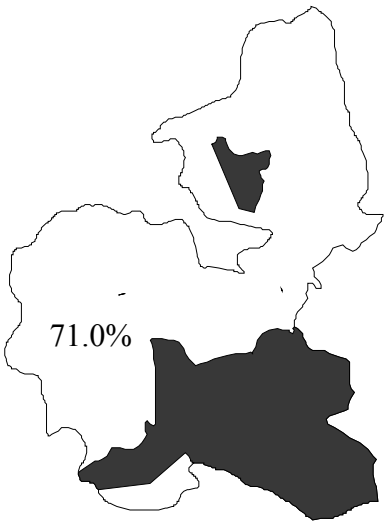

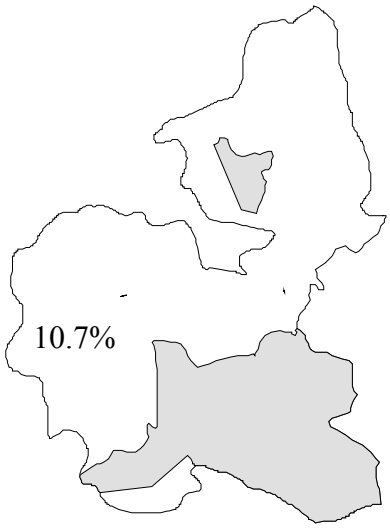

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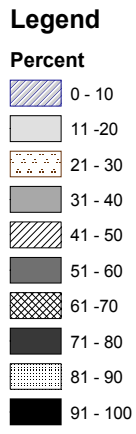
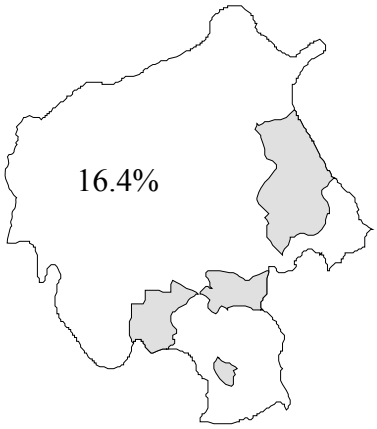
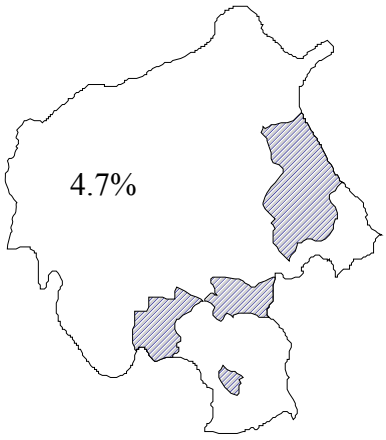




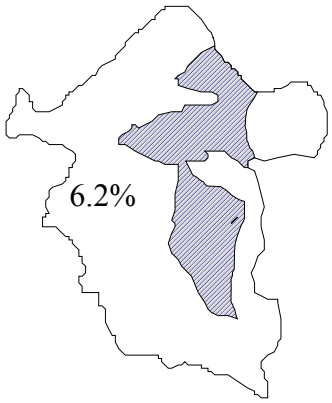


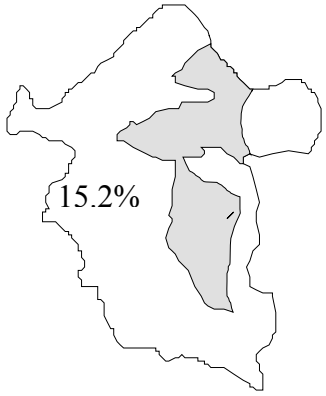
Map 3: Percentage of women and men who currently use any modern family planning method.

Female

Male

Enugu





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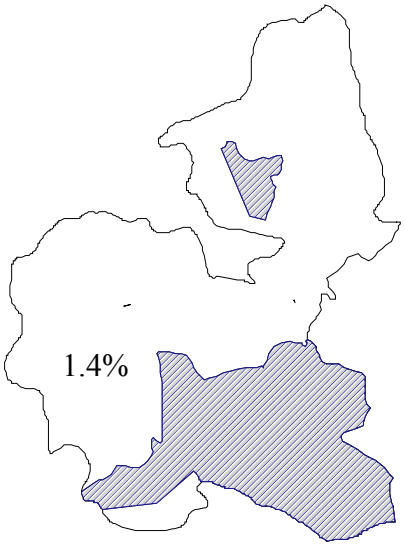

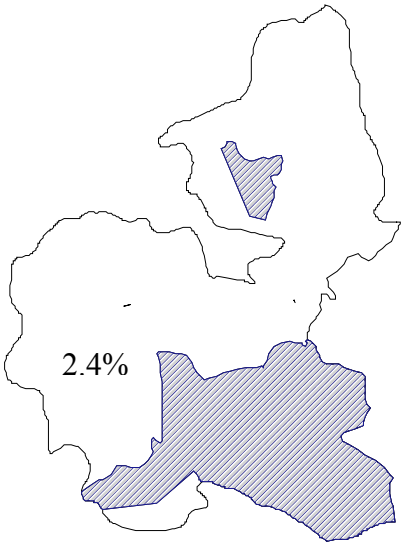

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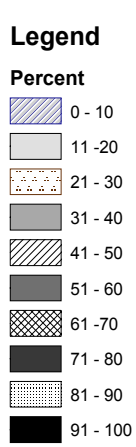
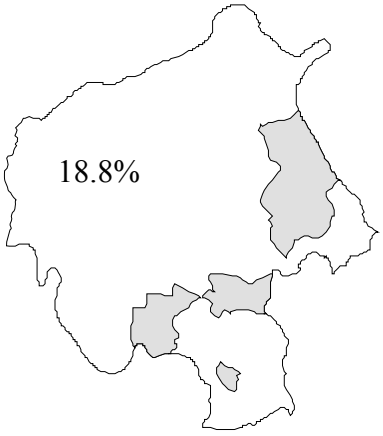
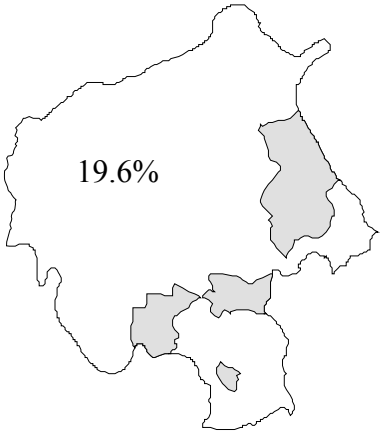


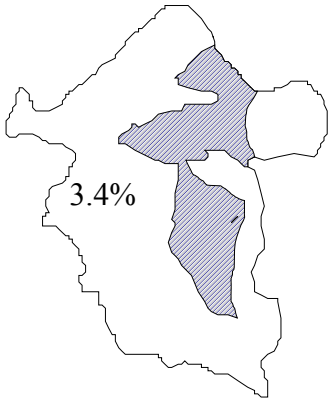


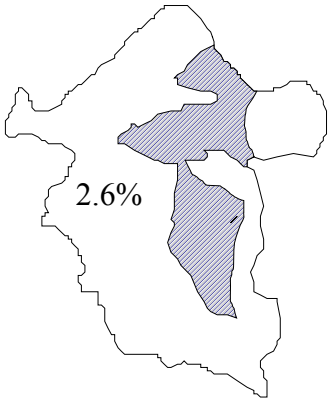


Map 4: Percentage of women and men who have never heard of HIV/AIDS.

Female Male

Enugu





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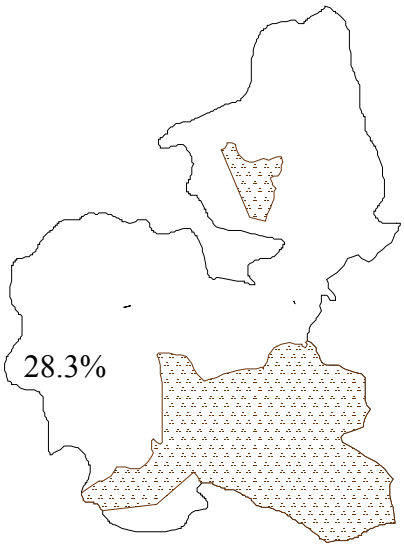

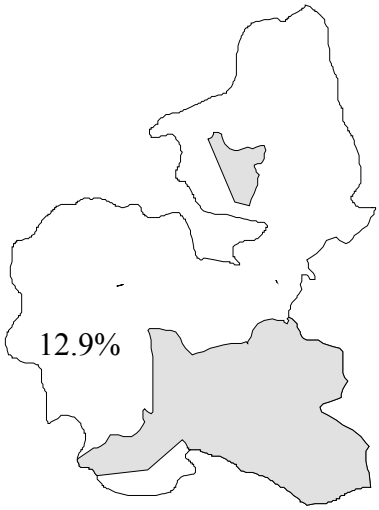

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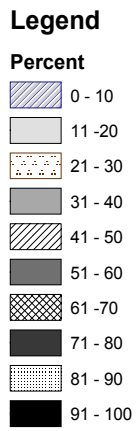
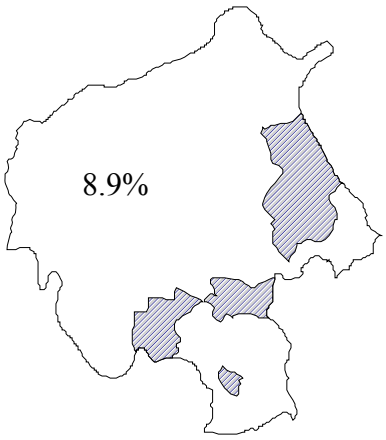
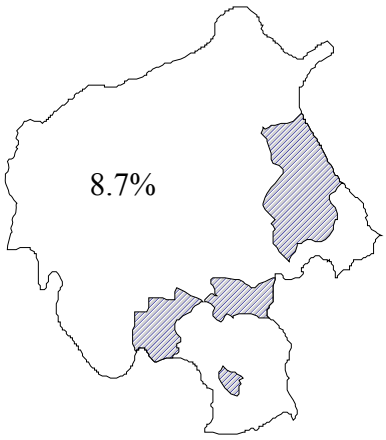
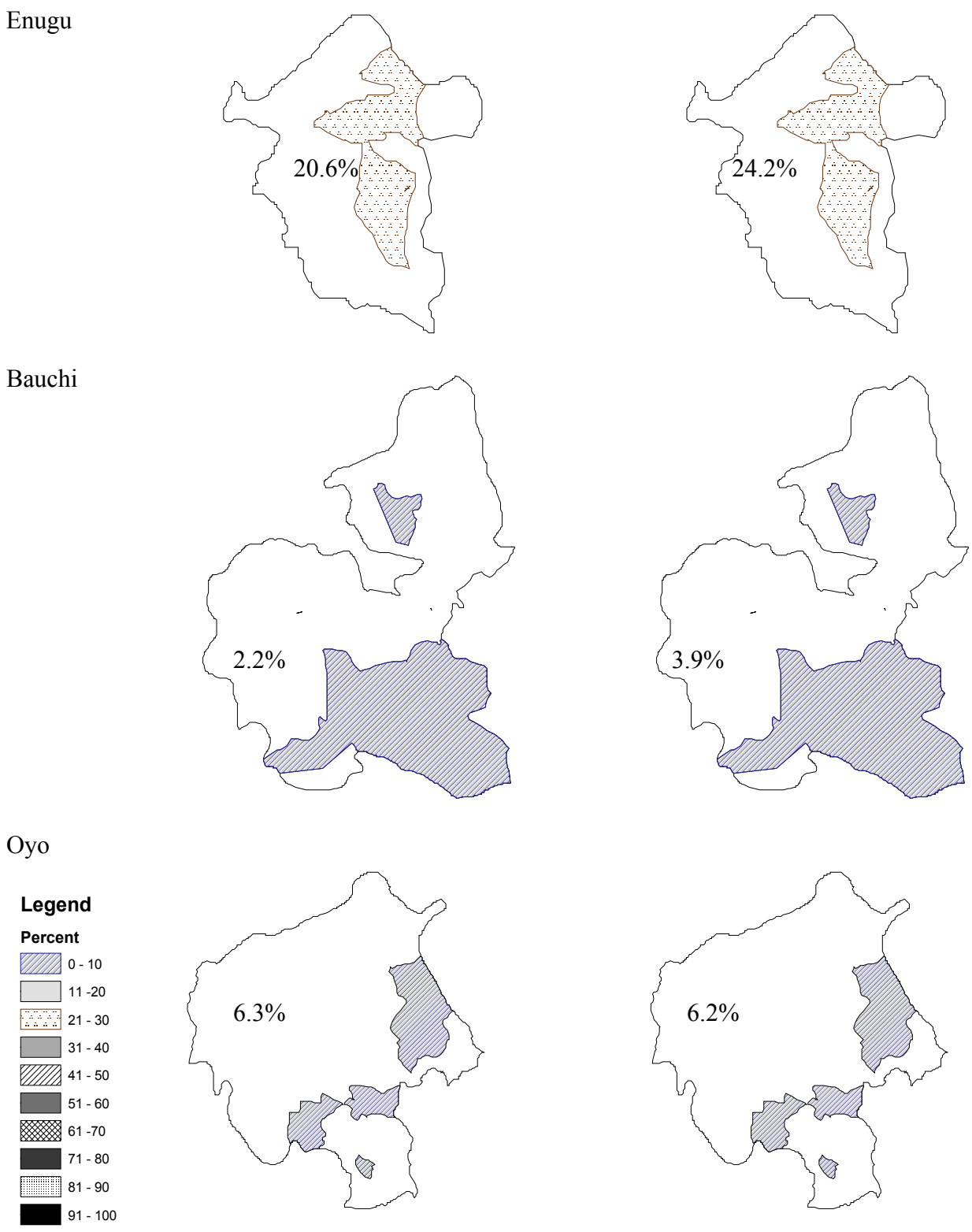


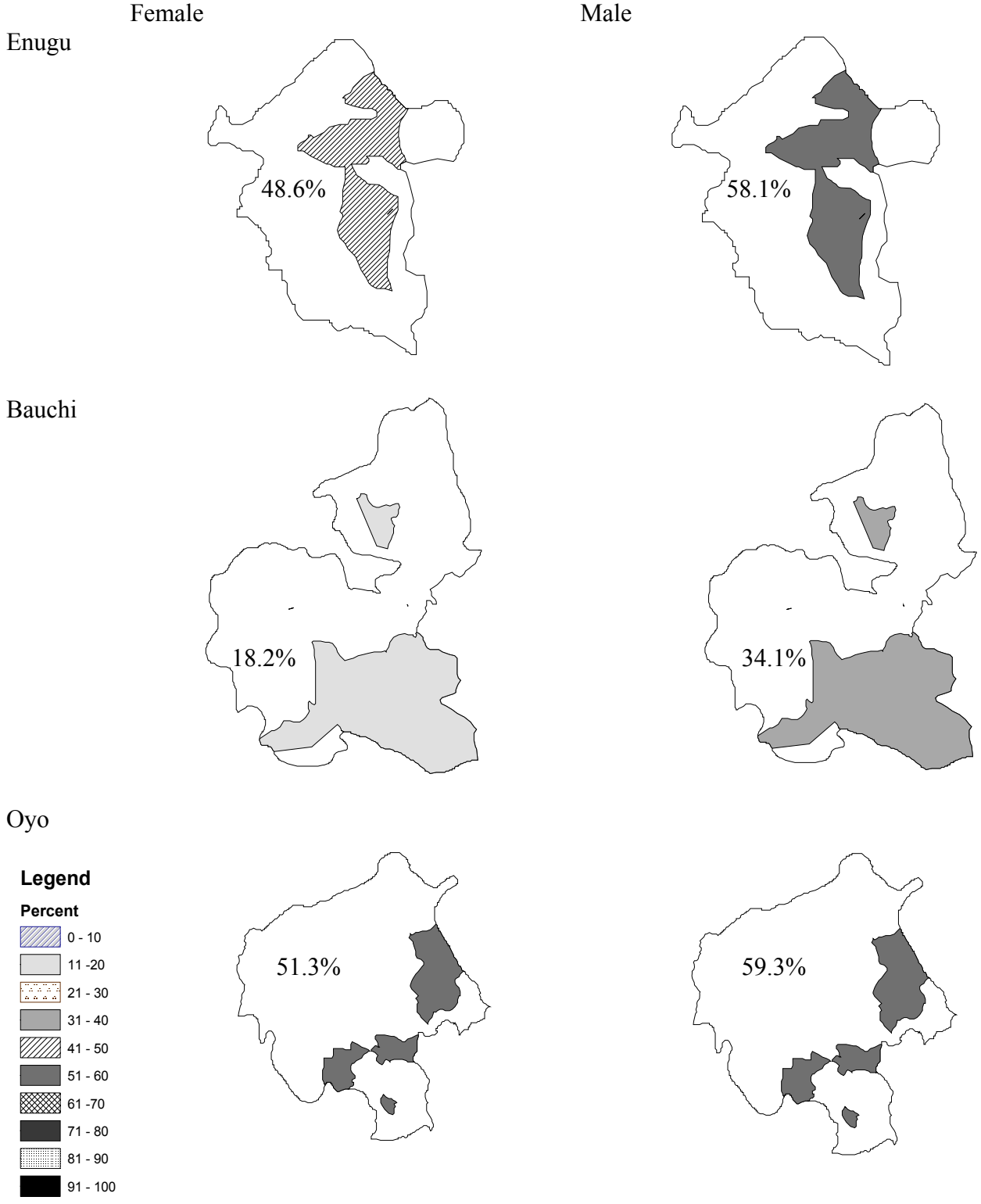




Map 5: Percentage of women and men who have ever been tested for HIV.



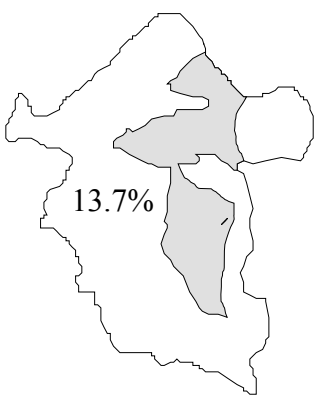
Map 6: Percentage of women and men who want to be tested for HIV, among those not already tested.

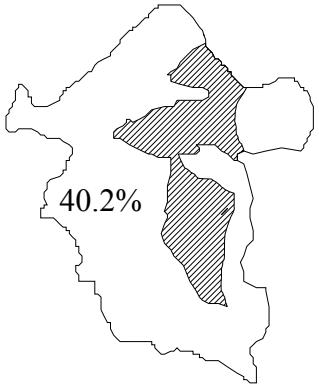


Map 7: Percentage of women and men who used a condom at last sex.

Female Male

Enugu





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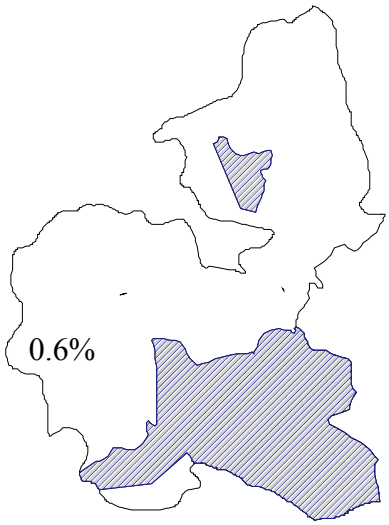

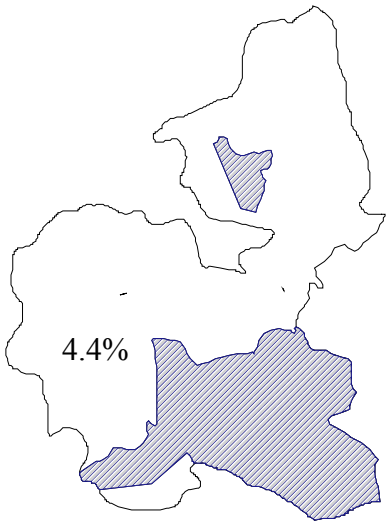

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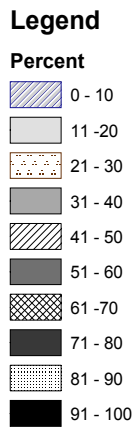
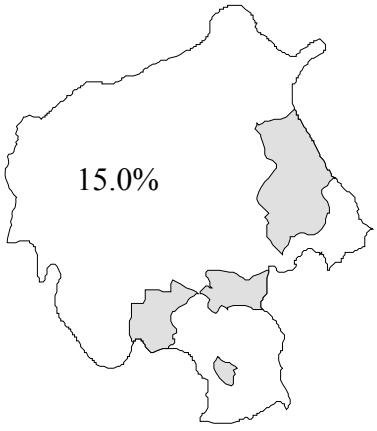
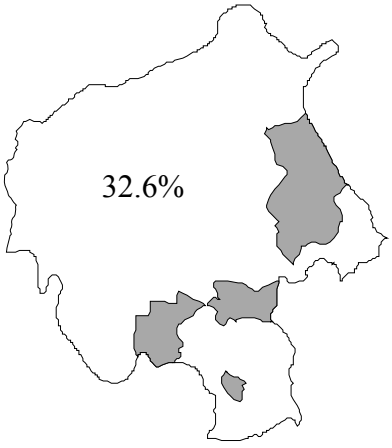




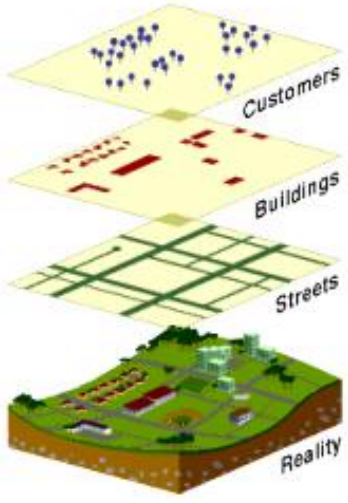


Appendix D: GIS and Public Health: Applications in Nigeria

A geographic information system (GIS) is a computer-based tool for storing, mapping, analyzing, and presenting events or things that occupy space or time. GIS differs from other information systems in that geographic analysis capabilities associated with maps are combined with database functions such as statistical analysis and query operations to produce layers on a map that represent information about an area. Visualizing data can be valuable for revealing ecological trends and relationships, predicting outcomes, planning strategies, generating hypotheses, and explaining events or risk factors that occur within an area or at a given point.

Geographic information systems are further unique in that they can input data from existing external digital sources such as satellite imagery and digitized maps, use scanned images of existing maps, edit and update new or existing databases and applicable geographic data, and store latitude, longitude, and attribute data about an area or point, all of which can be combined to produce a conceptual model of reality. Data records in a GIS can be retrieved based on attribute value or the location in space. For example, all health clinics with positive malaria test results greater than 20% could be displayed, reordered, or aggregated to a higher administrative or sampling unit based on specific values of the collected records. If retrieving data spatially, all health clinics with positive malaria results, and within a specific distance to a river, road, city, or some other criterion, could be selected. Combining queries to produce layers on a map is also possible. Vegetation, road networks, health clinics, households, utility infrastructure, and water bodies could be several layers, for example where the household distance to a road is weighted to be twice as important as household socioeconomic status in selecting households with reduced access to health care facilities. In short, if data are georeferenced, a GIS can create themes that can be stacked on top of each other to create layers of information about an area, where individual layers can be turned on or off, depending on how much information is needed to inform a public health decision. Figure D.1 illustrates the point with examples of data layers at a city level. Clarke et al. (1996) further review and discuss the topic of geographic applications in epidemiology and the health sciences.

Fig D.1: Conceptual GIS model (Image by ESRI).

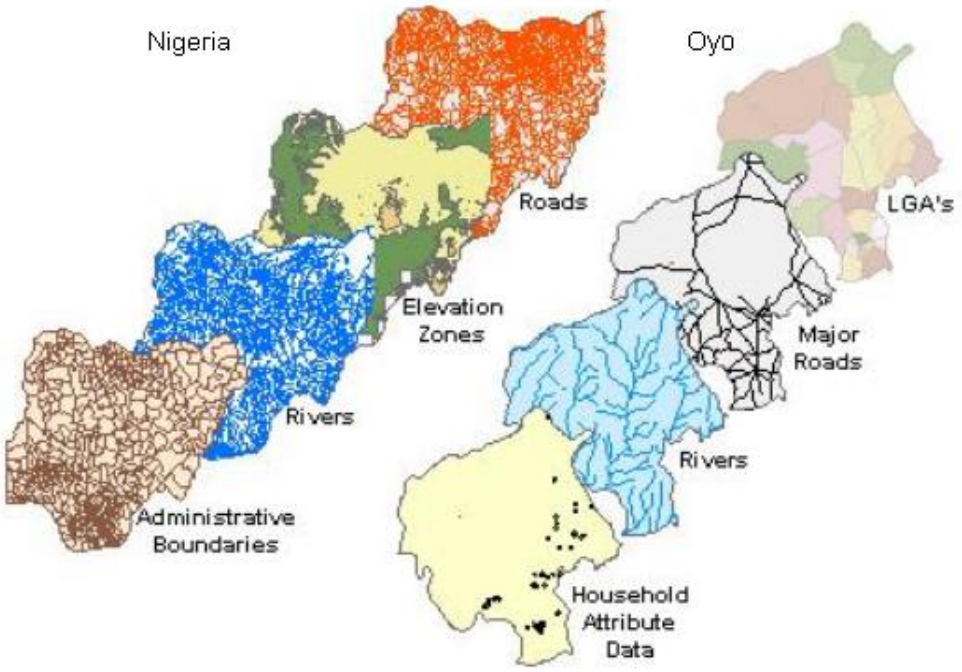


In general, geographic methodologies are useful for determining the geographic distribution of disease or risk factors, analyzing spatial or temporal trends across a study area, mapping populations at risk, stratifying populations or generating sample frames, intervention targeting, and disease surveillance. Numerous international, national, and local agencies are using GIS to visualize and analyze epidemiological, entomological, climatic, census, survey, and satellite data at the sub-national and national levels. The World Bank Development Research Center, for example, is mapping poverty to inform poverty reduction strategies for specific areas. ORC/MACRO is measuring and monitoring food security and vulnerability of populations using GIS, as well as georeferencing DHS data collected worldwide. The U.S. Census Bureau International Program Center is using censuses and GIS techniques to count people at "risk" worldwide. NASA is using GIS and remotely sensed satellite data to monitor specific vector-borne disease risk and epidemic potential, to understand the relationships between asthma and environmental conditions, and to map the transport of dust, which under certain circumstances may carry harmful bacteria, viruses, or fungi across an ocean.

The use of GIS in other areas of public health research has also been varied and well documented. Keating et al. (2003) used a GIS to generate a sample frame for linking entomological and human-ecological data in Kenya. Omumbo et al. (1998) used a GIS to map malaria transmission intensity in Africa. Brabyn and Skelly (2002) used a GIS to conduct a cost path analysis within census enumeration zones of New Zealand to determine the minimum travel time and distance to the closest hospital via the nearest roads. Briggs and Elliot (1995) further describe applications of GIS in studies on the environment and health. The extent to which a GIS is appropriate or useful as a public health tool depends upon, among other things, the spatial structure and quality of the data used, and the underlying intention of the end-user. Because the investment can be expensive in terms of software, data acquisition, and training, it is important that the capabilities and appropriateness of a GIS be discussed and identified for each project, program, or surveillance system implemented.

As part of the MEASURE reproductive health and family planning baseline survey in Nigeria, Arcview 8.0® GIS (Environmental System Research Institute Inc.) was used to view, manage, and project both the household and facility data in relation to administrative boundaries. In both the household survey and health facility census, latitude and longitude data were collected using hand-held Garmin e-Trex® navigational units and matched to the respective households and facility questionnaires in 15 Local Government Areas (LGA) in 3 states. GPS Utility 3.0® was used to download coordinates as database files (.dbf), and Arcview 8.0® was used to link household and facility data to the respective coordinates. Geographic data from the Digital Chart of the World database and the World Resource Institute were used to generate maps illustrating both state level administrative units and LGA administrative units in relation to, among other things, rivers, roads, utility services, and major and minor cities and towns within Nigeria. In two of the states, redistricting had occurred at both the state and LGA levels. In these cases, updates in the GIS were made based on maps collected by project staff within Nigeria. All geographic data sets were standardized to an Albers projection. Household and facility coordinates were plotted in a GIS to determine the extent of survey and census coverage, identify data inconsistencies, and aggregate variables of interest to the LGA level. Each field of data, at both the household and facility levels, formed a map layer. Figure D.2 illustrates examples of layers of data that were collected either using hand-held navigational systems (GPS) or from within an existing geographic database. Two separate scales are presented, one illustrating data at the country level and one illustrating the types of data that exist at the state and LGA levels (only 15 LGA's were considered in this project).

Figure D.2: Examples of data layers that exist at the country level and state level in Nigeria.



The usefulness of GIS for analysis and mapping of this data set is limited in the absence of defined protocols and objectives. A geographical analysis is appropriate only if the data to be used have a spatial structure and can be georeferenced and projected with reasonable accuracy. If data are collected without respect to future GIS input, it is often necessary to recode and enter data in proper format before adding tabular data to the GIS. That being said, it is important that data quality and analytical methodologies applicable to specific objectives be reviewed to avoid costly mistakes and improve the quality of the data before using a geographical analysis. General spatial analysis techniques are listed in Table D.1. Descriptions of specific uses of a GIS within the context of the collected Nigeria data are described in the following paragraphs.

Table D.1: Examples of techniques and applications for geographic methodologies.

Technique	Description	Application
Overlay	Combination of one data layer with another layer	Combination of vegetation coverage, human population and vector habitat
Buffering	Creation of zones or areas of specified width around points, lines, or polygons	Define areas of access to facilities or roads
Interpolation	Estimates values for un-sampled locations	Mapping of pollution or soil type
Proximal estimation	Analyzes conditions at a point based on values at other points within a specific distance	Estimate vegetation coverage based on surrounding land-use
Smoothing	Creation of a smoothed surface	Mapping of generalized surfaces
Point in polygon	Identifies intersection between points and the area in which it is found	Identify all HIV cases within a defined area
Line in polygon	Identifies intersection between line features and the areas in which it is found	Identify all roads within an area

A GIS could be used to view and manipulate existing or collected images reflecting values for households or LGA records, specific to variables of interest. Because scale is often critical for linking data, interpreting results, or evaluating methodologies, it is imperative that end-users consider the sampling unit size and the level of aggregation desired. In the case of data collected as part of the MEASURE project in Nigeria, digitizing or locating existing enumeration areas (EA) could allow for improvements in scale (e.g., from LGA to EA) and a more accurate representation of any observable heterogeneity. A disaggregated data analysis and presentation is therefore possible. More importantly, establishing either the boundaries of the EA or the center of the EA, could allow for small area estimations of DHS outcomes. As well, census data could be linked to DHS data based on common variables, thus eliminating expensive data collection efforts, and used in conjunction with geographic data such as road networks, rivers, and facilities to establish where variables intersect to effect an outcome. For example, one layer that expresses the poverty level of a defined area could be combined with a second layer containing information about HIV status, to identify areas with both high HIV seroprevelance and high levels of poverty in relation to distance to a clinic or road. This information could be useful for prioritizing preventive measures or re-thinking development strategies in specific areas. As it stands now, the LGA is the smallest administrative unit for which both polygon and project survey and census data exist, although latitude and longitude also exist for individual households and facilities sampled.

Given that geographical data exist for a plethora of risk factors, behaviors, and outcomes, as entered from the household and facility level DHS-type questionnaires used in this study, the combined effects could be studied in relation to effect modification and possible confounding across an area. Maps of crude rates, standardized rate ratios, or the numbers of cases or households having a specific value can also be used to illustrate the combined effect of covariates after controlling for a vector of community level variables. Residual or observational autocorrelation associated with space can also be mapped and smoothed based on model-adjusted rates, using techniques within a GIS. As well, GIS offers techniques for locating clusters of disease, or an outcome of interest, at the lowest scale for which vector or rastor data exist, while accounting for the effects of spatial autocorrelation. As well, the location and extent of exposure or behavior in relation to schools, agricultural areas, or hospitals, for example, can also be established, thus offering insight into the linearity or non-linearity of the respective data. Because proximity in space often represents a vector of community level variables that are to some degree correlated, controlling for latitude and longitude helps to account for the effect of space on the respective estimate or value. Spatial interaction models, for example, reflect the principle that for continuous surfaces, things that are near in space are more similar in value than things that are further away; interaction decreases with distance and increases with population size or "attractiveness."

A second application involves joining household and facility tabular data to calculate the distance of each household to the nearest health facility. Households and facilities can further be selected based on attributes of interest. A geo-processing function in the GIS performs the calculation. This calculation also allows for the creation of buffer zones around facilities, reflecting potential service area, or for the creation of contours reflecting areas with reduced or increased access. These calculations can also be done while controlling for distances to rivers, roads, forested areas, nearest towns, or any other feature attribute of an area. Interpolation techniques such as kriging, spline, and inverse distance weighted (IDW) are also possible in a GIS. These techniques are generally used for continuous surfaces (e.g., soil type), although population based surfaces have also been estimated to locate the urban extent and in the creation of endemicity maps. Estimates are calculated from either a set number of "nearest" values, or all values within a fixed radius. Interpolation is used when only a fixed number of values occur or are sampled over a surface, and estimates of a total area are required.

Providing public health decision makers with the results of a geographic analysis should be avoided without also discussing any assumptions used, and the implications of the respective assumptions, for each area. It is important to note that a geographic analysis alone is usually not sufficient to establish

cause and effect relationships, but it may be enough to justify a proactive position with respect to disease control or prevention. Thus, the importance and usefulness of a GIS for solving research problems or informing public health decisions should be considered only after weighing the pros and cons associated with such an approach.