# Nigeria Reproductive Health, Child Health, and Education End-of-Project Household Survey, 2009 

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## ACRONYMS

| AHIP | Adolescent Health and Information Project |
| :--- | :--- |
| AIDS | acquired immune deficiency syndrome |
| ANC | antenatal care |
| ARI | acute respiratory infection |
| CAI | Creative Associates International |
| CHEW | community health extension worker |
| CHO | community health officer |
| COMPASS | Community Participation for Action in the Social Sectors Project |
| CRERD | Center for Research, Evaluation and Resource Development |
| CSACEFA | Civil Society Action Coalition on Education For All |
| DPT3 | diphtheria, pertussis, and tetanus vaccine, three doses |
| EA | enumeration area |
| FCT | Federal Capital Territory |
| FOMWAN | Federation of Muslim Women's Associations of Nigeria |
| FP | family planning |
| HH | Household |
| HIV | human immunodeficiency virus |
| IPT | intermittent preventive treatment |
| IR | intermediate result |
| ITN | insecticide-treated bednets |
| JHU/CCP | Johns Hopkins University Bloomberg School of Public Health Center |
|  | for Communication Programs |
| KLN | Kano, Lagos, and Nasarawa |
| LGA | local government area |
| MSH | Management Sciences for Health |
| NMA | Nigeria Medical Association |
| OAU | Obafemi Awolowo University |
| OPV | oral polio vaccine |
| ORT | oral rehydration therapy |
| PMV | patent medicine vendor |
| PSRHH | Promoting Sexual and Reproductive Health for HIV/AIDS Reduction |
| SDP | service delivery point |
| SFH | Society for Family Health |
| SO | strategic objective |
| TT | Tetanus toxoid |
| UNAIDS | Joint United Nations Programme on HIV/AIDS |
| USAID | U.S. Agency for International Development |
| WHO | World Health Organization |
| CH |  |

## EXECUTIVE SUMMARY

This report presents findings from the 2009 Nigeria end-of-project household survey. The survey serves as the endline for the Community Participation for Action in the Social Sector Project (COMPASS). The survey was implemented in local government areas (LGAs) in the states of Bauchi, Federal Capital Territory (FCT), Kano, Lagos, and Nasarawa where COMPASS was implemented. The purpose of COMPASS was to enhance reproductive health and family planning services, as well as to promote child survival and improved literacy. The core idea behind COMPASS was to integrate the health, child survival, and education sectors through the promotion of community coalitions.

The household survey used a multi-stage stratified sampling design and collected information on reproductive health, child health, and primary school education among a representative sample of women aged 15-49 and men aged 15-64. Education and demographic information about all children residing in the selected households was obtained from respondents. Information about treatment and prevention of childhood illness was collected about children who were either the last birth or second-to-last birth and who were 59 months or younger at the time of the survey. The objective of this report is to provide estimated values for a set of indicators used by COMPASS and the U.S. Agency for International Development (USAID) in Nigeria for monitoring program performance with respect to individual knowledge of and demand for health and education services. Data from the baseline study, conducted in 2005, are compared to the end-of-project survey results to measure changes resulting from COMPASS interventions. Because the project was envisaged to have spillover effects in non-intervention LGAs, it was not possible to include control or comparison groups in the study design.

Chapter 1 of this report describes survey objectives and methods, and provides background information about the sample. Chapter 2 presents data on initiation of sexual activity and childbearing. Chapter 3 presents results on a number of aspects of contraception, including knowledge, current use, approval, and discussion of family planning methods. Chapter 4 reports on care during pregnancy and breastfeeding. Chapter 5 presents findings on several areas of importance to child survival. Information is presented on vitamin A supplementation, use of insecticide treated bednets, home-based treatment of common childhood illnesses, and child immunization. In Chapter 6, information is presented on mass media exposure. Chapter 7 presents information on primary school education. The final chapter focuses on changes in household-level indicators between the baseline and end-of-project surveys. In each chapter, estimates are provided separately for each state, the total population, and the states of Kano, Lagos, and Nasarawa (KLN) combined. Appendix A lists the states were COMPASS was working. Appendix B lists the data collectors and supervisors who implemented the end-ofproject survey. Appendix C is the survey instrument. Note that findings from a primary school survey and the health facility survey are presented in separate reports.

## Fertility

- The age at which sexual activity and childbearing begins can have a major impact on the health and well-being of both the mother and the child. Among sexuallyexperienced women aged 16 years and older, $27 \%$ were sexually active before age 15 .

Men tended to start sexual activity at a later age than women. Only 10\% of sexuallyexperienced men aged 16-64 years initiated sexual intercourse before age 15 years.

- Early sexual activity was more common among women in Bauchi, Kano, and rural areas; and among uneducated women. Among men, those in Nasarawa and rural areas, and those without formal schooling had higher levels of sexual activity before the age of 15 years.
- Twenty-four percent of women as compared to only $2 \%$ of men aged 19 years and older had a child before age 18 years.
- The median number of months separating the last birth and second-to-last birth among women with two or more births was 26 months and ranged from 23 months in Kano to 30 months in Nasarawa. Across all states, $52 \%$ of all births to women with two or more births were separated by at least 24 months.


## Family Planning

- In the 2009 household survey, $72 \%$ of all men and $69 \%$ of all women knew at least one modern method of contraception. Male condoms, the pill, and injectables were the most widely known methods.
- About 17 percent of men and 13 percent of women were currently using a method of contraception.
- More than one-third of respondents approved of family planning. Less than one in 10 respondents had discussed family planning with his or her partner in the past 12 months.


## Antenatal Care and Breastfeeding

- More than half of mothers obtained antenatal care (ANC) services from a trained health care provider at a hospital or clinic and three out of 10 visited a clinic or hospital for ANC services more than once during their last pregnancy.
- Half of women visiting a clinic or hospital for antenatal care during the last pregnancy were counseled about the use of intermittent preventive treatment (IPT) for malaria but only $14 \%$ actually received IPT with the drug Fansidar at least once during their last pregnancy.
- Six out of 10 women who received ANC during their last pregnancy were given at least one dose of tetanus toxoid (TT) vaccine but less than half received two doses of TT during their last pregnancy.
- Half of deliveries were attended by a trained provider (that is, a doctor, midwife, nurse, community health extension worker (CHEW), or community health officer (CHO)).
- Roughly one in four infants younger than six months old was exclusively breastfed in the past 24 hours.


## Child Health

- Sixty two percent of mothers were aware that children aged 6-59 months should take vitamin A supplements.
- Less than $30 \%$ of children aged 6-59 months received vitamin A supplements in the past six months.
- The majority of respondents ( $83 \%$ of women and $84 \%$ of men) were aware that using an insecticide treated bednet (ITN) can prevent malaria transmission.
- Only $13 \%$ of children under five years old slept under an ITN the night before the survey.
- In the total sample, approximately $30 \%$ of children aged $0-23$ months with febrile illness in the past two weeks received anti-malarial drugs. More than $40 \%$ of children 0-23 months with a diarrhea episode in the past two weeks were treated with oral rehydration therapy (ORT). The percentage of children with acute respiratory illness (ARI) who received recommended antibiotic therapy was $36 \%$.
- Less than $5 \%$ of children 12-23 months old were fully immunized before their first birthday.


## Exposure to Mass Media

- Approximately $76 \%$ of women and $85 \%$ of men reported listening to the radio at least one a week.
- Forty-five percent of males and $27 \%$ of females reported reading the newspaper at least once a week.
- More than $60 \%$ of male and female respondents reported watching television at least once a week.
- Less than $15 \%$ of females and less than $10 \%$ of males were not exposed to any mass media.


## School Attendance, Retention, and Promotion

- Attendance rates for males and female students were similar: 39\% for boys aged 6-14 years and $38 \%$ for girls of a similar age.
- The overall gender parity index was 1.07.
- Repeater rates for all grades and both sexes ranged from less than $4 \%$ to $15 \%$. Repeater rates were highest in primary 1.
- Dropout rates for all grades and both sexes ranged from $0 \%$ to less than $2 \%$.
- The survival rate of primary school students as they move from one grade level to the next was high, over $96 \%$.


## Changes in Selected Household Indicators, 2005 to 2009

- There was a significant increase in the percentage of women currently using a modern method of contraception in FCT, Kano, Lagos, and the KLN states. In the KLN states, the percentage of women currently using a modern method of contraception increased from $10 \%$ in 2005 to $13 \%$ in 2009. Regarding men's reported use of contraception, only Lagos state showed a significant increase between surveys in the percentage of men who currently use a modern method of contraception: from 21\% in 2005 to 29\% in 2009.
- Among women, significant increases in the modern contraceptive prevalence rate were seen in urban areas, in the 25-29 age group, among those who were unmarried or living with their partner, and among those who had primary or secondary/higher education. Among men, significant increases in the percentage currently using a
modern method of contraception occurred in the 15-19 and 30-34 age groups, among those in union/living with their partner, and those with primary education.
- Overall, $36 \%$ of mothers at baseline and $58 \%$ of mother at endline reported receiving ANC services at least once during their last pregnancy ( $p<0.01$ ). Significant increases in the utilization of ANC services were observed in most subgroups.
- The percentage of mothers receiving ANC services four or more times during the last pregnancy did not change significantly between 2005 and 2009 ( $31 \%$ versus $30 \%$ ). Nasarawa was the only state that had a significant increase in the percentage of mothers who received ANC four times during their last pregnancy ( $27 \%$ in 2005 and $37 \%$ in 2009).
- Significant declines in the percentage of mothers receiving the recommended minimum of four antenatal visits were observed in semi-urban areas ( $32 \%$ in 2005 versus $21 \%$ in 2009) and among those who were in union or living with their partner ( $43 \%$ in 2005 versus $29 \%$ in 2009).
- Among women who obtained ANC services from a trained provider at a hospital or clinic, the percentage who received IPT at least once was $14 \%$. This represented a significant increase over the baseline value of $9 \%$ ( $<0.01$ ). Statistically significant increases in IPT receipt were seen in Kano, Nasarawa, rural areas, among women younger than 25 , and among uneducated women.
- There was a significant increase in the percentage of women who were counseled on IPT, among those who obtained ANC services, from $48 \%$ in 2005 to 56\% in 2009 (p < $0.05)$.
- Although there was a slight decrease in the percentage of women who received two doses of TT vaccine during their last pregnancy (among those who obtained ANC services), no statistical difference was detected between baseline and endline values in the total population or any subgroup.
- No statistically significant differences were detected between the baseline and end-ofproject surveys in the percentage of infants less than six months old who were exclusively breastfeed over the last 24 hours.
- There was a statistically significant increase in the percentage of children 6-59 months old who received vitamin A supplements in the past six months, from 23\% in 2005 to $29 \%$ in 2009. Statistically significant increases in the rate of vitamin A supplementation coverage were observed between baseline and endline values for Kano, rural areas; and among children whose mothers were aged 30-34, those whose mothers were married, those whose mothers were uneducated, and among Muslim children.
- There was a statistically significant increase in the percentage of children under five years old who slept under an ITN the night before the survey, from 3\% in 2005 to $13 \%$ in 2009. Statistically significant increases in ITN use among children under five years old were detected in all subgroups, with the exception of children whose mothers were 15-19 or 45-49 years old, unmarried, or who practiced other religions.
- No statistically significant differences were noted between the baseline and endline surveys in the percentage of children ages 12-59 months who were fully immunized before their first birthday.
- There was a significant increase in the attendance rates for females aged 6-11 - from $42 \%$ in 2005 to $47 \%$ in 2009. Significant increases in school attendance rates were
observed in Kano for male children aged 6-11; in Bauchi, Kano, and Nasarawa for female children aged 6-11; in Kano for male children aged 6-14; and in Bauchi, Lagos, and Nasarawa for females aged 6-14.
- Repeater rates increased from the 2005 baseline to the 2009 end-of project survey, and significantly so at the primary 1 level. Among male school children, repeater rates in primary 1 increased from $3 \%$ in 2005 to $14 \%$ in 2009. Among female school children, repeater rates in primary 1 increased from $4 \%$ in 2005 to $14 \%$ in 2009. A significant decline in repeater rates was detected in primary 5 among female school children (from 6\% in 2005 to $2 \%$ in 2009).
- Dropout rates did not change significantly between 2005 and 2009.
- The overall gender parity index for children aged $6-14$ was 0.96 in 2005 and 1.02 in 2009.
- Parents' satisfaction with their sons’ or daughters' school experience in the last two weeks increased significantly from 39\% in 2005 to $57 \%$ in 2009. Most subgroups had significant increases in parental satisfaction with schools for daughters and sons, with the exception of Kano, Nasarawa, semi-urban areas, and rural areas.


## CHAPTER 1: INTRODUCTION

## Alfred Adewuyi

### 1.1 The Nigerian Demographic and Health Context

As the continent's fourth largest country, Nigeria is a country of economic, political and social relevance in Africa, particularly in the sub-Saharan region. The 2006 population census of Nigeria put the population figure at 140 million (National Population Commission [NPC], 2006), which makes it the most populous country in Africa and a central point in global population discourse. Although the population of Nigeria is predominantly rural, an estimated one-third resides in urban areas, with substantial variation in the percentage of urban residence among the states. Nigeria is divided into 36 states and a Federal Capital Territory (FCT) in the central part of the nation. Almost all the states have a mix of both urban and rural local government areas (LGAs), towns or communities. The state of Lagos is the most urbanized (94\%) and the state of Jigawa the least urbanized (7\%). Large portions of the Chad basin, the Niger River valley, the grass plains, and the Niger River delta are sparsely populated, while some rural areas report population densities in excess of 400 persons per square kilometer (NPC \& ORC Macro, 2004). Nigeria is currently in the fourth republic and operating a civilian system of government.

Nigeria is ranked among countries with critical health challenges and some of the documented health indicators are not very encouraging. For instance expectation of life at birth has gradually been decreasing since 1991 from 53 years (NPC, 1998) to 49 years for both sexes in 2007 (WHO, 2009). HIV and AIDs has contributed significantly to this trend. It was estimated that in 2009, 3,300,000 Nigerians were living with HIV, while about 220,000 deaths due to AIDS were recorded (UNAIDS, 2009). The maternal mortality situation in Nigeria is of serious concern and currently stands at an estimated 545 maternal deaths per 100,000 live births, despite the advocated reduction of maternal mortality ratio to 125 per 100,000 live births by 2010, and to 75 by 2015 as stipulated in the national policy on population and sustainable development. The child mortality rate (probability of dying before the age five) was estimated at 157 deaths per 1,000 live births, while the infant mortality rate was estimated at 75 deaths per 1,000 live births (NPC \& ORC Macro, 2009). The total fertility rate (TFR) was high at 5.7 children per woman (NPC \& ORC Macro, 2009). In 2002, over 25\% of teenagers had begun childbearing. Although the literacy rate is high in Nigeria, over $40 \%$ of women have no formal education (NPC \& ORC Macro, 2004).

### 1.2 Reproductive and Child Health in Nigeria

Child and reproductive health is of increasing concern for the government of Nigeria. By the end of 2004, between 3.2 million and 3.6 million Nigerians were infected with HIV (UNAIDS \& WHO, 2005). The projected annual deaths as a result of HIV and AIDS has increased from 50,000 in 1999 to over 350,000 in 2004 (NPC \& ORC Macro, 2004) at enormous cost to the economic and health sectors in the country. As a result, the Nigerian government has expressed renewed interest in reviewing the national HIV and AIDS policy. Only 36\% of women and 49\% of men reported using a condom at last high-risk sexual encounter (NPC \& ORC Macro, 2009).

The Nigerian government, with assistance from the World Bank, is 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. As well, the Nigerian government has established the National Action Committee on AIDS (NACA), and HIV and AIDS prevention interventions are targeting high-risk populations, such as commercial sex workers and transportation workers. The United Kingdom's Department for International Development is funding a project called Promoting Sexual and Reproductive Health for HIV/AIDS Reduction (PSRHH). PSRHH is a seven-year program implemented by the Society for Family Health (SFH), a local affiliate of Population Services International (PSI). The U. S. Agency for International Development (USAID) is supporting interventions aimed at integrating HIV and 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 mechanism through which USAID/Nigeria seeks to improve education, child health, and reproductive health is through the Community Participation for Action in the Social Sectors Project (COMPASS), an integrated health and education program launched in 2004 in five Nigerian states: Bauchi, FCT, Kano, Lagos, and Nasarawa.

The reach and impact of COMPASS were evaluated using a household survey on reproductive health, child health, and education; a health facility survey; and a school survey. The baseline survey was conducted in year 2005, followed by a mid-line evaluation in 2007. This report presents the 2009 end-line evaluation report of reproductive health, child health, and education household survey of the COMPASS project.

### 1.3 COMPASS and MEASURE Evaluation's Role

In 2004, USAID/Nigeria awarded a five-year COMPASS contract to Pathfinder International and its partners, Johns Hopkins University Bloomberg School of Public Health Center for Communication Programs (JHU/CCP), Creative Associates International (CAI), Constella Futures (currently Futures Group), Adolescent Health and Information Project (AHIP), Federation of Muslim Women's Associations of Nigeria (FOMWAN), Nigeria Medical Association (NMA), Management Sciences for Health (MSH), and the Civil Society Action Coalition on Education For All (CSACEFA). COMPASS in Nigeria aims to improve access to health and education within five Nigerian states, affecting 18 million people. The project targets 51 local government areas within the states of Lagos, Kano, FCT, Bauchi, and Nassarawa. The states vary widely in both socio-demographics and socioeconomics, reflecting disparities in wealth, health, and education between the northern and southern sections of the country. The five states in which COMPASS 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 and education services. The timeline for project implementation was from May 2004 through May 2009.

COMPASS contributes to USAID/Nigeria’s strategic objective for improved social sector services (SO13). Specifically, the project aims to contribute to each of USAID's SO13 indicators: increased coverage of children who have received the three doses of vaccine for
diphtheria, pertussis (whooping cough), and tetanus (DPT3); increased contraceptive prevalence rate; increased birth spacing; and increased student retention.

To that effect, the project objectives include:

- improving the quality of health and education services (IR13.1);
- improving local communities' ability to effectively participating in policy dialogue on health and education (IR13.2);
- increasing demand for quality health and education services (IR13.3); and
- increasing access to both health and education facilities (IR13.4).

MEASURE Evaluation is the external evaluator for COMPASS. MEASURE Evaluation, in consultation with COMPASS and USAID/Nigeria, developed a household survey, an education survey, and a facility survey. After conducting a competitive bidding process according to USAID/Nigeria requirements, MEASURE Evaluation contracted the Center for Research, Evaluation, and Resource Development (CRERD), a research organization based in Ile-Ife and affiliated with Obafemi Awolowo University (OAU), to implement the household and facility surveys, as well as the school surveys in the 51 LGAs where COMPASS operates.

Results from the household survey provide data for constructing indicators at the individual level (e.g., indicators of and demand for health and education issues and services) and for calculating attendance rates for primary school-aged children. Results of the facility survey indicators relate to access, types of services offered, and quality of services at the facility or service delivery point (SDP) level (e.g., contraceptive availability). Results from the school survey provide information in the quality and types of educational services offered.

### 1.4 Survey Objectives, Methods, and Sample Design and Size

The specific objectives of the end-line household survey are to:

- collect quantitative data on child and reproductive health indicators among a sample of adults in 51 LGAs in Bauchi, FCT, Kano, Lagos, and Nasarawa states;
- obtain data that will be used as a end-line against which to measure changes in child health, reproductive health, and education indicators resulting from COMPASS’s interventions; and
- provid data for the refinement of strategies and target populations for COMPASS activities, as well as for other child health, reproductive health, and educational programs in the region.

CRERD, in consultation with MEASURE Evaluation, was responsible for sample frame design, data collection (including recruiting and training of the field survey teams), data entry, and data cleaning. MEASURE Evaluation was responsible for all aspects of the end-line and developed the questionnaires, assisted with training of the supervisors and survey teams, and conducted data analysis. The survey reports were produced by CRERD and MEASURE Evaluation.

The reach and impact of the COMPASS project were assessed through three waves of crosssectional surveys in the project target areas. Three different types of surveys were conducted at each stage of the survey:

- a large-scale household survey related to reproductive health, child health, and primary school education, among a representative sample of women aged 15-49 years and men aged 15-64;
- a survey of primary health care facilities (comprehensive health care centers, public and primary health care centers, health clinic , private health center/maternity, private clinics, uniformed services clinics, health posts, and dispensaries) and patent medicine vendors (PMV); and
- a survey of primary schools (public and private), including both teachers and headmasters.

The baseline data were collected in 2005, the midline data were collected in 2007, and the final end-line data were collected in 2009. The objective of the 2009 end-line education survey was to collect quantitative data on primary school education indicators among a representative sample of respondents and schools in the target areas (the 51 LGAs, listed in appendix A). Education and demographic information about all children residing in the selected houses were obtained from the respondents. Information about child health was collected about children who were either the last birth or second to last birth, and who were aged up to 59 months. Because the project is likely to have a spillover effects in non-intervention LGAs (which would be a desirable outcome), it is not possible to include control groups in the study design.

Sample size calculations for the baseline, midline, and end-line were the same. Household surveys were conducted using regional estimates of the five indicators: contraceptive prevalence, modern contraceptive prevalence, and $\mathrm{DPT}_{1}, \mathrm{DPT}_{2}$ and $\mathrm{DPT}_{3}$ rates. The highest estimate indicated a sample size of 80 respondents per LGA would allow detection of changes of 25 percentage points at the LGA level with $90 \%$ power and $95 \%$ confidence (and much more accurate estimates at the state level). Given that there are 51 project LGAs, the target sample size was 4,080 . Allowing for $10 \%$ non-response, the sample size was increased to 4,500 . The sample size for children was a function of the number of children living in the selected house, and meeting specific age criteria (table 1.1). Since the facility and school surveys are linked surveys, they do not have a predetermined sample size. The sample size for these surveys depends on the number of facilities and schools used by the respondents in the household survey.

A multistage stratified sampling strategy was used for the household survey. Assuming 25 interviews per enumeration area (EA), 182 EAs were needed to achieve the target sample size for the household survey. Because the number of intervention LGAs varies by state, allocating the EAs proportional to population size would not be appropriate, as this would result in very small sample size for some of the states. Hence, 52 were selected in each of the other states. Within each state, EAs were selected proportional to the population size of the respective LGAs. Within each LGA, the required number of enumeration areas was selected using a table of random numbers. Within each selected EA, 25 households were selected using systematic random sampling. Because the EAs were not selected proportional to the population size of the respective COMPASS LGAs in each state, standardized state-level weights were applied to all
between-state estimates. Weights were based on the proportion of the population in the COMPASS LGAs in each state (relative to the total population across all COMPASS LGAs in all five states), and the proportion of houses sampled in COMPASS LGAs in each state (relative to the total number of sampled houses across all COMPASS LGAs in all states). Total estimates across all states in the tables found in chapters 2 through 8 reflect weighted totals.

The health facility and school surveys are linked to the household survey. The facility survey includes all public and primary health care facilities serving the population interviewed in the household survey. The school survey sample includes all primary schools (public and private) that serve the families of those interviewed in the household survey. Hence, the facility and school surveys may include some facilities or schools that are located outside the EA selected for the household survey. By linking the facility and education surveys to the household survey, it is possible to assess the effect of improvements in health services and education on individual health outcomes.

Table 1.1: Population, Enumeration Areas, Estimated and Actual Sample Sizes for Primary Schools, by State

|  | Bauchi | FCT | Kano | Lagos | Nasarawa | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 2005 population* | $1,355,181$ | 371,674 | $2,476,911$ | $4,388,647$ | 498,862 | $9,091,095$ |
| Number of EAs sampled | 26 | 26 | 52 | 52 | 26 | 182 |
| Proposed household | 650 | 650 | 1,300 | 1,300 | 650 | 4,550 |
| (HH) sample size |  |  |  |  |  |  |
| Actual HH sample size | 650 | 651 | 1,296 | 1,292 | 650 | 4,539 |
| Male respondent | 316 | 297 | 655 | 548 | 391 | 2,207 |
| Female respondent | 334 | 354 | 641 | 744 | 259 | 2,332 |
| Mothers (has any child) | 242 | 234 | 496 | 491 | 210 | 1,673 |
| Children 6-14 years | 916 | 574 | 1,905 | 852 | 932 | 5,179 |
| Children 6-11 years | 673 | 419 | 1,386 | 565 | 677 | 3,720 |
| Children 0-59 months | 227 | 183 | 393 | 341 | 184 | 1,333 |
| Children 6-59 months | 196 | 174 | 360 | 312 | 182 | 1,224 |
| Children 12-59 months | 174 | 157 | 327 | 276 | 156 | 1,090 |
| Children 0-23 months | 97 | 77 | 172 | 151 | 65 | 562 |
| Children 12-23 months | 44 | 50 | 95 | 86 | 32 | 307 |
| Children 0-5 months | 31 | 10 | 44 | 29 | 7 | 121 |
| Health facilities sampled | 38 | 36 | 71 | 70 | 27 | 242 |
| Schools sampled | 164 | 53 | 308 | 206 | 45 | 776 |
| Teachers sampled | 651 | 260 | 1,648 | 1,086 | 278 | 3,923 |

Note: * Source: Keating, 2006.

### 1.5 Questionnaire Development, Training of Survey Teams, and Data Collection

This MEASURE Evaluation, in consultation with all COMPASS collaborating partners, developed the questionnaires (found in appendices C and D ). The headmaster and teacher questionnaires included sections on the school's general background, record keeping, school health activities and health curriculum, materials and resources, parent-teacher associations, teacher and headmaster's experience, and family education. The questionnaires were translated into the three major local languages of the five COMPASS states (Hausa, Igbo, and Yoruba), then back-translated into English. The questionnaires were interviewer-administered. Geographic coordinates were collected at each school using the Garmin eTex® hand-held navigational unit and downloaded using GPS Utility.

Training of field staff was conducted in two stages. First, supervisors received a four-day centralized training at OAU. Subsequent three-day regional trainings of the field teams were held in each of the five states. About $80 \%$ of the supervisors who participated in the baseline and midline evaluations were recruited for the end-line survey. The fieldworkers were recruited from each state and comprised mostly of those who participated satisfactorily in the baseline and midline surveys. CRERD led all training. Training consisted of a question-by-question review of the questionnaires, a 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 questionnaires.

Data collection for the household survey was implemented concurrently in each of the five states. Fieldwork for the household survey started in mid-June 2009 and was completed by early July, 2009. A total of 216 interviewers and 52 supervisors implemented the data collection for the COMPASS 2009 end-line survey.

### 1.6 Limitations

As with all cross-sectional surveys, this survey was subject to response and recall biases. Selfreported data may reflect a perceived desirability of responses rather than actual knowledge or practices, and may be affected by response bias. Responses to questions related to events in the past (for example, ever trained in family planning methods, number of sexual partners in the past 12 months, condom use during the past 12 months) were subject to recall bias.

Also, one of the EAs in Bauchi state was substituted due to reasons of inaccessibility. Since the survey sample was restricted to those 51 LGAs targeted by COMPASS, the results from this survey may not be representative of the people of the state. This substitution may also result in selection bias as not all EAs had an equal probability of selection.

### 1.7 Sample Characteristics

Table 1.2 presents information on the background characteristics of all household survey respondents. In all, there were 2,250 females and 2,218 males, which added up to a total of 4,468 respondents. As can be seen from the table, the majority of female and male respondents were from Lagos (52.4\% and 43.7\% respectively).

Table 1.2: Percentage of Background Characteristics among Household Survey Respondents, by Gender, 2009

| COMPASS LGAs | Female | Male |
| :---: | :---: | :---: |
| State |  |  |
| Bauchi | 12.0 | 17.8 |
| FCT | 4.5 | 3.9 |
| Kano | 25.5 | 29.2 |
| Lagos | 52.4 | 43.7 |
| Nasarawa | 5.7 | 5.5 |
| KLN ${ }^{\dagger}$ total | 83.5 | 78.4 |
| Location |  |  |
| Urban | 59.5 | 53.2 |
| Semi-urban | 15.8 | 15.0 |
| Rural | 24.8 | 31.8 |
| Age |  |  |
| 15-19 | 14.9 | 12.9 |
| 20-24 | 16.3 | 13.9 |
| 25-29 | 21.5 | 15.7 |
| 30-34 | 15.2 | 16.3 |
| 35-39 | 12.2 | 10.3 |
| 40-44 | 9.4 | 8.4 |
| 45-49 | 10.6 | 8.0 |
| $\geq 50$ | 0.0 | 14.7 |
| Marital status |  |  |
| Married | 52.9 | 43.0 |
| In union/living with partner | 16.4 | 12.3 |
| Not married/in union | 30.7 | 44.7 |
| Ever had a child | 66.3 | 46.6 |
| Education |  |  |
| No formal schooling | 29.9 | 24.4 |
| Primary | 28.9 | 29.2 |
| Secondary or higher | 41.2 | 46.5 |
| Religion |  |  |
| Christian | 40.4 | 37.8 |
| Muslim | 57.1 | 59.9 |
| Other | 2.5 | 2.3 |
| Total (n) | $100(2,250)$ | $100(2,218)$ |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara.
A greater proportion of both men and women were from urban areas (59.5\% for females and $53.2 \%$ for males). More than half of the women (67.9\%) and men (58.8\%) were 34 years of age
or younger, and the remaining $32.2 \%$ of women and $41.4 \%$ of men were 35 years of age or older. No women aged 50 years or older were sampled in this study.

Nearly $53 \%$ of female respondents were married compared to $43 \%$ of male respondents who were married. Approximately $16 \%$ of women were in unions or living with their partners, and almost $31 \%$ were single; and among male respondents, $12.3 \%$ were in unions or living with their partners and $44.7 \%$ were single. Almost two-thirds (66.3\%) of female respondents have ever had a child, compared to only $46.6 \%$ of male respondents. Nigeria has a four-tiered educational system known as the 6-3-3-4 system. Primary education is in the first six years, followed by three years of junior secondary, three years of senior secondary, and four years of university or polytechnic. Education is compulsory and free of tuition up to the junior secondary school level, as stipulated in the Compulsory, Free Universal Basic Education Act of 2004 (Federal Ministry of Education, 2008). Among survey respondents, $41.2 \%$ of women and $46.5 \%$ of men had a secondary school education or higher. Nearly $30 \%$ of women and $24.4 \%$ of men had no formal schooling at all, and approximately $29 \%$ of women and $29 \%$ of men had a primary school education. With regards to religious affiliation, more than half of both female (57.1\%) and male (59.9) respondents was Muslim, while $40.4 \%$ of women and $37.8 \%$ of men were Christian. Only $2.5 \%$ of women and $2.3 \%$ of men reported other faiths apart from Christianity and Islam.

## CHAPTER 2: INITIATION OF SEX AND CHILDBEARING

## Nana Koram

This chapter describes the initiation of sexual activity and childbearing. In many societies, the initiation of sexual intercourse at an early age is considered undesirable due to the increased risk of early pregnancy and the possibility of contracting sexually transmitted infections (STI). Early childbearing is also frowned upon in many cultures as it has negative consequences such as the increased likelihood of pregnancy complications, which can lead to sterility, an unhealthy baby and even death of the mother.

### 2.1 Age at First Intercourse

Table 2.1 shows the percentage of respondents 16 years of age or older who first had sex by age 15 , according to gender. The results show that, in general, while $27 \%$ of women 16 years or older engaged in sex by age 15 , only $10 \%$ of men 16 years or older had sex by age 15 years. However, among both men and women, there was considerable variation in the timing of sexual initiation. Among women, the percentage of women who engaged in sexual intercourse at an early age was significantly higher in Bauchi and Kano, rural areas among teenage women and those with no formal schooling, as well as among married women and those who reported practicing other religions, such as traditional religions.

In Bauchi and Kano states, $44 \%$ and $50 \%$ respectively of women 16 years or older reported having had sexual intercourse by age 15, as compared to $28 \%$ in Nasarawa, $16 \%$ in FCT, and $10 \%$ in Lagos. When looking at the combined numbers for Kano, Lagos and Nasarawa, 24.8\% of women reported having had sex by age 15 . In rural areas, $49 \%$ of women living in rural areas reported having had sex by age 15 , as compared to $33 \%$ in semi-urban areas, and $14 \%$ in urban areas. Teenage female respondents, and female respondents in their early twenties engaged in sexual intercourse at an earlier age ( $44 \%$ and $40 \%$ respectively), as compared with other age groups. This is partly due to the fact that the data pertain to women who were sexually experienced at the time of the survey and excludes, therefore, those who had delayed sexual initiation. Women with no formal schooling were also more likely to report having had sex by age 15 ( $48 \%$ ), as compared to $20 \%$ of those with a primary school education, and $12 \%$ of those with a secondary school or higher education level. Married women and non-Christian/Muslim women (i.e., women practicing other religions) were also more likely to report early sexual initiation ( $30 \%$ and $39 \%$, respectively).

The pattern of sexual activity for male respondents was slightly different. The highest levels of early sexual initiation among men were reported in Nasarawa and Kano states (17\% and 11\% respectively), as compared with 9\% in Bauchi, 4.3\% in FCT and 9\% in Lagos. The combined numbers for Kano, Lagos, and Nasarawa show that approximately $10 \%$ of men in these areas reported early sexual initiation. Unlike for female respondents, where there was considerable variation in early sexual initiation from rural to urban areas, among male respondents the pattern of sexual activity from rural to urban areas was slightly less varied; $11 \%$ and $10 \%$ of men living
in semi-urban and rural areas respectively were more likely to report having had sex at an early age, as compared to $9 \%$ of men living in urban areas.

Table 2.1: $\quad$ Percentage of Sexually Experienced Respondents Who Had First Sex by Age 15, by Gender

| COMPASS LGAs | Female | n | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 44.2 | 208 | 9.1 | 230 |
| FCT | 15.9 | 232 | 4.3 | 140 |
| Kano | 50.4 | 448 | 10.5 | 430 |
| Lagos | 9.6 | 437 | 8.7 | 263 |
| Nasarawa | 27.5 | 244 | 16.5 | 194 |
| KLN ${ }^{\dagger}$ total | 24.8 | 1,129 | 10.1 | 887 |
| Location |  |  |  |  |
| Urban | 14.2 | 647 | 8.7 | 436 |
| Semi-urban | 32.9 | 309 | 10.7 | 236 |
| Rural | 48.9 | 590 | 10.2 | 567 |
| Age |  |  |  |  |
| 16-19 | 44.2 | 99 | 23.2 | 29 |
| 20-24 | 39.5 | 217 | 16.8 | 46 |
| 25-29 | 25.2 | 356 | 5.3 | 141 |
| 30-34 | 27.9 | 297 | 11.9 | 210 |
| 35-39 | 19.0 | 253 | 9.0 | 197 |
| 40-44 | 24.1 | 179 | 10.7 | 179 |
| 45-49 | 21.5 | 168 | 8.6 | 168 |
| $\geq 50$ | N/A | 0 | 8.4 | 287 |
| Marital status |  |  |  |  |
| Married | 30.1 | 1,209 | 10.3 | 976 |
| In union/living with partner | 17.7 | 360 | 7.7 | 281 |
| Not married/in union | N/A | 0 | N/A | 0 |
| Education |  |  |  |  |
| No formal schooling | 48.0 | 611 | 11.4 | 429 |
| Primary | 19.9 | 510 | 9.1 | 424 |
| Secondary or higher | 11.9 | 448 | 8.7 | 404 |
| Religion |  |  |  |  |
| Christian | 13.8 | 556 | 8.7 | 405 |
| Muslim | 34.4 | 978 | 9.8 | 829 |
| Other | 38.7 | 35 | 23.6 | 23 |
| Total | 27.1 | 1,569 | 9.7 | 1,257 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

The pattern for men was also less varied for marital status and education, as compared to the pattern for women. Ten percent of married men were more likely to have had sex by age 15, as compared to $8 \%$ of men in non-marital relationships. While $11 \%$ of uneducated male respondents reported early sex, corresponding estimates were $9 \%$ among male respondents with a primary school, or secondary or higher education. Similar to the pattern for female respondents, teenage men and men in their early twenties were more likely to report having had sex by age 15 ( $23 \%$ and $17 \%$ respectively), as compared to men in other age categories.

Table 2.2 shows the percentage of respondents aged 19 years or older who reported having had sex by age 18. In general, the patterns were similar to those observed in the previous table, with a higher percentage of women aged 19 years or older (53\%) reporting having had sex by age 18, as compared with men aged 19 years or older (23\%). Among female respondents, more than $70 \%$ of respondents living in Bauchi and Kano states ( $71 \%$ and $74 \%$, respectively), reported having had sex by age 18, as compared to $59 \%$ in Nasarawa, $38 \%$ in Lagos, and $36 \%$ in FCT. When looking at the combined numbers for Kano, Lagos, and Nasarawa states, roughly $51 \%$ of women in these areas reported having had sex by age 18. Among male respondents, approximately 43\% of males living in Nasarawa had had sex by age 18, as compared to $24 \%$ in Lagos, $21 \%$ in Bauchi, $20 \%$ in Kano, and $16 \%$ in FCT. The combined numbers for Kano, Lagos, and Nasarawa states show that approximately $24 \%$ of men in these areas had engaged in sexual activity by age 18. Seventy-two percent of women aged 19 years or older and living in rural areas reported having had sex by age 18 , as compared to $51 \%$ of women in semi-urban areas, and $44 \%$ of women in urban areas. Among male respondents, there was much less variation in the pattern of sexual initiation. Approximately $24 \%$ of men living in rural areas engaged in sexual activity by age 18 , compared to $23 \%$ of men in semi-urban areas, and $22 \%$ of men in urban areas.

Among female respondents, women 24 years of age or younger were more likely to have had sex by age 18 (greater than $70 \%$ ) as compared to women in other age categories. A similar pattern was seen among male respondents. Forty-one percent of men aged 19 years and $38 \%$ of men aged 20 to 24 years reported having initiated sex by age 18 , higher than men in other age categories reported. Among women, $54 \%$ of those who were married and $50 \%$ of non-married women in relationships reported having engaged in sexual intercourse by age 18 years, while $24 \%$ of married men and $22 \%$ of non-married men in relationships had also engaged in sexual intercourse by age 18 years.

As was seen in the previous table, less educated female respondents reported higher rates of initiating sex engaging in sexual intercourse by age 18 years of age than their more educated counterparts: $73 \%$ of women with no formal school compared to $45 \%$ of those with a primary school education, and $41 \%$ of those with a secondary school or higher education. However, this trend is reversed among men, as better educated male respondents reported higher rates of initiating sexual intercourse by age 18 . Roughly $24 \%$ of men with a secondary school education or higher, and $23 \%$ of men with a primary school education reported having had sex by age 18 , as compared with approximately $22 \%$ of uneducated men. With respect to religion, $61 \%$ of Muslim women were more likely to have engaged in sexual intercourse by age 18, as compared with roughly $57 \%$ of women practicing other religions, and roughly $40 \%$ of Christian women. A different pattern of sexual activity is seen among male respondents, as men practicing other
religions reported higher rates of engaging in sexual intercourse by age 18 (44\%), compared to approximately 23\% of both Christian and Muslim men.

Table 2.2: Percentage of Sexually Experienced Respondents Who Had First Sex by Age 18, by Gender, 2009

| COMPASS LGAs | Female | n | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 71.3 | 188 | 21.3 | 216 |
| FCT | 36.1 | 230 | 15.7 | 140 |
| Kano | 74.0 | 408 | 19.8 | 425 |
| Lagos | 38.1 | 436 | 24.3 | 263 |
| Nasarawa | 59.3 | 236 | 42.9 | 191 |
| KLN ${ }^{\dagger}$ total | 51.1 | 1,080 | 23.8 | 879 |
| Location |  |  |  |  |
| Urban | 43.8 | 632 | 21.8 | 436 |
| Semi-urban | 51.4 | 295 | 22.7 | 234 |
| Rural | 72.3 | 548 | 24.4 | 547 |
| Age $^{\ddagger}$ ( ${ }^{\text { }}$ |  |  |  |  |
| 19 | 79.6 | 28 | 41.2 | 7 |
| 20-24 | 71.3 | 217 | 38.2 | 46 |
| 25-29 | 55.4 | 356 | 20.3 | 141 |
| 30-34 | 50.7 | 297 | 31.4 | 210 |
| 35-39 | 46.1 | 253 | 18.9 | 197 |
| 40-44 | 44.8 | 179 | 23.6 | 179 |
| 45-49 | 46.3 | 168 | 18.6 | 168 |
| $\geq 50$ | N/A | 0 | 20.8 | 287 |
| Marital status |  |  |  |  |
| Married | 54.3 | 1,148 | 23.5 | 959 |
| In union/living with partner | 49.5 | 350 | 21.6 | 276 |
| Not married/in union | N/A | 0 | N/A | 0 |
| Education |  |  |  |  |
| No formal schooling | 72.6 | 574 | 22.3 | 415 |
| Primary | 45.1 | 489 | 23.0 | 419 |
| Secondary or higher | 41.0 | 435 | 23.8 | 401 |
| Religion |  |  |  |  |
| Christian | 39.8 | 545 | 22.7 | 402 |
| Muslim | 61.0 | 920 | 22.6 | 810 |
| Other | 56.7 | 33 | 43.6 | 23 |
| Total | 53.1 | 1,498 | 23.1 | 1,235 |

Notes: $\quad$ KLN refers to Kano, Lagos, and Nasawara. $\ddagger$ Among respondents 19 years of age or older. N/A = not applicable.

### 2.2 Age at First Birth

Table 2.3 provides information on the percentage of respondents who had first birth by age 15 , among respondents 16 years of age or older. Generally, these numbers were relatively low, and female respondents were much more likely to have had a child by age 15 (8\%), as compared with male respondents (less than 1\%). Female respondents from Bauchi and Kano states, women living in rural areas, uneducated women and Muslim women had the highest early childbearing rates (i.e., first birth by age 15): $16 \%$ and $18 \%$ of female respondents in Bauchi and Kano respectively, $20 \%$ of rural women, $17 \%$ of uneducated women, and $13 \%$ of Muslim women. Over twice as many rural women (20\%) as semi-urban women (8\%) and six times as many rural as urban women (3\%) became mothers before age 15 . While $17 \%$ of uneducated women reporting first births by age 15 , roughly $8 \%$ of women with a primary school education and only $2 \%$ of women with a secondary school education or higher did. With respect to religion, $13 \%$ of Muslim women reported having had a child by age 15 compared with only $2 \%$ of Christian women, and roughly $9 \%$ of women practicing other religions.

Among male respondents, levels of early childbearing were generally low in comparison with female respondents, and there was also less variation in the fathering patterns observed. Less than $1 \%$ of male respondents living in Nasarawa, Kano, or Bauchi reported having had their first child by age 15. No male respondents in FCT or Lagos reported becoming a father by age 15. With respect to age, teenage male respondents (that is, males aged 16 to 19 years), had slightly higher early fatherhood rates than other cohorts ( $0.9 \%$ compared with $0.5 \%$ or less in all other age cohorts).

Both married men and non-married men in relationships were more likely to have fathered a child by age 15 , as compared with single men. More uneducated men reported fathering a child by age 15, as compared with men with only a primary school education and men with a secondary school education or higher; but in each subgroup, the rate was less than $1 \%$. Similar to female respondents, Muslim men were more likely to report slightly higher rates of having their first child by age 15 ( $0.5 \%$ ), compared with of Christian men ( $0.1 \%$ ) and $0 \%$ of men practicing other religions. However, the differences between these subgroups were negligible.

Table 2.4 shows the percent of female and male respondents who had first birth by age 18, among those 19 years of age and older. On the whole, the patterns observed here for both female and male respondents were similar to the patterns observed in table 2.3, with female respondents being more likely to report having had their first births by age 18 ( $24 \%$ ), as compared to only $2 \%$ of male respondents. Among female respondents, $50 \%$ of women in Bauchi, and $44 \%$ of women in Kano reported having had their first births by age 18, compared with roughly $27 \%$ in Nasarawa, $15 \%$ in FCT, and approximately $10 \%$ in Lagos. A slightly different pattern was observed among male respondents, with slightly more male respondents in Nasarawa and Bauchi reporting having fathered their first child by age 18 ( $5 \%$ and $4 \%$ respectively) than in Kano (4\%) and FCT and Lagos (less than 1\%).

Female respondents in rural areas were more likely to have had their first birth by age 18 (48\%), as compared with roughly $20 \%$ in semi-urban areas, and approximately $15 \%$ in urban areas. A similar pattern can be seen among male respondents, as approximately $6 \%$ of men living in rural
areas reported having had their first child by age 18, compared with $2 \%$ of men in semi-urban areas, and only $0.4 \%$ in urban areas.

Table 2.3: Percentage of Sexually Experienced Respondents Who Had First Birth by Age 15, by Gender, 2009

| COMPASS LGAs | Female | n | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 16.3 | 257 | 0.5 | 364 |
| FCT | 5.2 | 346 | 0.0 | 292 |
| Kano | 18.3 | 580 | 0.6 | 653 |
| Lagos | 1.6 | 695 | 0.0 | 573 |
| Nasarawa | 7.7 | 326 | 1.0 | 301 |
| KLN ${ }^{\dagger}$ total | 7.0 | 1,601 | 0.3 | 1,527 |
| Location |  |  |  |  |
| Urban | 3.1 | 951 | 0.0 | 878 |
| Semi-urban | 8.2 | 448 | 0.4 | 405 |
| Rural | 20.4 | 740 | 0.9 | 842 |
| Age |  |  |  |  |
| 16-19 | 8.5 | 270 | 0.9 | 244 |
| 20-24 | 8.0 | 380 | 0.1 | 311 |
| 25-29 | 9.0 | 466 | 0.3 | 337 |
| 30-34 | 8.2 | 348 | 0.1 | 343 |
| 35-39 | 4.9 | 279 | 0.0 | 230 |
| 40-44 | 12.3 | 208 | 0.5 | 193 |
| 45-49 | 6.0 | 217 | 0.5 | 179 |
| $\geq 50$ | N/A | N/A | 0.4 | 317 |
| Marital status |  |  |  |  |
| Married | 11.6 | 1,209 | 0.5 | 976 |
| In union/living with partner | 7.3 | 360 | 0.5 | 281 |
| Not married/in union | 2.1 | 599 | 0.1 | 897 |
| Education |  |  |  |  |
| No formal schooling | 17.2 | 729 | 0.9 | 546 |
| Primary | 7.9 | 640 | 0.2 | 646 |
| Secondary or higher | 1.6 | 799 | 0.1 | 962 |
| Religion |  |  |  |  |
| Christian | 1.9 | 871 | 0.1 | 809 |
| Muslim | 12.5 | 1,235 | 0.5 | 1,292 |
| Other | 8.6 | 62 | 0.0 | 53 |
| Total | 8.1 | 2,168 | 0.3 | 2,154 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

Table 2.4: Percentage of Sexually Experienced Respondents Who Had First Birth by Age 18, by Gender, 2009

| COMPASS LGAs | Female | n | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 49.5 | 214 | 4.4 | 296 |
| FCT | 15.2 | 316 | 0.8 | 266 |
| Kano | 44.3 | 485 | 4.0 | 582 |
| Lagos | 9.9 | 645 | 0.4 | 534 |
| Nasarawa | 26.9 | 301 | 5.0 | 278 |
| KLN ${ }^{\dagger}$ total | 20.6 | 1,431 | 2.0 | 1,394 |
| Location |  |  |  |  |
| Urban | 15.2 | 881 | 0.4 | 820 |
| Semi-urban | 19.8 | 398 | 2.4 | 372 |
| Rural | 47.9 | 653 | 5.9 | 736 |
| Age $^{\ddagger}$ |  |  |  |  |
| 19 | 24.2 | 63 | 2.3 | 46 |
| 20-24 | 27.1 | 380 | 1.5 | 311 |
| 25-29 | 24.8 | 466 | 1.6 | 337 |
| 30-34 | 22.3 | 348 | 2.5 | 343 |
| 35-39 | 16.7 | 279 | 1.7 | 230 |
| 40-44 | 29.8 | 208 | 3.2 | 193 |
| 45-49 | 20.4 | 217 | 4.2 | 179 |
| $\geq 50$ | N/A | N/A | 2.5 | 317 |
| Marital status |  |  |  |  |
| Married | 32.4 | 1,148 | 3.8 | 959 |
| In union/living with partner | 20.9 | 350 | 1.8 | 276 |
| Not married/in union | 6.1 | 463 | 0.7 | 721 |
| Education |  |  |  |  |
| No formal schooling | 42.4 | 659 | 4.4 | 493 |
| Primary | 21.9 | 596 | 3.1 | 604 |
| Secondary or higher | 11.2 | 706 | 0.7 | 859 |
| Religion |  |  |  |  |
| Christian | 10.8 | 807 | 1.3 | 751 |
| Muslim | 33.1 | 1,103 | 3.0 | 1,157 |
| Other | 29.8 | 51 | 1.7 | 48 |
| Total | 23.6 | 1,961 | 2.3 | 1,956 |

Notes: $\quad$ KLN refers to Kano, Lagos, and Nasawara. $\ddagger$ Among respondents 19 years of age or older. N/A = not applicable.
The highest rates of early childbearing were observed among women aged 40 to 44 years (30\%), although similar percentages were seen among women in the younger cohorts: $24 \%$ of women aged 19 years, $27 \%$ of women aged 20 to 24 years, and $22 \%$ of women aged 30 to 34 years.

Among male respondents, it is the age group 45 to 49 years that reported the highest proportion of respondents who had their first child by age 18 (4\%). Approximately $32 \%$ of married women reported having had their first birth by age 18 , as compared to nearly $21 \%$ of non-married women in relationships, and roughly $6 \%$ of women who were not married or in relationships. Among men, a similar pattern is observed, although there is less variation in numbers. Close to $4 \%$ of married men reported having fathered their first child by age 18 , as compared with $2 \%$ of non-married men in relationships, and less than $1 \%$ of men who were neither married nor in relationships.

Both uneducated female and male respondents were more likely to have had their first child by age 18 ( $42 \%$ of uneducated females and $4 \%$ of uneducated males). Again more variation is seen in the education numbers for females than in the education numbers for males. The $42 \%$ of uneducated females reporting having had their first birth by age 18 compares to approximately $22 \%$ of females with only a primary school education who had done so, and $11 \%$ of females with a secondary school education or higher. Among male respondents, the $4 \%$ of uneducated males who reported having fathered their first child by age 18 is in comparison with $3 \%$ of males with only a primary school education, and less than $1 \%$ of males with a secondary school education or higher. With regards to religion, Muslim women and men also reported higher percentages of first births by age 18, as compared with Christian respondents or respondents practicing other religions. Among women, $33 \%$ of Muslims reported having had their first birth by age 18, in comparison with approximately $11 \%$ of Christian women, and $30 \%$ of women practicing other religions. Among male respondents, $3 \%$ of Muslims had fathered a child by age 18, compared with approximately $1 \%$ of Christian men, and nearly $2 \%$ of men practicing other religions.

Figure 2.1 presents the median birth interval separating successive births among women with two or more births by state. From the graph, it can be seen that, across all states, there was more variation in median birth interval separating the last birth and second-to-last birth than there was in the median birth interval separating the second to last birth and the third to last birth. On the whole, the median birth interval between the last birth and second-to-last birth was higher (26 months) than the median birth interval between the second to last birth and the third to last birth (21 months) across all states.

With regards to the median birth interval between the last birth and the second to last birth, the highest median intervals were reported in Nasarawa ( 30 months), FCT, and Lagos ( 27 months for both). The lowest median birth interval between the last birth and the second to last birth was reported in Kano (23 months). The highest median interval between the second to last birth and the third to last birth was reported in FCT ( 26.5 months), while the lowest median interval was reported in Kano (20 months).


Figure 2.1: Median birth interval, in months, separating successive births, among women with two or morth births, 2009.

Across all states, $52 \%$ of all births were separated by at least 24 months among women with two or more births (figure 2.2). With regards to separation for the last birth and second-to-last birth, $57 \%$ of births were separated by at least 24 months, across all states. The highest percentages of births separated by at least 24 months for the last birth and second to last birth were reported in Lagos (68\%) and Nasarawa (67\%). The lowest percentage of births separated for the last birth and second to last birth was reported in Kano (46\%).

With regards to the time interval between the second-to-last birth and the third-to-last birth, $27 \%$ of births across all states were separated by at least 24 months. The highest percentage of births separated by at least 24 months for births in this category was reported in FCT (75\%), and the lowest percentage was reported in Bauchi (17\%).


Figure 2.2: Percentage of births separated by at least 24 months among women with two or more births, 2009.

## CHAPTER 3: FAMILY PLANNING METHODS

Ambrose Akinlo

### 3.1 Knowledge of Modern Family Planning Methods

The survey obtained information on the knowledge of modern family planning (FP) methods by the respondents. Table 3.1 shows the percentage of respondents who had spontaneous awareness of specific family planning methods in the LGAs across the five states. Examining the percentage of respondents who have heard of at least one method in each of the five states, disaggregated by gender, it was found that awareness of contraception is highest in Nigeria's two most urbanized states, Lagos ( $90 \%$ for females and $91 \%$ for males) and the FCT ( $76 \%$ for females, and $80 \%$ for males). Bauchi state recorded the least spontaneous awareness of family planning methods as only about a third of the females (33\%) and about $43 \%$ of the males had spontaneous awareness of at least one method of FP. It is also the only state where less than half of the respondents (male or female) had spontaneous awareness of family planning methods. Three methods of FP were the best known in all the states, and these were the male condom, injectables, and the oral contraceptive pill. Among male respondents, the male condom was consistently the best known method in all the states; the oral contraceptive pill was consistently the second best known method, while injectables were consistently the third best known method among males in all the states. Among female respondents, the male condom, oral contraceptive pill and injectables were also the three best known methods, although unlike among males, the level of awareness of these methods followed no consistent pattern across the five states.

By state, among females in Bauchi awareness of oral contraceptive pill was highest among the methods, where about $24 \%$ reported spontaneous knowledge. Approximately $18 \%$ of females in Bauchi reported spontaneous awareness of injectables while about $14 \%$ reported spontaneous awareness of the male condom. Awareness was lowest for both male sterilization and female sterilization, as only about $3 \%$ of female respondents in Bauchi reported awareness of sterilization methods. Among Bauchi males, however, the method for which the lowest awareness was foam/jelly (nearly 6\%). In FCT, awareness of all the methods of family planning was relatively higher than in the other states, except Lagos. An observable pattern in FCT was that a consistently higher percentage of females report spontaneous awareness of female methods of family planning (female sterilization, pill, IUD, injectables, implants, female condom, diaphragm, and foam/jelly) than their male counterparts, whereas a higher percentage of males consistently report spontaneous awareness of male methods (male sterilization and male condom) than females. The lowest spontaneous FP method awareness in FCT was for foam/jelly (about $13 \%$ each for both genders). In Kano among females, the pill was the most spontaneously cited method (43\%); awareness of injectables, male condom, and IUD were relatively high as at least a fifth (about 20\%) of the respondents had spontaneous knowledge of each. The foam/jelly method was the least known method in Kano by both genders. In Lagos, spontaneous awareness of specific family planning methods was higher than in any other state. More than four in five respondents, irrespective of gender, know of the male condom ( $81 \%$ females and about $86 \%$ males). At least half of the respondents, male or female, had spontaneous knowledge of oral contraceptive pill and injectables respectively.

Table 3.1: Percentage of Respondents Who Report Spontaneous Awareness of Specific Family Planning Method, by Gender and State, 2009

|  | Bauchi |  | FCT |  | Kano |  | Lagos |  | Nasarawa |  | $\mathbf{K I N}{ }^{+}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male |
| Female sterilization | 3.1 | 6.4 | 24.8 | 22.6 | 10.1 | 9.6 | 28.6 | 32.0 | 9.9 | 12.8 | 21.7 | 22.3 |
| Male sterilization | 2.7 | 7.5 | 18.0 | 21.9 | 8.4 | 7.8 | 24.9 | 28.8 | 4.5 | 8.3 | 18.5 | 19.5 |
| Pill | 23.9 | 20.6 | 55.5 | 49.8 | 42.9 | 32.2 | 65.4 | 58.8 | 42.3 | 44.9 | 56.9 | 48.0 |
| IUD | 8.1 | 9.7 | 23.4 | 19.5 | 19.9 | 13.1 | 40.9 | 37.3 | 16.8 | 15.7 | 32.9 | 26.8 |
| Injectables | 18.1 | 17.4 | 41.4 | 37.7 | 34.8 | 28.8 | 56.4 | 50.0 | 47.4 | 36.9 | 49.2 | 41.2 |
| Implants | 6.2 | 8.0 | 23.9 | 17.2 | 11.9 | 8.7 | 25.6 | 26.3 | 9.9 | 9.9 | 20.4 | 18.6 |
| Male condom | 13.5 | 31.6 | 61.1 | 73.7 | 28.1 | 39.0 | 80.8 | 85.7 | 35.4 | 50.0 | 61.7 | 65.8 |
| Female condom | 5.0 | 7.0 | 30.4 | 27.6 | 10.6 | 11.5 | 35.2 | 43.8 | 13.8 | 10.3 | 26.2 | 29.4 |
| Diaphragm | 3.9 | 5.9 | 14.9 | 12.8 | 5.8 | 6.1 | 18.7 | 24.0 | 4.8 | 5.8 | 13.8 | 16.1 |
| Foam/jelly | 3.5 | 5.6 | 13.2 | 12.8 | 6.6 | 5.4 | 20.6 | 23.3 | 4.2 | 5.1 | 15.2 | 15.4 |
| Total ${ }^{*}$ | 33.2 | 42.9 | 75.8 | 79.5 | 51.8 | 50.1 | 90.4 | 90.5 | 63.4 | 67.0 | 76.8 | 73.8 |

Notes: * Total refers to percentage of those who had heard of at least one method.
$\dagger$ KLN refers to Kano, Lagos, and Nasawara.

At least a fifth (about 20\%) of the respondents in Lagos had spontaneous awareness of all the specific modern methods of family planning listed in Table 3.1 - the only exception was in the case of diaphragm where only roughly $19 \%$ of females report spontaneous awareness and is the least known method among females. The least known method among males was foam/jelly, spontaneously cited by approximately $23 \%$ of the male respondents. In Nasarawa state, awareness of injectables was about $47 \%$ among females, the highest awareness level among the methods, while the lowest spontaneous awareness was foam/jelly (about $4 \%$ among females and approximately $5 \%$ among males).

Table 3.2 presents the percentage of respondents who know at least one method of modern contraception, by socio-demographic characteristics and by gender. Overall, about 72\% of female respondents, and nearly $69 \%$ of male respondents know at least one method of modern contraception. By state and gender, Lagos and FCT reported the highest percentage of respondents (female or male) who know at least a method of contraception while the lowest percentage of respondents, irrespective of gender, who know at least a method of contraception, was reported in Bauchi. The percentage of respondents that knew at least one method of contraception in Lagos was nine out every 10 respondents, female or male (about $90 \%$ of females and $91 \%$ of males), three-quarters of the females in FCT (roughly 76\%) and four in five males (about $80 \%$ ) know at least one method of modern contraception, close to two-third of females in Nasarawa (about 63\%) and two-third of the males (67\%) report knowledge of at least one method of contraception, about half of both females and males in Kano ( $52 \%$ and $50 \%$ respectively) know at least one method of contraception, and a third of the females in Bauchi (roughly $33 \%$ ) and about $43 \%$ of the males report knowledge of at least one method of contraception.

By residence, a higher percentage of urban residents know of at least one method of contraception compared to semi-urban or rural residents. Among urban residents, more than four in every five respondents (about $85 \%$ of females and roughly $82 \%$ of males) know at least a method compared to less than half of either the female or male respondents in the rural areas. Disaggregated by five-year age groups, the lowest percentage of respondents that know at least a method of contraception was reported among the teenage age group 15 to 19 years (about 54\% of females and $50 \%$ of males). The knowledge of at least a method of contraception was relatively high among the remaining age groups, female or male. A slightly higher percentage of respondents with multiple sexual partners in the last 12 months preceding the survey (approximately $75 \%$ of females and $76 \%$ of males) report spontaneous knowledge of at least a modern method of contraception compared to either those with only one partner (roughly 74\% of females and $72 \%$ of males) or those with none (about $67 \%$ of females and $61 \%$ of males). Similarly, a higher percentage of those with secondary/higher education report knowledge of at least one method of modern contraception compared to those with only primary or no formal schooling - at least $80 \%$ of either females or males with secondary/higher education report knowledge of at least a method of contraception in contrast to only about $47 \%$ of females and roughly $41 \%$ of males with no formal schooling. Generally, higher percentage of Christians also report knowledge of at least a method of modern contraception relative to Muslims among both male and female respondents.

Table 3.2: Percentage of Respondents Who Knew at Least One Method of Modern Contraception, by Gender, 2009

| COMPASS LGAs | Female | N | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 33.2 | 259 | 42.9 | 373 |
| FCT | 75.8 | 355 | 79.5 | 297 |
| Kano | 51.8 | 604 | 50.1 | 670 |
| Lagos | 90.4 | 699 | 90.5 | 566 |
| Nasarawa | 63.4 | 333 | 67.0 | 312 |
| KLN ${ }^{\dagger}$ total | 76.8 | 1,636 | 73.8 | 1,548 |
| Location |  |  |  |  |
| Urban | 85.3 | 978 | 81.9 | 887 |
| Semi-urban | 68.6 | 467 | 71.5 | 422 |
| Rural | 40.5 | 775 | 45.5 | 879 |
| Age |  |  |  |  |
| 15-19 | 54.1 | 352 | 50.4 | 308 |
| 20-24 | 71.0 | 380 | 71.8 | 311 |
| 25-29 | 77.5 | 466 | 74.8 | 337 |
| 30-34 | 72.7 | 348 | 73.9 | 343 |
| 35-39 | 74.7 | 279 | 75.4 | 230 |
| 40-44 | 72.9 | 208 | 66.2 | 193 |
| 45-49 | 78.2 | 217 | 75.2 | 179 |
| $\geq 50$ | N/A | 0 | 61.8 | 317 |
| Marital status |  |  |  |  |
| Married | 68.1 | 1,230 | 65.0 | 978 |
| In union/living with partner | 77.6 | 364 | 72.0 | 282 |
| Not married/in union | 74.2 | 656 | 71.0 | 958 |
| Ever had a child | 73.3 | 1,503 | 66.4 | 1,078 |
| Number of partners in past 12 months |  |  |  |  |
| None | 67.4 | 787 | 61.2 | 893 |
| 1 | 73.5 | 1,332 | 72.4 | 974 |
| 2 or more | 75.1 | 131 | 75.8 | 351 |
| Education |  |  |  |  |
| No formal schooling | 46.9 | 756 | 40.8 | 569 |
| Primary | 76.5 | 662 | 72.0 | 662 |
| Secondary or higher | 85.9 | 832 | 80.9 | 987 |
| Religion 80.980 |  |  |  |  |
| Christian | 86.4 | 890 | 86.4 | 828 |
| Muslim | 61.0 | 1,295 | 57.4 | 1,334 |
| Other | 72.6 | 65 | 64.8 | 56 |
| Total | 71.5 | 2,250 | 68.5 | 2,218 |

Notes: $\quad$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

Table 3.3 reports on the percentage of respondents who know two or more methods of modern contraception Overall, a higher percentage of women (59\%) know two or more methods of modern contraception as compared with their male counterparts (about 51\%). By state, Lagos reported the highest percentage of respondents (about $76 \%$ of females and $72 \%$ of males) that know two or more methods of modern contraception.

Approximately $72 \%$ of female urban respondents, roughly $56 \%$ of female semi-urban respondents and $29 \%$ of female rural respondents know at least two modern methods of contraception. The pattern is similar among males. Table 3.3 also shows that $62 \%$ of females who have ever had a child and a little over half of males who ever had a child (51\%) can spontaneously mention at least two modern methods of contraception. A higher percentage of respondents with secondary or higher education (about $72 \%$ of females and $64 \%$ of males) know of at least two modern contraceptive methods compared to those with lesser or no formal education; Christians (about $73 \%$ of females and $71 \%$ of males) also had higher percentages of respondents who can spontaneously mention two or more modern methods relative to Muslims.

### 3.2 Current Use of Family Planning Methods

Tables 3.4 examines the current use of specific family planning methods in LGAs. Overall, contraceptive use is very low among the study population. The percentage of respondents who report current use of specific family planning method was highest in Lagos and FCT; in Lagos, about $18 \%$ of females and $29 \%$ of males report current use of specific methods of family planning while in the FCT, about $16 \%$ of females and $17 \%$ of males report use of specific family planning methods. Bauchi and Kano reported the lowest usage of specific family planning methods. Less than $2 \%$ of females in Bauchi and roughly $2 \%$ of the males use specific methods of family planning, while in Kano, less than $3 \%$ of females and about $1 \%$ of males use specific methods of family planning. No respondent reported the use of male sterilization, diaphragm and foam/jelly. The male condom was the most used method among males in all states.

The lowest percentage of respondents who can spontaneously mention at least two modern methods of contraception was reported in Bauchi, with less than a quarter of the females (roughly $24 \%$ ) and about a fifth of the males (about 20\%) being able to do so.

Table 3.3: Percentage of Respondents Who Knew Two or More Methods of Modern Contraception, by Gender, 2009

| COMPASS LGAs | Female | N | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 23.6 | 259 | 19.8 | 373 |
| FCT | 60.8 | 355 | 60.9 | 297 |
| Kano | 41.7 | 604 | 37.5 | 670 |
| Lagos | 75.5 | 699 | 71.6 | 566 |
| Nasarawa | 49.8 | 333 | 51.3 | 312 |
| $\mathrm{KLN}^{\dagger}$ total | 63.5 | 1,636 | 57.4 | 1,548 |
| Location |  |  |  |  |
| Urban | 71.7 | 978 | 63.0 | 887 |
| Semi-urban | 55.5 | 467 | 59.7 | 422 |
| Rural | 29.0 | 775 | 26.8 | 879 |
| Age |  |  |  |  |
| 15-19 | 37.0 | 352 | 27.3 | 308 |
| 20-24 | 55.5 | 380 | 46.3 | 311 |
| 25-29 | 65.4 | 466 | 58.8 | 337 |
| 30-34 | 61.2 | 348 | 58.9 | 343 |
| 35-39 | 63.2 | 279 | 62.2 | 230 |
| 40-44 | 63.0 | 208 | 50.7 | 193 |
| 45-49 | 66.8 | 217 | 61.3 | 179 |
| $\geq 50$ | N/A | N/A | 45.2 | 317 |
| Marital status |  |  |  |  |
| Married | 56.9 | 1,230 | 47.8 | 978 |
| In union/living with partner | 66.1 | 364 | 60.2 | 282 |
| Not married/in union | 57.5 | 656 | 51.3 | 958 |
| Ever had a child | 62.0 | 1,503 | 50.9 | 1078 |
| Number of partners in past 12 months |  |  |  |  |
| None | 52.5 | 787 | 43.3 | 893 |
| 1 | 61.9 | 1,332 | 55.3 | 974 |
| 2 or more | 59.5 | 131 | 57.3 | 351 |
| Education |  |  |  |  |
| No formal schooling | 35.3 | 756 | 23.2 | 569 |
| Primary | 63.5 | 662 | 53.6 | 662 |
| Secondary or higher | 72.0 | 832 | 63.7 | 987 |
| Religion |  |  |  |  |
| Christian | 72.8 | 890 | 70.3 | 828 |
| Muslim | 48.4 | 1,295 | 38.8 | 1334 |
| Other | 61.8 | 65 | 48.4 | 66 |
| Total | 58.6 | 2,250 | 50.9 | 2,218 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

Table 3.4: Percentage of Respondents Who Report Current Use of Specific Family Planning Method, by Gender and State, 2009

|  | Bauchi |  | FCT |  | Kano |  | Lagos |  | Nasarawa |  | $\mathbf{K I N}{ }^{\dagger}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male |
| Female sterilization | 0.0 | 0.3 | 0.9 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 0.0 | 0.0 | 0.1 | 0.3 |
| Male sterilization | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Pill | 0.4 | 0.5 | 4.6 | 1.3 | 1.9 | 0.4 | 4.9 | 0.5 | 1.7 | 1.0 | 3.8 | 0.5 |
| IUD | 0.0 | 0.3 | 1.8 | 0.0 | 0.4 | 0.0 | 1.1 | 0.5 | 0.0 | 0.0 | 0.8 | 0.3 |
| Injectables | 0.0 | 0.0 | 3.1 | 1.0 | 0.8 | 0.3 | 1.8 | 0.0 | 7.0 | 4.2 | 1.9 | 0.4 |
| Implants | 0.4 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.0 | 0.0 | 0.1 |
| Male condom | 0.8 | 1.3 | 4.9 | 15.2 | 0.0 | 0.6 | 9.5 | 26.9 | 2.6 | 7.4 | 6.2 | 15.7 |
| Female condom | 0.0 | 0.0 | 0.6 | 0.3 | 0.0 | 0.0 | 0.8 | 0.4 | 0.3 | 0.0 | 0.5 | 0.2 |
| Diaphragm | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Foam/jelly | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total ${ }^{*}$ | 1.7 | 2.1 | 16.2 | 16.8 | 2.8 | 1.2 | 17.8 | 28.6 | 11.3 | 12.5 | 13.0 | 17.3 |

Notes: * Total refers to respondents not pregnant at time of survey.
$\dagger$ KLN refers to Kano, Lagos, and Nasawara.

Table 3.5 shows the percentage of respondents who currently use any modern family planning method by socio-demographic characteristics. The data reported are only among respondents who were not pregnant as at the time of the survey. Overall, nearly $12 \%$ of the females and close to $15 \%$ of the males were current users of any modern family planning methods. By state, the highest percentage of current users of any modern family planning method among female respondents was in Lagos (about 18\%) and FCT (roughly 16\%) while the lowest percentage of current users was in Bauchi (only about 2\%). A similar pattern was also reported among males, with Lagos reporting the highest percentage (roughly 29\%) and Bauchi the lowest percentage of about 2\%. By residence, the percentage of current users of any modern family planning method was highest among urban respondents (approximately $16 \%$ of females and $22 \%$ of males) and lowest among rural respondents (approximately $4 \%$ of females and $3 \%$ of males). Only $13 \%$ of females who have ever had a child and $12 \%$ of males who had ever had a child were current users of any modern family planning method. The percentage that report current use of any modern family planning method appears to increase with the reported number of sexual partners in the last 12 months preceding the survey; among females, about $5 \%$ of those who claim to have no sexual partners report current use of modern family planning, roughly $14 \%$ of females with only one partner and about $26 \%$ of those with multiple partners report current use of any modern family planning method. The same pattern is reported among the male respondents. Similarly, usage of modern family planning methods rises with level of education of respondents; among females, the percentage of current users increased from about $4 \%$ among those with no formal schooling to roughly $13 \%$ among those with primary education, and $16.4 \%$ among those with a secondary school or higher education. Among males, the percentage of current users increased from about $3 \%$ among those with no formal schooling to roughly $14 \%$ among those with primary education, and about $21 \%$ among those with a secondary school or higher education. A higher percentage of Christians (approximately $17 \%$ of females and $26 \%$ of males) were current users of at least one modern family planning method compared to about $8 \%$ each of female and male Muslims. Approximately $8 \%$ each of females and males who were current users of modern contraception were of other religions (other than Christianity or Muslim).

Table 3.5: Percentage of Respondents Who Currently Use Any Modern Family Planning Method, by Gender, 2009

| COMPASS LGAs | Female | $N$ | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 1.7 | 237 | 2.1 | 373 |
| FCT | 16.2 | 327 | 16.8 | 297 |
| Kano | 2.8 | 532 | 1.2 | 670 |
| Lagos | 17.8 | 656 | 28.6 | 566 |
| Nasarawa | 11.3 | 302 | 12.5 | 312 |
| $\mathrm{KLN}^{\dagger}$ total | 13.0 | 1,636 | 17.3 | 1,548 |
| Location |  |  |  |  |
| Urban | 16.0 | 901 | 21.6 | 887 |
| Semi-urban | 9.5 | 418 | 15.8 | 422 |
| Rural | 3.6 | 706 | 2.8 | 879 |
| Age |  |  |  |  |
| 15-19 | 1.6 | 317 | 1.1 | 308 |
| 20-24 | 9.7 | 342 | 12.8 | 311 |
| 25-29 | 17.6 | 406 | 21.1 | 337 |
| 30-34 | 14.4 | 313 | 21.6 | 343 |
| 35-39 | 15.4 | 262 | 15.5 | 230 |
| 40-44 | 12.2 | 202 | 18.7 | 193 |
| 45-49 | 9.8 | 212 | 20.8 | 179 |
| $\geq 50$ | N/A | 0 | 6.9 | 317 |
| Marital status |  |  |  |  |
| Married | 11.4 | 1,077 | 8.6 | 978 |
| In union/living with partner | 13.5 | 329 | 21.2 | 282 |
| Not married/in union | 11.6 | 648 | 18.5 | 958 |
| Ever had a child | 12.6 | 1,364 | 12.2 | 1,078 |
| Number of partners in past 12 months |  |  |  |  |
| None | 5.4 | 740 | 3.6 | 893 |
| 1 | 14.2 | 1,191 | 18.3 | 974 |
| 2 or more | 26.0 | 123 | 30.9 | 351 |
| Education |  |  |  |  |
| No formal schooling | 3.9 | 697 | 2.7 | 569 |
| Primary | 13.3 | 591 | 13.9 | 662 |
| Secondary or higher | 16.4 | 766 | 21.3 | 987 |
| Religion |  |  |  |  |
| Christian | 17.3 | 830 | 26.1 | 828 |
| Muslim | 7.9 | 1,161 | 7.6 | 1334 |
| Other | 8.0 | 63 | 7.9 | 56 |
| Total | 11.8 | 2,054 | 14.6 | 2,218 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

### 3.3 Approval and Discussion of Family Planning Methods

Since approval of family planning methods is a precursor to its usage, table 3.6 reports on the percentage of respondents who approve of family planning methods. Overall, less than half of the respondents approved of family planning ( $46 \%$ of females and $41 \%$ of males). By state and gender, about two-third of respondents in Lagos (roughly $66 \%$ of females and $65 \%$ of males) approved of family planning, about $56 \%$ each of both female and male respondents in FCT approved of family planning. The lowest approval of family planning among females was reported in Bauchi (17\%) while the lowest approval of family planning among males was in Kano (14\%). Urban residents appear more likely to approve of family planning than semiurban or rural residents: the percentage that approved of family planning among urban female and male residents were $60 \%$ and $55 \%$ respectively, compared to semi-urban residents (about $38 \%$ each of female and male respondents) and rural residents (about $19 \%$ of females and $20 \%$ of males). While the percentage of men who approve of family planning seem to increase with their reported number of sexual partners (from about $32 \%$ of those with no partners, roughly $45 \%$ of those with only one partner, and to $54 \%$ of those with multiple partners), there was no clear pattern among the females. About the same percentage of females with only one partner (roughly 48\%) approved of family planning as those with multiple partners (about 48\%). However, approval of family planning tends to increase with the level of education; only about $22 \%$ of females and $14 \%$ of males with no formal schooling expressed approval of family planning methods, but the percentage that approved of family planning increased to nearly $50 \%$ of females and $42 \%$ of males with primary education, and further to $62 \%$ of females and $55 \%$ of males with secondary or higher education. Approval of family planning was also generally higher among Christians (for both females and males) than in the other religions.

Table 3.7 reports on the percentage of respondents who had discussed family planning in the last 12 months. The percentage of respondents who had discussed family planning was generally low among the study population. Overall, $7 \%$ of females and $5 \%$ of males had discussed family planning during the previous 12 months. Apart from the female respondents in the FCT (10\%) and males in Nasarawa (14\%), less than $10 \%$ of respondents in all other states had ever discussed family planning. Neither education, religion, age or residence seem to have any effect on the percentage of respondents that have discussed family planning in the last 12 months as the percentages remained generally low across the various sociodemographic groups.

Table 3.6: Percentage of Respondents Who Approve of Family Planning, by Gender, 2009

| COMPASS LGAs | Female | $N$ | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 17.0 | 259 | 22.5 | 373 |
| FCT | 56.3 | 355 | 55.9 | 297 |
| Kano | 20.0 | 604 | 14.2 | 670 |
| Lagos | 65.5 | 699 | 65.4 | 566 |
| Nasarawa | 41.4 | 333 | 43.6 | 312 |
| $\mathrm{KLN}^{\dagger}$ total | 50.0 | 1,636 | 44.8 | 1,548 |
| Location |  |  |  |  |
| Urban | 60.1 | 978 | 54.7 | 887 |
| Semi-urban | 37.7 | 467 | 38.1 | 422 |
| Rural | 19.0 | 775 | 20.3 | 879 |
| Age |  |  |  |  |
| 15-19 | 27.9 | 352 | 20.2 | 308 |
| 20-24 | 42.3 | 380 | 48.2 | 311 |
| 25-29 | 52.6 | 466 | 48.2 | 337 |
| 30-34 | 51.9 | 348 | 48.6 | 343 |
| 35-39 | 56.4 | 279 | 47.4 | 230 |
| 40-44 | 48.0 | 208 | 41.0 | 193 |
| 45-49 | 44.6 | 217 | 40.1 | 179 |
| $\geq 50$ | N/A | N/A | 34.1 | 317 |
| Marital status |  |  |  |  |
| Married | 41.3 | 1,230 | 34.9 | 978 |
| In union/living with partner | 55.0 | 364 | 45.0 | 282 |
| Not married/in union | 50.3 | 656 | 46.4 | 958 |
| Ever had a child | 47.7 | 1,503 | 38.3 | 1,078 |
| Number of partners in past 12 months |  |  |  |  |
| None | 42.5 | 787 | 32.2 | 893 |
| 1 | 48.3 | 1,332 | 44.8 | 974 |
| 2 or more | 47.9 | 131 | 53.5 | 351 |
| Education |  |  |  |  |
| No formal schooling | 21.5 | 756 | 14.0 | 569 |
| Primary | 49.6 | 662 | 42.0 | 662 |
| Secondary or higher | 62.0 | 832 | 55.1 | 987 |
| Religion |  |  |  |  |
| Christian | 64.4 | 890 | 63.5 | 828 |
| Muslim | 33.2 | 1,295 | 26.9 | 1334 |
| Other | 55.1 | 65 | 50.8 | 56 |
| Total | 46.3 | 2,250 | 41.3 | 2,218 |

Notes: † KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

Table 3.7: Percentage of Respondents Who Discussed Family Planning in the Past 12 Months, by Gender, 2009

| COMPASS LGAs | Female | $N$ | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 6.6 | 259 | 4.6 | 373 |
| FCT | 9.9 | 355 | 4.4 | 297 |
| Kano | 6.1 | 604 | 5.4 | 670 |
| Lagos | 7.7 | 699 | 3.7 | 566 |
| Nasarawa | 8.4 | 333 | 14.1 | 312 |
| $\mathrm{KLN}^{\dagger}$ total | 7.3 | 1,636 | 5.1 | 1,548 |
| Location |  |  |  |  |
| Urban | 6.9 | 978 | 4.0 | 887 |
| Semi-urban | 11.9 | 467 | 6.5 | 422 |
| Rural | 5.1 | 775 | 5.9 | 879 |
| Age |  |  |  |  |
| 15-19 | 2.4 | 352 | 1.5 | 308 |
| 20-24 | 5.0 | 380 | 3.9 | 311 |
| 25-29 | 7.2 | 466 | 4.5 | 337 |
| 30-34 | 10.1 | 348 | 3.0 | 343 |
| 35-39 | 11.7 | 279 | 10.2 | 230 |
| 40-44 | 7.5 | 208 | 7.0 | 193 |
| 45-49 | 8.6 | 217 | 7.8 | 179 |
| $\geq 50$ | N/A | N/A | 5.2 | 317 |
| Marital status |  |  |  |  |
| Married | 9.4 | 1,230 | 6.5 | 978 |
| In union/living with partner | 8.2 | 364 | 6.4 | 282 |
| Not married/in union | 3.2 | 656 | 3.0 | 958 |
| Ever had a child | 9.6 | 1,503 | 6.5 | 1,078 |
| Number of partners in past 12 months |  |  |  |  |
| None | 6.0 | 787 | 3.8 | 893 |
| 1 | 7.9 | 1,332 | 5.8 | 974 |
| 2 or more | 8.6 | 131 | 5.4 | 351 |
| Education |  |  |  |  |
| No formal schooling | 5.6 | 756 | 2.8 | 569 |
| Primary | 9.1 | 662 | 7.2 | 662 |
| Secondary or higher | 7.3 | 832 | 4.6 | 987 |
| Religion |  |  |  |  |
| Christian | 7.0 | 890 | 5.9 | 828 |
| Muslim | 7.6 | 1,295 | 4.2 | 1,334 |
| Other | 6.8 | 65 | 9.3 | 56 |
| Total | 7.3 | 2,250 | 4.9 | 2,218 |

Notes: † KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

## CHAPTER 4: ANTENATAL CARE AND BREASTFEEDING

## Olusina Bamiwuye

Proper care and quality of care during pregnancy is of utmost importance for the health of both the mother and the baby. The health care that a mother receives during pregnancy, at the time of delivery, and soon after delivery is important for the survival and well-being of both the mother and her child. Early initiation of breastfeeding is important for both the mother and the child. Colostrum, which is the liquid produced from the breast in the first few days after delivery, is highly nutritious and provides natural immunity to the infant. Mothers also benefit from early suckling because it stimulates breast milk production and facilitates the release of oxytocin, which helps the contraction of the uterus and reduces postpartum blood loss. The United Nations Children's Fund and World Health Organization recommend that children be exclusively breastfed during the first six months of life before introducing solid or semi-solid complementary foods. This is because breast milk is uncontaminated and contains all the nutrients necessary for children in the first few months of life. In addition, the mother's antibodies in breast milk provide immunity to disease.

This chapter looks first at the extent to which women are obtaining medical care during pregnancy, then examines the quality of general health services and the extent to which infants younger than six months old were exclusively breastfed during the 24 hours preceding the survey.

### 4.1 Antenatal Care Utilization

Antenatal care (ANC) from a trained health care provider ensures optimal health outcomes for the mother and the baby during pregnancy and delivery. Table 4.1 presents the distribution of mothers who obtained ANC services during their last pregnancy from a trained health care provider at a hospital or clinic, by background characteristics. The table shows that antenatal clinic utilization is generally low in Nigeria. For example, overall, $58 \%$ of mothers reported that they received antenatal care services from a trained provider at least once during their last pregnancy and approximately $30 \%$ received services more than once. With the exception of Lagos (68\%) and FCT (73\%) where roughly seven in every 10 women reported that they visited ANC at least once during their last pregnancy, less than half of mothers in Kano (roughly 45\%), $58 \%$ in Nasarawa, and $39 \%$ in Bauchi reported that they obtained ANC services at least once during their last pregnancy. Combined results from the states of Kano, Lagos, and Nasarawa show that $60 \%$ of mothers received ANC services from a trained provider at least once during their last pregnancy and less than one-third (31\%) obtained services more than once. The highest proportion of mothers who reported that they obtained ANC services from a trained provider more than once during their last pregnancy was in the FCT (nearly 40\%) and the least was from Bauchi (22\%). Urban residents were more likely to obtain ANC services than their counterparts in the semi urban and in the rural areas. For example $68 \%$ of mothers in urban areas, compared with roughly $55 \%$ in semi urban and approximately $37 \%$ of mothers residing in rural areas, reported that they accessed ANC services at least once. Nearly more than twice of urban mothers (37\%) than their rural (21\%) and semi-urban (21\%) counterparts obtained ANC services more than once during their last pregnancy from a trained provider at a hospital or clinic.

Table 4.1: $\quad$ Percentage of Mothers Who Obtained ANC Services from a Trained Provider at a Hospital or Clinic during Their Last Pregnancy, by Gender, 2009

| COMPASS LGAs | Obtained ANC Once | n | Obtained ANC More than Once | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 39.1 | 192 | 22.4 | 192 |
| FCT | 72.5 | 233 | 39.9 | 233 |
| Kano | 44.9 | 381 | 23.4 | 381 |
| Lagos | 68.0 | 459 | 34.0 | 459 |
| Nasarawa | 58.2 | 239 | 37.2 | 239 |
| KLN ${ }^{\dagger}$ total | 60.4 | 1,118 | 31.1 | 1,118 |
| Location |  |  |  |  |
| Urban | 68.4 | 636 | 37.1 | 636 |
| Semi-urban | 55.1 | 288 | 20.5 | 288 |
| Rural | 37.3 | 558 | 21.3 | 558 |
| Age |  |  |  |  |
| 15-19 | 42.9 | 55 | 27.3 | 55 |
| 20-24 | 56.4 | 182 | 28.7 | 182 |
| 25-29 | 68.8 | 326 | 39.8 | 326 |
| 30-34 | 59.0 | 302 | 31.2 | 302 |
| 35-39 | 64.0 | 257 | 30.2 | 257 |
| 40-44 | 49.1 | 192 | 24.6 | 192 |
| 45-49 | 46.8 | 189 | 22.1 | 189 |
| $\geq 50$ | N/A | N/A | N/A | N/A |
| Marital status |  |  |  |  |
| Married | 59.2 | 1,079 | 30.8 | 1,079 |
| In union/living with partner | 59.4 | 331 | 28.9 | 331 |
| Not married/in union | 47.8 | 147 | 30.4 | 147 |
| Number of partners in past 12 months |  |  |  |  |
| None | 54.1 | 411 | 28.5 | 411 |
| 1 | 60.5 | 1,053 | 32.0 | 1053 |
| 2 or more | 47.7 | 93 | 18.3 | 93 |
| Education |  |  |  |  |
| No formal schooling | 39.0 | 581 | 17.7 | 581 |
| Primary | 65.3 | 496 | 34.2 | 496 |
| Secondary or higher | 71.1 | 427 | 39.8 | 427 |
| Religion |  |  |  |  |
| Christian | 67.3 | 560 | 36.5 | 560 |
| Muslim | 51.8 | 905 | 26.3 | 905 |
| Other | 77.0 | 38 | 34.9 | 38 |
| Total | 58.0 | 1,563 | 30.3 | 1,563 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

The percentage of mother that accessed ANC services was higher in the age-group 25 to 29 years than in other age categories and was the least among mothers in the age-group 15 to 19 years. For example, while close to $69 \%$ of mothers in the age group 25 to 29 years said that they obtained ANC services at least once and nearly $40 \%$ obtained services more than once, approximately $43 \%$ of mothers aged below 20 years obtained ANC services at least once and $27 \%$ of them obtained services more than once during their last pregnancy. The percentage of mothers who obtained ANC services during their last pregnancy more than once increased between age bracket 15 to 19 years and 25 to 29 years, when it reached the peak and started decreasing from age bracket 30 to 34 years.

There are no marked differences in the utilization of ANC services between mothers who were married at the time of the survey (59\%) and those in union/living with their partner (59\%). Among those in union/living with their partner, roughly $30 \%$ accessed ANC services more than once during their last pregnancy. Roughly half of the mothers who were not married/not in unions as at the time of the survey (48\%) obtained ANC services during their last pregnancy at least once and $30 \%$ received services more than once.

The percentage of mothers who accessed ANC services during their last pregnancy increased by level of education. Fewer mothers with no formal education accessed ANC services as compared to those with some education. Among mothers with no formal education, 39\% obtained ANC services during their last pregnancy at least once while approximately $18 \%$ received services more than once. However, among mothers with primary education, close to two-thirds (65\%) received ANC services at least once during their last pregnancy, and $34 \%$ more than once. Among mothers who reported secondary education or higher, $71 \%$ obtained services at least once during their last pregnancy and nearly $40 \%$ received services more than once.

### 4.2 Quality of Antenatal Care Services

Table 4.2 presents the percentage of women who received intermittent preventive treatment (IPT) of malaria (Fansidar) at least once and percentage counseled on IPT, among women obtaining ANC services from a trained provider at a hospital or clinic. Overall, $14 \%$ of women received IPT (Fansidar) at least once, while more than half (56\%) were counseled on IPT. While roughly 37\% of the women were counseled on IPT in Nasarawa, approximately 27\% were given IPT. In FCT, the highest proportion of people among states were counseled on IPT (69\%), but less than $10 \%$ received IPT. In Bauchi, the least proportion of women received counseling on IPT compared with counseling in other states (32\%), and $17 \%$ were given IPT. In the combined results from Kano, Lagos, and Nasarawa states, close to three in five (57\%) were counseled on IPT, while $14 \%$ were given IPT. There is no marked difference in the proportion of women who received counseling on IPT in urban and semi-urban (both roughly 62\%), but the percentage that were given IPT varied; $14 \%$ of urban women compared with less than $10 \%$ of semi-urban women who obtained ANC services also received IPT. Among rural women who obtained ANC services, $30 \%$ were counseled on IPT but $16 \%$ were given IPT.

Table 4.2: Percentage of Women Who Received IPT (Fansidar) at Least Once and Percentage Counseled on IPT among Women Obtaining ANC Services from a Trained Provider at a Hospital or Clinic, 2009

| COMPASS LGAs | Given IPT (Fansidar) | $n$ | Counseled on IPT | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 17.3 | 75 | 32.0 | 75 |
| FCT | 9.5 | 169 | 68.6 | 169 |
| Kano | 22.8 | 171 | 52.0 | 171 |
| Lagos | 9.9 | 312 | 60.9 | 312 |
| Nasarawa | 26.6 | 139 | 36.7 | 139 |
| $\mathrm{KLN}^{\dagger}$ total | 14.0 | 630 | 57.2 | 630 |
| Location |  |  |  |  |
| Urban | 14.1 | 438 | 61.5 | 438 |
| Semi-urban | 9.8 | 168 | 61.7 | 168 |
| Rural | 16.3 | 248 | 30.0 | 248 |
| Age |  |  |  |  |
| 15-19 | 31.6 | 25 | 51.1 | 25 |
| 20-24 | 28.8 | 107 | 49.0 | 107 |
| 25-29 | 10.9 | 224 | 59.6 | 224 |
| 30-34 | 12.4 | 178 | 55.8 | 178 |
| 35-39 | 13.0 | 161 | 58.9 | 161 |
| 40-44 | 11.9 | 88 | 57.3 | 88 |
| 45-49 | 9.5 | 92 | 46.1 | 92 |
| $\geq 50$ | N/A | 0 | N/A | 0 |
| Marital status |  |  |  |  |
| Married | 14.8 | 615 | 56.6 | 615 |
| In union/living with partner | 11.3 | 197 | 52.2 | 197 |
| Not married/in union | 14.5 | 63 | 56.4 | 63 |
| Number of partners in past 12 months |  |  |  |  |
| None | 9.6 | 218 | 56.8 | 218 |
| 1 | 15.2 | 619 | 55.0 | 619 |
| 2 or more | 17.6 | 38 | 59.1 | 38 |
| Education |  |  |  |  |
| No formal schooling | 17.1 | 233 | 41.2 | 233 |
| Primary | 11.9 | 324 | 55.8 | 324 |
| Secondary or higher | 14.2 | 309 | 63.9 | 309 |
| Religion |  |  |  |  |
| Christian | 13.3 | 379 | 60.6 | 379 |
| Muslim | 14.9 | 462 | 51.5 | 462 |
| Other | 7.3 | 25 | 55.9 | 25 |
| Total | 14.0 | 875 | 55.6 | 875 |

Notes: *Given IPT refers to women who report receiving any IPT at least once. $\dagger$ KLN refers to Kano, Lagos, and Nasawara.
N/A = not applicable.

Across all age groups, with the exception of women aged between 20 to 24 years (49\%) and those aged between 45 to 49 years ( $46 \%$ ), more than half of the mothers obtaining ANC services in all other age categories were counseled on IPT; however younger women were more likely to receive IPT compared with older women. The highest proportion of women that received IPT was in the age group of 15 to 19 years (32\%), followed by women between ages 20 to 24 years (roughly 29\%).

The percentage of women who obtained ANC that received counseling on IPT increased by level of education, from $41 \%$ among uneducated women to nearly $64 \%$ among women with secondary education or higher. In contrast, the percentage of women obtaining ANC services who were uneducated and who received IPT (17\%) was higher than women with a secondary education or higher (14\%).

Although more Christian women (61\%), compared to Muslim women (52\%), were counseled on IPT, the percentage of Muslim women who received IPT (15\%) was slightly higher than their Christian counterparts (13\%). The percentage of women obtaining ANC services and who received counseling on IPT (Fansidar) by marital status showed that married women were more likely to receive counseling on IPT (57\%) and more likely to receive IPT (15\%) than other categories of women.

Neonatal tetanus has been found to be one of the leading causes of neonatal death in developing countries in places where a high proportion of deliveries take place where hygiene may be poor. Tetanus toxoid (TT) injections are given to women during pregnancy to prevent infant deaths due to neonatal tetanus. Information was collected on the number of TT doses the mother received during her last pregnancy. For a pregnant woman to be fully protected, she needs to receive two doses of TT injections. Five lifetime tetanus toxoid doses are required to provide protection from neonatal tetanus.

Table 4.3 shows the percentage of women who obtained ANC services during their last pregnancy who received two doses of TT. Also shown in the table is the percentage of women who received at least one dose of TT, if needed. Approximately $47 \%$ of women received two doses of TT during the pregnancy and 59\% received at least one dose. The percentage of mothers who received two doses of TT varies by state and this ranges from roughly $37 \%$ in Bauchi to close to $50 \%$ in Lagos. The percentage of women who received at least one dose of TT injections was least in Bauchi (50\%) and highest in Kano (66\%). Approximately 48\% of women in the combined results from Kano, Lagos, and Nasarawa received two doses of TT, and $60 \%$ received at least one dose of TT injections during pregnancy. In FCT, the percentage that received two doses of TT was $45 \%$, while $65 \%$ received at least one dose during pregnancy.

The proportion of women who received one or more doses of TT injections during their last pregnancy varies both by residence and by age. Slightly more than half of women in urban areas (52\%) received two doses of TT injections during pregnancy, compared with roughly $44 \%$ of women in semi-urban areas, and $34 \%$ of women in rural areas. Among women who received at least one dose of TT, $63 \%$ were urban residents, $55 \%$ lived in semi-urban areas and $49 \%$ in rural areas.

Table 4.3: Percentage of Women Who Obtained ANC Services during Their Last Pregnancy Who Received Two Doses of TT, and Percentage Who Received at Least One Dose of TT, If Needed, 2009

| COMPASS LGAs | Two TT Doses | n | At Lease One Dose TT | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 36.5 | 74 | 50.0 | 74 |
| FCT | 45.2 | 166 | 64.5 | 166 |
| Kano | 45.2 | 168 | 66.1 | 168 |
| Lagos | 49.8 | 309 | 57.6 | 309 |
| Nasarawa | 43.1 | 137 | 62.8 | 137 |
| KLN ${ }^{\dagger}$ total | 48.4 | 622 | 59.8 | 622 |
| Location |  |  |  |  |
| Urban | 51.5 | 433 | 63.0 | 433 |
| Semi-urban | 43.7 | 165 | 55.1 | 165 |
| Rural | 33.5 | 244 | 49.1 | 244 |
| Age |  |  |  |  |
| 15-19 | 67.9 | 25 | 81.3 | 25 |
| 20-24 | 43.7 | 105 | 64.2 | 105 |
| 25-29 | 47.8 | 222 | 59.2 | 222 |
| 30-34 | 51.8 | 176 | 63.6 | 176 |
| 35-39 | 52.2 | 155 | 64.2 | 155 |
| 40-44 | 36.6 | 88 | 46.2 | 88 |
| 45-49 | 38.4 | 92 | 46.7 | 92 |
| $\geq 50$ | N/A | N/A | N/A | N/A |
| Marital status |  |  |  |  |
| Married | 48.4 | 608 | 61.0 | 608 |
| In union/living with partner | 46.7 | 192 | 60.4 | 192 |
| Not married/in union | 36.6 | 63 | 40.1 | 63 |
| Number of partners in past 12 months |  |  |  |  |
| None | 38.5 | 217 | 53.4 | 217 |
| 1 | 51.4 | 609 | 62.9 | 609 |
| 2 or more | 24.3 | 37 | 29.7 | 37 |
| Education |  |  |  |  |
| No formal schooling | 43.2 | 232 | 55.3 | 232 |
| Primary | 44.3 | 316 | 56.0 | 316 |
| Secondary or higher | 52.0 | 306 | 64.5 | 306 |
| Religion |  |  |  |  |
| Christian | 50.7 | 374 | 61.7 | 374 |
| Muslim | 44.7 | 455 | 58.1 | 455 |
| Other | 38.9 | 25 | 41.6 | 25 |
| Total | 47.1 | 863 | 59.2 | 863 |

Notes: $\quad \dagger$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

Women younger than 20 years were more likely to receive TT vaccines than those in older age categories. For example, nearly $68 \%$ of women below 20 years of age received two doses of TT, compared with approximately $37 \%$ in the age group 40 to 45 years, and roughly $38 \%$ in the age range 45 to 49 years. The percentage that received at least one dose of TT injections ranges from approximately $46 \%$ among women in the age brackets 40 to 49 years to $81 \%$ among women younger than 20 years.

The percentage of women who received two doses of TT injections increases by level of education; approximately $43 \%$ among the uneducated mothers to $52 \%$ among mothers with a secondary school education or higher. Similarly the percentage of women who received at least one dose of TT injections ranges from 55\% among women with no formal schooling to 65\% among women who had a secondary school education or higher. The proportion of women who received two doses of TT during pregnancy was higher among Christians than Muslims. Slightly more than half of Christian women (51\%) received two doses of TT injections during pregnancy, compared with roughly $45 \%$ of Muslim women. Sixty-two percent of Christian women had at least one dose of TT injection compared with $58 \%$ of Muslim women, and $42 \%$ of women practicing other religions.

Table 4.4 presents the percentage distribution of women obtaining ANC services who also received counseling about the warning signs of pregnancy complications, by selected characteristics. Overall, $71 \%$ of women obtaining ANC services received counseling about pregnancy complications. By state, the proportion of women obtaining ANC and who received counseling ranges from roughly $65 \%$ in Nasarawa to approximately $83 \%$ in Bauchi state. In FCT, approximately $82 \%$ received counseling, while in Lagos about $66 \%$ received counseling about the warning signs of pregnancy complications. From the combined results from Kano, Lagos, and Nasarawa, roughly $69 \%$ of women received counseling on warning signs of pregnancy complications.

The proportion of women obtaining ANC services who also received counseling about the warning signs of pregnancy complications was slightly higher among rural residents (72\%) than their urban counterparts (71\%). In the semi-urban areas, $69 \%$ of women obtaining ANC services reported that they were counseled on warning signs of pregnancy complications. Nearly all women under 20 years (roughly 96\%) who obtained ANC services reported that they were counseled on warning signs of pregnancy complications, compared with approximately $68 \%$ and $66 \%$ of older women aged 40 to 44 and 45 to 49 years respectively. At least seven in 10 of mothers in age groups 20 to 24 years ( $71 \%$ ), 25 to 29 years ( $74 \%$ ), and 35 to 39 years ( $72 \%$ ) who obtained ANC services said that they received counseling about warning signs of pregnancy complications.

Seventy-two percent of married women who obtained ANC services, compared with $70 \%$ of women in union/living with partner and nearly $60 \%$ of women who were not married/in union reported that they were counseled about the warning signs of pregnancy complications. There was no marked difference in the percentage of women obtaining ANC services who also received counseling by number of partners in the last 12 months preceding the survey. The percentage of women obtaining ANC services who reported that they received counseling about warning signs of pregnancy complications increased by level of education; approximately $66 \%$
of uneducated women compared with roughly $69 \%$ of women with primary education and $76 \%$ of women with a secondary school education or higher claimed that they received counseling about warnings of pregnancy complications during their ANC visits. In terms of religious affiliation, more Christians (73\%) than Muslims (69\%) obtaining ANC services reported that they received counseling about the warning signs of pregnancy complications, while close to $67 \%$ of women with other faiths also received counseling about the warning signs of pregnancy complications.

Figure 4.1 is a pictorial presentation of the percentage of deliveries attended by a trained provider (that is, doctor, midwife, nurse, community health extension worker, or community health officer). Lagos and FCT reported the highest percentage of attended deliveries ( $70 \%$ each), and Bauchi and Kano reported the lowest percentage ( $23 \%$ and $28 \%$, respectively). Overall, about $52 \%$ reported having a trained provider attend the delivery.

Table 4.4: Percentage of Women Who Obtained ANC Services Who Were Counseled about Warning Signs of Pregnancy Complications, 2009

| COMPASS LGAs | Counseled about Warning Signs | n |
| :---: | :---: | :---: |
| State |  |  |
| Bauchi | 82.7 | 75 |
| FCT | 82.2 | 169 |
| Kano | 76.0 | 171 |
| Lagos | 66.7 | 312 |
| Nasarawa | 64.7 | 139 |
| KLN ${ }^{\dagger}$ total | 68.6 | 630 |
| Location |  |  |
| Urban | 71.0 | 438 |
| Semi-urban | 68.5 | 168 |
| Rural | 72.1 | 248 |
| Age |  |  |
| 15-19 | 96.1 | 25 |
| 20-24 | 71.3 | 107 |
| 25-29 | 74.1 | 224 |
| 30-34 | 65.3 | 178 |
| 35-39 | 72.2 | 161 |
| 40-44 | 68.2 | 88 |
| 45-49 | 66.1 | 92 |
| $\geq 50$ | N/A | 0 |
| Marital status |  |  |
| Married | 72.0 | 615 |
| In union/living with partner | 70.1 | 197 |
| Not married/in union | 59.5 | 63 |
| Number of partners in past 12 months |  |  |
| None | 70.7 | 218 |
| 1 | 70.5 | 619 |
| 2 or more | 71.2 | 38 |
| Education |  |  |
| No formal schooling | 65.8 | 233 |
| Primary | 68.5 | 324 |
| Secondary or higher | 75.5 | 309 |
| Religion |  |  |
| Christian | 72.7 | 379 |
| Muslim | 69.1 | 462 |
| Other | 66.6 | 25 |
| Total | 70.6 | 875 |

[^0]

Figure 4.1: Percentage of deliveries attended by a trained provider (doctor, midwife, nurse, CHEW, or CHO), 2009.

### 4.3 Quality of General Health Care Services

Figure 4.2 illustrates the percentage of women who are satisfied or very satisfied with the services provided at their last visit to a health facility for general health. Overall satisfaction was fairly high with the majority of women (approximately 92\%) being satisfied or very satisfied with the services they received the last time they visited a health facility in the last 12 months. Bauchi respondents report the highest female patient satisfaction (93\%), while Nasarawa respondents report the lowest (90\%).

### 4.4 Breastfeeding

Table 4.5 presents the percentage distribution of infants under six months old who were exclusively breastfed in the last 24 hours preceding the survey, by mother's characteristics. Overall, roughly one in four mothers ( $24 \%$ ) exclusively breastfed their infants under six months over the last 24 hours preceding survey. Mothers in urban area (27\%) were more likely to breastfeed their infants under six months old than those in semi-urban areas (25\%) and those in rural areas (14\%). The percentage of Muslim mothers who exclusively breastfed their infants under six months old in the 24 months preceding survey ( $30 \%$ ) was twice that the proportion of Christian mothers (roughly 15\%). Due to small sample sizes, no applicable results could be obtained with regards to mothers' educational level.


Figure 4.2: Percentage of deliveries attended by a trained provider (doctor, midwife, nurse, CHEW, or CHO), 2009.

Table 4.5: Percentage of Infants Under Six Months Old Exclusively Breastfed during the Past 24 Hours, 2009

|  | Characteristic of <br> Mother |  |
| :--- | :---: | :---: |
| Location |  | $\boldsymbol{n}$ |
| Urban | 27.3 | 44 |
| Semi-urban | 25.0 | 23 |
| Rural | 14.1 | 45 |
| Education |  |  |
| No formal schooling | N/A | 1 |
| Primary | N/A | 3 |
| Secondary or higher | N/A | 1 |
| Religion |  |  |
| Christian | 14.6 | 46 |
| Muslim | 30.2 | 64 |
| Other | 22.4 | 3 |
| Total | 24.1 | 113 |

Note: $\quad$ N/A $=$ not applicable.

## CHAPTER 5: CHILD HEALTH

## Nana Koram

This chapter presents information on respondents' knowledge of childhood illnesses, as well as home-based treatment of malaria, acute respiratory illnesses (ARI), and diarrhea. Data on vitamin A supplementation and immunization rates are also presented. Knowledge and understanding of childhood illnesses is important in determining treatment-seeking behaviors. The data presented here can help identify subgroups in project areas that are in need of more education regarding childhood illnesses and how they should be treated and prevented.

### 5.1 Use of Vitamin A Supplements

Table 5.1 provides information on the percentage of mothers who are aware that children aged 6 to 59 months should receive vitamin A supplements. Overall, more than half of mothers surveyed (62\%) were aware that children aged 6 to 59 months required vitamin A supplementation. Awareness was highest amongst mothers living in Lagos and FCT (77\% and $73 \%$, respectively), as compared to $64 \%$ in Nasarawa, $47 \%$ in Kano, and $40 \%$ in Bauchi. The combined numbers for Kano, Lagos, and Nasarawa show that approximately 66\% of mothers in these areas were aware that children 6 to 59 months old should receive vitamin A supplements. Mothers in urban areas were more likely to be aware that children 6 to 59 month should supplementation: $75 \%$ of mothers in urban areas, compared to $59 \%$ of mothers in semi-urban areas, and $40 \%$ of mothers in rural areas.

The highest level of awareness of vitamin A supplementation for children aged 6 to 59 months was among mothers aged 45 to 49 years. However, mothers in the 25 to 29 , 30 to 35 , and 35 to 40 age cohorts also showed relatively high levels of awareness - $66 \%$, $64 \%$, and $65 \%$ respectively. Non-married mothers in relationships had the highest level of awareness of vitamin A supplementation (68\%), compared to approximately 61\% of married mothers, and nearly 59\% of mothers who were not married or in relationships. Uneducated mothers were more likely not to know that children aged 6 to 59 months should receive supplementation ( $47 \%$ ), as compared to $66 \%$ of mothers with a primary school education and $73 \%$ of mothers with a secondary school education or higher. With respect to religious affiliation, the highest awareness level was reported among Christian mothers: 77\% of Christian mothers compared to $54 \%$ of Muslim mothers and $44 \%$ of mothers practicing other religions.

Table 5.2 shows the percentage of children aged 6 to 59 months who actually received vitamin A supplementation, according to their health cards or mothers' memory, in the past six months from the time the survey was carried out. Overall, $29 \%$ of children aged 6 to 59 months had received vitamin A supplementation in the past six months from the time the survey was conducted. The highest percentage of children 6 to 59 months receiving vitamin A supplementation was reported in Nasarawa (44\%), as compared to approximately $39 \%$ in both FCT and Lagos, and $13 \%$ in Bauchi. The combined data for Kano, Lagos, and Nasarawa states show that approximately $31 \%$ of children in these areas had received vitamin A supplementation in the past six months. Children in living in urban areas were more likely to have had vitamin A
supplementation, as compared to children living in semi-urban or rural areas: 35\% of children in urban areas, $28 \%$ in semi-urban areas, and $19 \%$ in rural areas.

Table 5.1: $\quad$ Percentage of Mothers Aware that Children Aged 6-59 Months Should Received Vitamin A Supplements, 2009

| COMPASS LGAs | Aware Child Should Receive Vitamin A | n* |
| :---: | :---: | :---: |
| State |  |  |
| Bauchi | 39.8 | 123 |
| FCT | 72.5 | 131 |
| Kano | 47.1 | 221 |
| Lagos | 76.5 | 226 |
| Nasarawa | 64.4 | 174 |
| KLN ${ }^{\dagger}$ total | 65.9 | 629 |
| Location |  |  |
| Urban | 75.2 | 340 |
| Semi-urban | 58.8 | 154 |
| Rural | 40.1 | 371 |
| Age |  |  |
| 15-19 | 36.2 | 48 |
| 20-24 | 57.1 | 154 |
| 25-29 | 66.2 | 259 |
| 30-34 | 64.4 | 209 |
| 35-39 | 65.2 | 131 |
| 40-44 | 55.7 | 51 |
| 45-49 | 74.5 | 23 |
| $\geq 50$ | N/A | 0 |
| Marital status |  |  |
| Married | 60.7 | 667 |
| In union/living with partner | 68.0 | 185 |
| Not married/in union | 58.6 | 38 |
| Education |  |  |
| No formal schooling | 46.9 | 322 |
| Primary | 65.8 | 298 |
| Secondary or higher | 73.4 | 255 |
| Religion |  |  |
| Christian | 77.3 | 323 |
| Muslim | 54.1 | 532 |
| Other | 43.6 | 20 |
| Total | 62.1 | 890 |

Notes: *Among mothers with children aged 6-59 months of age. $\dagger$ KLN refers to Kano, Lagos, and Nasawara.
N/A = not applicable.

Table 5.2: Percentage of Children 6-59 Months Old Who Received Vitamin A Supplement in Past Six Months According to Health Card or Recall, 2009

| COMPASS LGAs | Child Received Vitamin A | ${ }^{*}$ |
| :---: | :---: | :---: |
| State |  |  |
| Bauchi | 13.3 | 113 |
| FCT | 39.4 | 104 |
| Kano | 16.1 | 267 |
| Lagos | 39.3 | 224 |
| Nasarawa | 43.7 | 174 |
| KLN ${ }^{\dagger}$ total | 31.3 | 674 |
| Location |  |  |
| Urban | 34.5 | 357 |
| Semi-urban | 28.1 | 158 |
| Rural | 18.5 | 357 |
| Age |  |  |
| 15-19 | 17.4 | 43 |
| 20-24 | 18.5 | 171 |
| 25-29 | 34.8 | 266 |
| 30-34 | 30.8 | 208 |
| 35-39 | 26.1 | 128 |
| 40-44 | 42.6 | 46 |
| 45-49 | 30.9 | 29 |
| $\geq 50$ | N/A | 0 |
| Marital status |  |  |
| Married | 26.5 | 699 |
| In union/living with partner | 40.8 | 160 |
| Not married/in union | 24.1 | 40 |
| Education |  |  |
| No formal schooling | 20.7 | 320 |
| Primary | 32.4 | 309 |
| Secondary or higher | 33.9 | 253 |
| Religion |  |  |
| Christian | 38.0 | 310 |
| Muslim | 24.3 | 558 |
| Other | 32.1 | 14 |
| Total | 29.1 | 899 |

Notes: $\quad \dagger$ KLN refers to Kano, Lagos, and Nasawara.
N/A = not applicable.
The highest levels of supplementation in the past six months were reported among mothers in older cohorts: 43\% of children of mothers aged 40 to 45 years; 35\% among mothers aged 25-29; and $31 \%$ of children of mothers aged 45 to 49 and 30 to 34 years had received vitamin A supplementation. Children of unmarried mothers who were in relationships, or living with their
partners were more likely to have received supplementation (41\%) compared to children of married mothers (27\%) and children of mothers who were not married or in relationships (24\%). With respect to religious affiliation, children of Christian mothers were more likely to have received supplementation (38\%) compared to children of Muslim mothers (24\%) and children of mothers practicing other religions (32\%).

### 5.2 Use of Insecticide Treated Nets to Prevent Malaria

Table 5.3 reports on the percentage of respondents who are aware that the use of insecticidetreated bednets (ITN) can prevent malaria transmission, by gender. Overall, the majority of survey participants were aware that ITN use can prevent malaria transmission: $83 \%$ of women, and $84 \%$ of men. Among female respondents, the highest level of awareness was reported in Kano (90\%), as compared to $87 \%$ in FCT, $82 \%$ in Lagos, $77 \%$ in Nasarawa, and $74 \%$ in Bauchi. The combined data for Kano, Lagos, and Nasarawa states show that approximately $84 \%$ of female respondents in these areas were aware that ITN use can prevent malaria transmission. Among male respondents, the highest level of awareness was also reported in Kano, (93.1\%), as compared to $84 \%$ in FCT, $81 \%$ in Bauchi, and approximately $79 \%$ in both Lagos and Nasarawa. When looking at the combined data for Kano, Lagos, and Nasarawa states, it can be seen that approximately $85 \%$ of male respondents in these areas were aware that using ITNs can prevent malaria transmission.

Although malaria transmission is much more likely in rural areas, among female respondents, the highest levels of awareness of ITN use for malaria prevention were reported in urban and semiurban areas (approximately 85\% in both areas), while the lowest level was reported in rural areas (approximately 78\%). However, among male respondents, the highest level of awareness was reported among those living in semi-urban areas (87\%), and rural areas (85\%), while the lowest level was reported in urban areas ( $82 \%$ ). With respect to age, among female respondents, the lowest levels of awareness were reported among women aged 45 to 49 years ( $76 \%$ ), and women aged 30 to 34 years (76\%). Among male respondents, the lowest level of awareness was reported among men aged 45 to 49 years ( $80 \%$ ).

Among female respondents, the highest level of awareness of ITN use for malaria prevention was reported among unmarried women who were also not in relationships (approximately 85\%), as compared to roughly $83 \%$ of married women, and nearly $79 \%$ of women in relationships. Among male respondents, a different pattern was observed. Married men were more likely to be aware that ITN use can prevent malaria transmission (88\%), as compared to $81 \%$ of unmarried men who were not in relationships and $79 \%$ of unmarried men in relationships. On the whole, the majority of both men and women who had ever had a child were aware that using ITNs can help prevent malaria transmission (approximately $81 \%$ of women, and $85 \%$ of men).

Education is important in knowledge and understanding of malaria prevention, and it can be seen that, among both male and female respondents, the highest levels of awareness were reported among those with a secondary school education or higher ( $86 \%$ of women, and $86 \%$ of men). For women, the lowest level of awareness was reported among those with no formal schooling (78\%), while for men, the lowest level of awareness was reported among those with a primary school education (82\%). With regards to religion, among female respondents, $90 \%$ of women
practicing other religions were aware that ITN use can prevent malaria transmission, as compared to $85 \%$ of Christian women, and approximately $81 \%$ of Muslim women. Among male respondents, awareness level was highest among Muslim men ( $86 \%$ ), and lowest among men practicing other religions (72\%).

Table 5.3: Percentage of Respondents Aware that ITN Use Can Prevent Malaria Transmission, by Gender, 2009

| COMPASS LGAs | Female | n | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 73.7 | 259 | 80.7 | 373 |
| FCT | 87.0 | 355 | 84.2 | 297 |
| Kano | 89.6 | 604 | 93.1 | 670 |
| Lagos | 82.1 | 699 | 79.3 | 566 |
| Nasarawa | 77.2 | 333 | 79.2 | 312 |
| KLN ${ }^{\dagger}$ total | 84.1 | 1,636 | 84.5 | 1,548 |
| Location |  |  |  |  |
| Urban | 84.5 | 978 | 82.1 | 887 |
| Semi-urban | 84.6 | 467 | 87.0 | 422 |
| Rural | 78.1 | 775 | 84.8 | 879 |
| Age |  |  |  |  |
| 15-19 | 85.1 | 352 | 84.5 | 308 |
| 20-24 | 86.7 | 380 | 84.3 | 311 |
| 25-29 | 85.2 | 466 | 83.0 | 337 |
| 30-34 | 76.3 | 348 | 83.0 | 343 |
| 35-39 | 85.0 | 279 | 86.0 | 230 |
| 40-44 | 83.9 | 208 | 87.5 | 193 |
| 45-49 | 76.1 | 217 | 79.6 | 179 |
| $\geq 50$ | N/A | 0 | 82.8 | 317 |
| Marital status |  |  |  |  |
| Married | 83.3 | 1,230 | 87.9 | 978 |
| In union/living with partner | 78.7 | 364 | 78.5 | 282 |
| Not married/in union | 84.6 | 656 | 81.2 | 958 |
| Ever had a child | 80.8 | 1,503 | 85.4 | 1,078 |
| Education |  |  |  |  |
| No formal schooling | 77.8 | 756 | 82.5 | 569 |
| Primary | 83.7 | 662 | 81.9 | 662 |
| Secondary or higher | 86.2 | 832 | 85.6 | 987 |
| Religion |  |  |  |  |
| Christian | 85.0 | 890 | 81.6 | 828 |
| Muslim | 81.2 | 1,295 | 85.6 | 1334 |
| Other | 90.1 | 65 | 72.0 | 56 |
| Total | 83.0 | 2,250 | 83.8 | 2,218 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

Table 5.4 provides information on the percentage of children under five years of age (that is, children aged 0 to 59 months), who slept under an ITN the night before the survey was conducted. Overall, only a small minority of children slept under an ITN the night before (13\%), and it is important to note here that information on entomological inoculation rates or malaria incidence relative to the level of precipitation in COMPASS areas was not concurrently collected. Children under five years living in FCT and Nasarawa states were more likely to have slept under an ITN the night before (both 18\%) as compared to children living in Kano (16\%), Lagos (12\%), and Bauchi (6\%). When looking at the combined data for Kano, Lagos, and Nasarawa, it can be seen that approximately $14 \%$ of children under five years old slept under an ITN the night before the survey. Further, ITN use was highest in children living in urban and semi-urban areas ( $16 \%$ and $12 \%$ respectively), as compared to those living in rural areas (10\%). ITN use was also highest among children whose mothers were aged 25 to 29 years (16\%) and lowest among children whose mothers were aged 15 to 19 years (8\%). However, there appeared to be no specific pattern among this subgroup.

Children of married mothers were more likely to have slept under an ITN the night before (15\%), as compared to $10 \%$ of children of unmarried mothers in relationships, and only $0.8 \%$ of children of unmarried mothers who were not in relationships. The highest percentage of children who slept under an ITN the night before the survey was reported among children of mothers with only a primary school education (16\%), as compared to $14 \%$ of children of mothers with a secondary school education or higher, and $9 \%$ of children of mothers with no formal schooling. Children of Christian mothers were also more likely to have slept under an ITN the night before the survey (15\%), as compared to children of Muslim mothers (12\%), and $3 \%$ of children of mothers practicing other religions.

### 5.3 Home-Based Treatment for Malaria, ARI, and Diarrhea

Table 5.5 provides information on the percentage of respondents who know at least two of the danger signs requiring immediate care from a clinic, patent medicine vendor (PMV), chemist, or health center, by gender. Danger signs that were asked at the time of the interview include the following: repeated watery stools, bloody stools, repeated vomiting, fast breathing, difficulty breathing, noisy breathing, cough, fever, convulsions, not eating or drinking, not breastfeeding well, difficult to wake up, or getting sicker/very sick.

Overall, female respondents were more likely to know at least two of the danger signs that required immediate care (83\%), as compared to male respondents (77\%). Female respondents living in FCT reported the highest percentage of knowledge of dangers signs (87\%), as compared to $86 \%$ in Kano, $84 \%$ in Nasarawa, $83 \%$ in Lagos, and $77 \%$ in Bauchi. When looking at the combined data for women living in Kano, Lagos and Nasarawa, $84 \%$ those living in these areas knew of at least two danger signs that required immediate care. However, among male respondents, men in Nasarawa were more likely than men living in any other area to know of at least two danger signs requiring immediate care: $86 \%$ in Nasarawa, as compared to $82 \%$ in FCT, $79 \%$ in Kano, $75 \%$ in Lagos, and $74 \%$ in Bauchi. The combined information for Kano, Lagos and Nasarawa states shows that approximately $77 \%$ of men living in these areas were aware of at least two danger signs requiring immediate care. With regards to residence, there was no clear pattern observed. For both female and male respondents, the highest awareness levels were
reported in semi-urban areas ( $86 \%$ of women, and $81 \%$ of men), while the lowest levels were reported in rural areas for women (81\%), and in urban areas for men (76\%).

Table 5.4: Percentage of Children under Five Years Old Who Slept under an ITN the Night before the Survey, 2009

| Characteristic of Mother | Child Who Slept under ITN | n* |
| :---: | :---: | :---: |
| State |  |  |
| Bauchi | 6.3 | 126 |
| FCT | 18.3 | 126 |
| Kano | 16.2 | 278 |
| Lagos | 12.2 | 262 |
| Nasarawa | 17.8 | 197 |
| KLN ${ }^{\dagger}$ total | 14.1 | 746 |
| Location |  |  |
| Urban | 15.6 | 400 |
| Semi-urban | 11.7 | 180 |
| Rural | 9.5 | 390 |
| Age |  |  |
| 15-19 | 7.8 | 49 |
| 20-24 | 13.4 | 191 |
| 25-29 | 15.6 | 296 |
| 30-34 | 12.0 | 233 |
| 35-39 | 13.0 | 148 |
| 40-44 | 13.6 | 50 |
| 45-49 | 0.0 | 22 |
| $\geq 50$ | N/A | 0 |
| Marital status |  |  |
| Married | 14.7 | 768 |
| In union/living with partner | 10.4 | 194 |
| Not married/in union | 0.8 | 43 |
| Education |  |  |
| No formal schooling | 9.1 | 347 |
| Primary | 16.0 | 347 |
| Secondary or higher | 14.2 | 295 |
| Religion |  |  |
| Christian | 15.2 | 356 |
| Muslim | 12.3 | 616 |
| Other | 2.8 | 17 |
| Total | 13.2 | 1,005 |

Notes:
$\dagger$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

Table 5.5: Percentage of Respondents Knowing Two or More Danger Signs Requiring Immediate Care from Clinic, PMV, Chemist, or Health Center, by Gender, 2009

| COMPASS LGAs | Female | n | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 77.1 | 253 | 74.0 | 354 |
| FCT | 87.2 | 352 | 81.6 | 282 |
| Kano | 85.6 | 569 | 79.2 | 634 |
| Lagos | 83.4 | 688 | 75.0 | 529 |
| Nasarawa | 84.1 | 314 | 86.1 | 295 |
| KLN ${ }^{\dagger}$ total | 84.1 | 1,571 | 77.4 | 1,458 |
| Location |  |  |  |  |
| Urban | 83.8 | 962 | 75.6 | 838 |
| Semi-urban | 85.8 | 442 | 80.7 | 400 |
| Rural | 81.1 | 744 | 77.6 | 827 |
| Age |  |  |  |  |
| 15-19 | 78.8 | 322 | 67.6 | 268 |
| 20-24 | 81.5 | 366 | 71.9 | 291 |
| 25-29 | 84.4 | 456 | 78.4 | 310 |
| 30-34 | 84.9 | 341 | 76.4 | 326 |
| 35-39 | 85.6 | 274 | 81.5 | 223 |
| 40-44 | 86.4 | 204 | 81.6 | 192 |
| 45-49 | 83.1 | 213 | 82.4 | 175 |
| $\geq 50$ | N/A | 0 | 79.0 | 309 |
| Marital status |  |  |  |  |
| Married | 83.8 | 1,209 | 79.6 | 954 |
| In union/living with partner | 87.5 | 354 | 83.6 | 267 |
| Not married/in union | 80.4 | 613 | 72.3 | 873 |
| Ever had a child | 85.0 | 1,482 | 82.0 | 1,058 |
| Education |  |  |  |  |
| No formal schooling | 84.7 | 723 | 77.4 | 538 |
| Primary | 81.3 | 648 | 77.7 | 628 |
| Secondary or higher | 84.0 | 805 | 76.2 | 928 |
| Religion |  |  |  |  |
| Christian | 82.7 | 869 | 78.7 | 779 |
| Muslim | 84.2 | 1,249 | 76.3 | 1,265 |
| Other | 77.9 | 58 | 65.1 | 50 |
| Total | 83.4 | 2,176 | 76.9 | 2,094 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.
Although no clear pattern was also observed among the age cohorts for female respondents, for male respondents, younger men ( 15 to 34 years) and men in the oldest age cohorts ( 50 years and older) were less likely to know at least two danger signs requiring immediate care. Among female respondents, women aged 25 years and older were more likely than younger women to know at least two danger signs, while among male respondents, men aged 35 years through to 49
years were more likely to know at least two danger signs. Unmarried women living with their partners were more likely to know at least two danger signs (88\%), as compared to married women (84\%), and unmarried women who were not in relationships (80\%). A similar pattern was observed among male respondents. Unmarried men living with their partners were more likely to know at least two danger signs (84\%), as compared to married men (80\%), and unmarried men not in relationships (72\%).

Among respondents who had ever had a child, the majority of both women and men knew at least two or more danger signs that required immediate care: $85 \%$ of female respondents and $82 \%$ of male respondents. Women with no formal school were more likely to know at least two danger signs ( $85 \%$ ), as compared to $84 \%$ of women with a secondary school education or higher, and $81 \%$ of women with only a primary school education. No clear pattern was found among male respondents. Approximately $78 \%$ of men with a primary school education knew at least two danger signs that required immediate care, as compared to roughly $77 \%$ of uneducated men, and roughly $76 \%$ of men with a secondary school education or higher. Muslim women were more likely to know at least two danger signs (84\%), as compared to $83 \%$ of Christian women, and $78 \%$ of women practicing other religions. Among male respondents, the highest level of knowledge of at least two danger signs was also among Christian men (79\%), as compared to $76 \%$ of Muslim men, and $65 \%$ of men practicing other religions.

Figure 5.1 presents the percentage of children aged 0 to 23 months with febrile illness episode during the past two weeks who received anti-malarial therapy, the percentage of children 0 to 23 months with diarrhea episode who received oral rehydration therapy (ORT), and the percentage of children with acute respiratory illnesses who received recommended antibiotic therapy. The five-state average (over all COMPASS states), as well as a three-state average (Kano, Lagos, and Nasarawa states) for the respective indicators described above are presented. Vertical lines in figure 5.1 represent $95 \%$ confidence intervals.

Due to the small sample sizes resulting from few mothers reporting children with febrile illnesses, diarrhea and ARI, caution must be used when interpreting and extrapolating these results to areas or situations outside the scope of COMPASS. Overall the averages were similar between the five-state estimates and the three-state estimates. Across all five states, approximately $30 \%$ of children with febrile illness received anti-malarial therapy, compared to nearly $32 \%$ for the threestate average. About $36 \%$ of children across all five states received appropriate antibiotic therapy for ARI, while approximately $38 \%$ in the three states received antibiotic therapy. A higher percentage of children with diarrheal illnesses received appropriate treatment, compared to other childhood illnesses: across all five states, $46 \%$ of children with diarrhea received ORT, while approximately $44 \%$ of children with diarrhea in the three states received ORT.


Figure 5.1: Percentage of children 0-23 months with febrile illness episode during last two weeks who received anti-malarial therapy, with diarrhea episode during the last two weeks who received ORT, and with ARI during the last two weeks who received recommended antibiotic therapy, 2009.

### 5.4 Childhood Vaccinations

Table 5.6 shows the percentage of children aged 12 to 23 months who received three doses of diphtheria, pertussis, and tetanus vaccinations (DPT3) before their first birthday, according to their health cards. Overall, approximately $10 \%$ of children had DPT3 before their first birthday. Large variations exist among sub-groups of the population. While nearly $24 \%$ of children in Nasarawa and approximately $21 \%$ of children in FCT had received DPT3 before their first birthday, only $12 \%$ of children in Lagos and $9 \%$ of children in Kano had received their vaccinations. In Bauchi, none of children had received their vaccinations. DPT3 coverage was highest in semi-urban areas (15\%), as compared to urban (11\%) and rural (8\%) areas. With respect to the age cohorts of the mothers of these children, there was no clear pattern. The highest DPT3 coverage was among children of mothers aged 20 to 24 years (15\%), while the lowest coverage was among children of mothers aged 15 to 19 years, and 45 to 49 years ( $0 \%$ for both age categories).

Children of mothers in unions or living with their partners were more likely to have received DPT3 before their first birthday (18\%), as compared with $10 \%$ of children of married mothers, and none of the children of unmarried mothers not in unions had received DPT3. There was also considerable variation in DPT3 coverage among children with regards to mothers' education status. Children of educated mothers were more likely to have had three doses of DPT before their first birthday (21\%), as compared to children of mothers with only a primary school education (8\%), and children of mothers with no formal schooling (2\%). With respect to religion,
the highest DPT3 coverage was seen among children of mothers practicing other religions (43\%), as compared to children of Christian mothers (13\%), and children of Muslim mothers (8\%).

Table 5.6: Percentage of Children Who Received Three Doses of DPT before Their First Birthday, According to Health Card, among Children Ages 12-23 Months Old, 2009

| Characteristic of Mother | Child Received DPT3 | n* |
| :---: | :---: | :---: |
| State |  |  |
| Bauchi | 0.0 | 26 |
| FCT | 21.4 | 28 |
| Kano | 8.5 | 71 |
| Lagos | 12.0 | 50 |
| Nasarawa | 23.7 | 38 |
| KLN ${ }^{\dagger}$ total | 11.6 | 162 |
| Location |  |  |
| Urban | 10.7 | 93 |
| Semi-urban | 15.0 | 42 |
| Rural | 7.6 | 77 |
| Age |  |  |
| 15-19 | 0.0 | 13 |
| 20-24 | 14.6 | 48 |
| 25-29 | 9.6 | 62 |
| 30-34 | 11.3 | 48 |
| 35-39 | 12.8 | 30 |
| 40-44 | 3.3 | 11 |
| 45-49 | 0.0 | 1 |
| $\geq 50$ | N/A | 0 |
| Marital status |  |  |
| Married | 9.5 | 176 |
| In union/living with partner | 18.2 | 30 |
| Not married/in union | 0.0 | 10 |
| Education |  |  |
| No formal schooling | 2.0 | 73 |
| Primary | 8.0 | 74 |
| Secondary or higher | 20.9 | 66 |
| Religion |  |  |
| Christian | 13.2 | 72 |
| Muslim | 8.0 | 137 |
| Other | 43.1 | 4 |
| Total | 10.4 | 216 |

[^1]Table 5.7 shows the percentage of children aged 12 to 59 months who were fully immunized by their first birthday, according to their health cards. Generally, the percentage of child immunization was low: overall, only $4 \%$ of children were fully immunized by their first birthday.

Table 5.7: Percentage of Children Who Are Fully Immunized by First Birthday, According to Health Card, among Children 12-59 Months Old, 2009

| Characteristic of Mother | Child Fully Immunized | n* |
| :---: | :---: | :---: |
| State |  |  |
| Bauchi | 0.0 | 80 |
| FCT | 8.0 | 75 |
| Kano | 3.1 | 194 |
| Lagos | 4.3 | 139 |
| Nasarawa | 7.9 | 114 |
| KLN ${ }^{\dagger}$ total | 4.2 | 454 |
| Location |  |  |
| Urban | 4.0 | 241 |
| Semi-urban | 5.6 | 113 |
| Rural | 2.5 | 241 |
| Age |  |  |
| 15-19 | 0.0 | 33 |
| 20-24 | 5.9 | 118 |
| 25-29 | 3.2 | 194 |
| 30-34 | 4.2 | 128 |
| 35-39 | 3.8 | 88 |
| 40-44 | 1.4 | 28 |
| 45-49 | 0.0 | 13 |
| $\geq 50$ | N/A | 0 |
| Marital status |  |  |
| Married | 3.4 | 487 |
| In union/living with partner | 6.1 | 98 |
| Not married/in union | 0.0 | 29 |
| Education |  |  |
| No formal schooling | 0.7 | 225 |
| Primary | 2.7 | 216 |
| Secondary or higher | 8.5 | 161 |
| Religion |  |  |
| Christian | 4.5 | 203 |
| Muslim | 2.8 | 390 |
| Other | 26.1 | 9 |
| Total | 3.7 | 614 |

Notes: $\quad \dagger$ KLN refers to Kano, Lagos, and Nasawara.
N/A = not applicable.

Percentages were highest in FCT and Nasarawa (8\%), and lowest in Kano and Bauchi (3\% and $0 \%$, respectively). Percentages were also higher in semi-urban areas (6\%), compared to urban areas (4\%), and rural areas (3\%).

Children of mothers aged 20 to 24 years had the highest full immunization coverage rates (5.9\%), while children of teenage mothers and children of mothers aged 45 to 49 years were less likely to be fully immunized ( $0 \%$ for both age cohorts). Approximately $6 \%$ of children of mothers in unions or living with their partners were fully immunized, compared to $3 \%$ of children of married mothers, and $0 \%$ of children of unmarried mothers not in unions. Children of educated mothers were more likely to be fully immunized: $9 \%$ of children of mothers with a secondary school education or higher were fully immunized, compared to $3 \%$ of children of mothers with only a primary school education, and $0.7 \%$ of children of mothers with no formal schooling. Percentages were also higher among children of mothers practicing other religions (26\%), as compared to only $5 \%$ of children of Christian mothers, and $3 \%$ of children of Muslim mothers.

## CHAPTER 6: EXPOSURE TO MASS MEDIA

## Akanni Akinyemi

Mass media is a viable tool in promoting family planning, reproductive health and general health information. Information on many of the health programs, including those targeted towards behavioral change, has been provided through the mass media. Some of these health messages were in local languages and aired either on the television or radio, or published through print media. This section examines the levels of exposure to mass media including radio, newspapers, and television, within COMPASS areas. Information on exposure to media sources is important for guiding programmatic decisions. Understanding the variability in exposure to media sources is also essential as it provides valuable information about the potential coverage of mass media family planning, reproductive health, and health education campaigns.

### 6.1 Radio Media Exposure

The distribution of respondents who listen to radio at least once a week in COMPASS sites by gender across other variables are presented in table 6.1. Overall, approximately $76 \%$ of females and $85 \%$ of males reported listening to the radio at least once a week. Among females across the states, the proportion of radio listeners was lowest in Bauchi and Nasarawa (roughly 58\% each) and highest in Kano (83\%). About $78 \%$ of women in the three states of Kano, Lagos, and Nasarawa listened to the radio at least once a week. Among male respondents, the lowest proportion of radio listeners was in Bauchi (75\%), while the highest was in the FCT (89\%). In all of the states except Bauchi, more than four-fifths of male respondents listened to the radio at least once a week. The proportion of females who listen to the radio at least once a week was highest in the urban (81\%) and semi-urban (80\%) areas compared with rural areas (59\%). However, the distribution was different with marginal variation across residence among males; the highest proportion of radio listeners was in semi-urban and urban areas (roughly $89 \%$ each), compared with rural areas (roughly 77\%). By age group, more than $70 \%$ females across each of the age groups reported listening to a radio at least once a week, with the highest proportion among those in the age group 40 to 44 years (approximately $84 \%$ ). Among males, with the exception of those in age group 15 to 19 years ( $72 \%$ ), more than $85 \%$ in each of the age groups listen to the radio at least once a week with the highest proportion among those in age group 45 to 49 years ( $88 \%$ ).

Approximately $75 \%$ of females compared with roughly $87 \%$ of males who had a child reported listening to a radio at least once a week. Across educational levels, the proportion of females who listened to the radio was lowest among the uneducated (65\%) compared with those with primary education (79\%) and those with a secondary school education or higher (81\%). A similar pattern was observed for males; the proportion of those who listened to the radio was lowest among the uneducated (roughly 74\%) compared with those with primary education (roughly 87\%) and those with higher education (roughly 90\%). Generally, the proportion of males who listen to radio was higher than females, with the exception of the age groups 15-19 and $40-44$ years.

Table 6.1: Percentage of Respondents Who Listen to Radio at Least Once a Week, by Gender, 2009

| COMPASS LGAs | Female | n | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 57.9 | 259 | 74.5 | 373 |
| FCT | 76.9 | 355 | 88.9 | 297 |
| Kano | 83.3 | 604 | 86.7 | 670 |
| Lagos | 77.5 | 699 | 88.2 | 566 |
| Nasarawa | 57.7 | 333 | 82.1 | 312 |
| KLN ${ }^{\dagger}$ total | 77.9 | 1,636 | 87.2 | 1,548 |
| Location |  |  |  |  |
| Urban | 81.0 | 978 | 88.6 | 887 |
| Semi-urban | 80.2 | 467 | 89.4 | 422 |
| Rural | 59.4 | 775 | 76.9 | 879 |
| Age |  |  |  |  |
| 15-19 | 73.9 | 352 | 72.2 | 308 |
| 20-24 | 75.9 | 380 | 87.9 | 311 |
| 25-29 | 73.9 | 466 | 87.7 | 337 |
| 30-34 | 72.7 | 348 | 87.7 | 343 |
| 35-39 | 76.9 | 279 | 86.1 | 230 |
| 40-44 | 84.3 | 208 | 84.0 | 193 |
| 45-49 | 74.8 | 217 | 88.2 | 179 |
| $\geq 50$ | N/A | 0 | 85.7 | 317 |
| Marital status |  |  |  |  |
| Married | 75.4 | 1,230 | 86.2 | 978 |
| In union/living with partner | 77.9 | 364 | 86.1 | 282 |
| Not married/in union | 74.4 | 656 | 83.6 | 958 |
| Ever had a child | 75.3 | 747 | 86.7 | 1140 |
| Number of partners in past 12 months |  |  |  |  |
| None | 76.3 | 787 | 84.1 | 893 |
| 1 | 74.8 | 1,332 | 86.1 | 974 |
| 2 or more | 78.6 | 131 | 84.1 | 351 |
| Education |  |  |  |  |
| No formal schooling | 65.3 | 756 | 73.9 | 569 |
| Primary | 78.6 | 662 | 87.1 | 662 |
| Secondary or higher | 80.7 | 832 | 89.5 | 987 |
| Religion |  |  |  |  |
| Christian | 75.9 | 890 | 88.3 | 828 |
| Muslim | 75.8 | 1,295 | 83.6 | 1,334 |
| Other | 63.9 | 65 | 68.9 | 56 |
| Total | 75.5 | 2,250 | 85.0 | 2,218 |

Notes: $\quad$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

With regards to religious affiliation, approximately the same percentage of Christian and Muslim women reported listening to a radio at least once a week (roughly 76\% each), as compared with $64 \%$ of women practicing other religions. Among male respondents, the highest proportion of radio listeners was among Christian men (88\%), and the lowest among those practicing other faiths (69\%).

### 6.2 Newspaper Media Exposure

Table 6.2 presents the distribution of newspaper readers among respondents within COMPASS sites. Overall, approximately $27 \%$ of females and $45 \%$ of males reported reading the newspaper at least once a week. Among females, the proportion of newspaper readers was highest in Lagos (roughly 40\%) and FCT (roughly 39\%) and lowest in Bauchi (nearly 9\%). About 29\% of females in the three states of Kano, Lagos, and Nasarawa reported reading a newspaper at least once a week. Among male respondents, the highest proportion of newspaper readers was in Lagos (roughly 69\%) followed by FCT (approximately 61\%) and the lowest in Kano (roughly 22\%). Approximately 49\% of males in the three states of Kano, Lagos, and Nasarawa reported reading a newspaper at least once in a week. Only about $7 \%$ of females in rural areas reported reading a newspaper at least once a week compared with about $36 \%$ of those in urban areas and roughly $29 \%$ of those in semi-urban areas. Among their male counterparts, about $61 \%$ of those in the urban areas and roughly $51 \%$ of those in semi-urban areas, compared with approximately $16 \%$ of those in the rural areas, reported reading a newspaper at least once in a week.

By age group, the proportion of females who read a newspaper at least once a week is less than $30 \%$ except for those in the age group of 35 to 39 years. Among males, with the exception of those in the 15 to 19 years age category, more than $40 \%$ of males across all the age groups read newspapers at least once a week. For both females and males across marital status, the highest proportion of newspaper readers was among those not married/not in unions (roughly $40 \%$ of females compared to roughly $52 \%$ of males) and lowest among the married (approximately $21 \%$ of females and $38 \%$ of males). Females with only one sexual partner were less likely to read newspapers (24\%) compared with those with two or more sexual partners (32\%). The pattern is similar but higher among their male counterparts, as men with two or more sexual partners reported the highest proportion of newspaper readership (roughly 51\%) compared with those with only one sexual partner (roughly 46\%). Across educational levels, female respondents with a secondary school or higher education reported the highest proportion of newspaper readership (roughly 43\%), followed by those with a primary education (approximately 29\%), and the lowest proportion among those with no formal education (roughly 5\%). The pattern is similar among males: $63 \%$ of male respondents with a secondary school education or higher reported reading newspapers at least daily, while approximately $45 \%$ of those with a primary school education, and only $10 \%$ of those with no formal schooling read newspapers at least once a week. Generally, the proportions of males who reported reading newspapers were higher than for females across all selected characteristics.

With regards to religious affiliation, among female respondents, the highest proportion of newspaper readers was among Christians (close to 40\%), while the lowest was among Muslim women (approximately 19\%). Among male respondents, a similar pattern was observed, as the
highest proportion of newspaper readers was also among Christians (68\%), and the lowest was also among Muslims (31\%).

Table 6.2: Percentage of Respondents Who Read a Newspaper at Least Once a Week, by Gender, 2009

| COMPASS LGAs | Female | n | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 8.5 | 259 | 23.1 | 373 |
| FCT | 39.4 | 355 | 60.9 | 297 |
| Kano | 11.9 | 604 | 21.8 | 670 |
| Lagos | 39.8 | 699 | 69.4 | 566 |
| Nasarawa | 12.3 | 333 | 34.3 | 312 |
| $\mathrm{KLN}^{\dagger}$ total | 29.4 | 1,636 | 49.2 | 1,548 |
| Location ${ }^{\text {c }}$ |  |  |  |  |
| Urban | 35.5 | 978 | 60.6 | 887 |
| Semi-urban | 28.7 | 467 | 50.7 | 422 |
| Rural | 7.1 | 775 | 16.2 | 879 |
| Age |  |  |  |  |
| 15-19 | 25.0 | 352 | 28.5 | 308 |
| 20-24 | 28.8 | 380 | 49.3 | 311 |
| 25-29 | 28.5 | 466 | 53.0 | 337 |
| 30-34 | 26.8 | 348 | 49.7 | 343 |
| 35-39 | 32.5 | 279 | 51.1 | 230 |
| 40-44 | 29.0 | 208 | 42.6 | 193 |
| 45-49 | 19.5 | 217 | 40.9 | 179 |
| $\geq 50$ | N/A | 0 | 41.2 | 317 |
| Marital status |  |  |  |  |
| Married | 20.6 | 1,230 | 37.9 | 978 |
| In union/living with partner | 25.8 | 364 | 45.5 | 282 |
| Not married/in union | 39.8 | 656 | 51.8 | 958 |
| Ever had a child | 23.1 | 1,503 | 40.2 | 1078 |
| Number of partners in past 12 months |  |  |  |  |
| None | 32.5 | 787 | 41.2 | 893 |
| 1 | 24.1 | 1,332 | 46.1 | 974 |
| 2 or more | 31.6 | 131 | 51.4 | 351 |
| Education |  |  |  |  |
| No formal schooling | 5.3 | 756 | 10.3 | 569 |
| Primary | 28.6 | 662 | 45.3 | 662 |
| Secondary or higher | 42.5 | 832 | 63.1 | 987 |
| Religion |  |  |  |  |
| Christian | 39.6 | 890 | 67.6 | 828 |
| Muslim | 18.7 | 1,295 | 30.9 | 1,334 |
| Other | 27.7 | 65 | 44.4 | 56 |
| Total | 27.4 | 2,250 | 45.0 | 2,218 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

### 6.3 Television Media Exposure

The distribution of respondents who watch television in COMPASS sites at least once a week is presented in table 6.3. Unlike the exposure pattern of previously discussed media, the overall proportion of female respondents who reported watching television at least once a week was higher than that of male respondents ( $65 \%$ of females compared with roughly $62 \%$ of males). Female respondents living in Lagos had the highest proportion of television watchers (88.1\%), while those in Bauchi had the lowest proportion (28\%). About 70\% of females and nearly 69\% of males in the three combined states of Kano, Lagos, and Nasarawa reported viewing television at least once a week. About $89 \%$ of males in Lagos compared with $30 \%$ of those in Bauchi reported watching television at least once in a week. There is a marked difference in the proportion of those who watch television at least once in a week between rural and urban areas among both male and female respondents. Among female respondents, $85 \%$ living in urban areas compared with roughly $18 \%$ of those in rural areas watched television once a week, while $84 \%$ of male respondents in urban areas compared with $21 \%$ of those in rural areas also watched television at least once a week. The proportion of those who watched television at least once a week among those not yet married was higher than those who were married, for both females (unmarried/not in unions-roughly $76 \%$ vs. married-roughly $57 \%$ ) and males (unmarried/not in unions-roughly $71 \%$ vs. married-roughly 51\%). Across education levels, female respondents with no education had the lowest proportion of television watchers (approximately 30\%) compared with those with a primary education (roughly 70\%), and those with a secondary school education or higher (roughly 87\%). Among males, only about $26 \%$ of those with no education compared with roughly $59 \%$ of those with a primary education, and $83 \%$ of those with a secondary school education or higher reported watching television at least once a week.

The distribution of respondents not exposed to any form of mass media at least once a week, by selected characteristics, is presented in table 6.4. Overall, approximately $13 \%$ of females and roughly $8 \%$ of males had no exposure to any type of mass media. The highest proportion among females for this group of respondents with no mass media exposure was in Bauchi (roughly 32\%), followed by Nasarawa (roughly 31\%) while the lowest was in Lagos (approximately 6\%). The pattern was the similar among males with the highest proportion of those not exposed to any form of mass media in Bauchi (roughly 18\%) and the lowest proportion in Lagos (roughly 3\%). By residence for both females and males, the proportion of those not exposed to any of the mass media was highest in rural areas (females, 33\%; males, roughly 18\%), and least in urban areas (females, 5\%; males, 3\%). Married women (approximately 15\%) had a higher proportion of those not exposed to any mass media compared with those not married/in unions (roughly 10\%). There was no difference in the proportion among married males (8\%) and their unmarried counterparts (8\%). Across educational levels, females with no formal education had the highest proportion of those not exposed to any media (roughly 29\%), while approximately $8 \%$ of those with a primary school education, and roughly $5 \%$ of those with a secondary school education or higher were also not exposed to any media. The distribution was also similar among males, as about $20 \%$ of those with no formal education, approximately $5 \%$ of those with a primary school education, and roughly $3 \%$ of those with a secondary school education or higher reported lack of exposure to mass media.

Table 6.3: Percentage of Respondents Who Watch Television at Least Once a Week, by Gender, 2009

| COMPASS LGAs | Female | n | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 28.2 | 259 | 29.5 | 373 |
| FCT | 71.8 | 355 | 77.4 | 297 |
| Kano | 38.6 | 604 | 40.3 | 670 |
| Lagos | 88.1 | 699 | 89.4 | 566 |
| Nasarawa | 42.3 | 333 | 55.8 | 312 |
| $\mathrm{KLN}^{\dagger}$ total | 69.9 | 1,636 | 68.8 | 1,548 |
| Location |  |  |  |  |
| Urban | 85.1 | 978 | 84.3 | 887 |
| Semi-urban | 63.4 | 467 | 70.9 | 422 |
| Rural | 17.7 | 775 | 20.5 | 879 |
| Age |  |  |  |  |
| 15-19 | 60.6 | 352 | 48.3 | 308 |
| 20-24 | 63.3 | 380 | 67.2 | 311 |
| 25-29 | 69.7 | 466 | 73.4 | 337 |
| 30-34 | 63.2 | 348 | 65.8 | 343 |
| 35-39 | 72.3 | 279 | 62.6 | 230 |
| 40-44 | 65.4 | 208 | 60.9 | 193 |
| 45-49 | 58.1 | 217 | 60.8 | 179 |
| $\geq 50$ | N/A | 0 | 54.5 | 317 |
| Marital status |  |  |  |  |
| Married | 56.7 | 1,230 | 51.0 | 978 |
| In union/living with partner | 71.0 | 364 | 69.6 | 282 |
| Not married/in union | 76.0 | 656 | 70.8 | 958 |
| Ever had a child | 61.5 | 1,503 | 55.2 | 1078 |
| Number of partners in past 12 months |  |  |  |  |
| None | 68.0 | 787 | 62.9 | 893 |
| 1 | 62.9 | 1,332 | 61.4 | 974 |
| 2 or more | 69.4 | 131 | 62.3 | 351 |
| Education |  |  |  |  |
| No formal schooling | 30.3 | 756 | 26.3 | 569 |
| Primary | 69.5 | 662 | 58.9 | 662 |
| Secondary or higher | 86.9 | 832 | 83.0 | 987 |
| Religion |  |  |  |  |
| Christian | 81.5 | 890 | 84.7 | 828 |
| Muslim | 53.9 | 1,295 | 48.1 | 1,334 |
| Other | 52.2 | 65 | 56.6 | 56 |
| Total | 65.0 | 2,250 | 62.1 | 2,218 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

Table 6.4: Percentage of Respondents Not Exposed to Media at Least Once a Week, by Gender, 2009

| COMPASS LGAs | Female | n | Male | n |
| :---: | :---: | :---: | :---: | :---: |
| State |  |  |  |  |
| Bauchi | 32.4 | 259 | 18.2 | 373 |
| FCT | 14.1 | 355 | 5.4 | 297 |
| Kano | 13.4 | 604 | 8.5 | 670 |
| Lagos | 6.3 | 699 | 2.8 | 566 |
| Nasarawa | 30.6 | 333 | 12.2 | 312 |
| KLN ${ }^{\dagger}$ total | 10.1 | 1,636 | 5.6 | 1,548 |
| Location |  |  |  |  |
| Urban | 5.0 | 978 | 3.0 | 887 |
| Semi-urban | 11.0 | 467 | 4.1 | 422 |
| Rural | 33.0 | 775 | 17.8 | 879 |
| Age |  |  |  |  |
| 15-19 | 13.6 | 352 | 19.3 | 308 |
| 20-24 | 12.0 | 380 | 5.0 | 311 |
| 25-29 | 13.0 | 466 | 5.7 | 337 |
| 30-34 | 16.0 | 348 | 4.0 | 343 |
| 35-39 | 11.2 | 279 | 5.0 | 230 |
| 40-44 | 8.4 | 208 | 7.5 | 193 |
| 45-49 | 15.1 | 217 | 6.5 | 179 |
| $\geq 50$ | N/A | 0 | 9.9 | 317 |
| Marital status |  |  |  |  |
| Married | 15.0 | 1,230 | 8.3 | 978 |
| In union/living with partner | 12.7 | 364 | 5.8 | 282 |
| Not married/in union | 9.6 | 656 | 8.0 | 958 |
| Ever had a child | 14.7 | 1,503 | 7.8 | 1078 |
| Number of partners in past 12 months |  |  |  |  |
| None | 12.1 | 787 | 8.7 | 893 |
| 1 | 13.9 | 1,332 | 7.6 | 974 |
| 2 or more | 7.7 | 131 | 6.5 | 351 |
| Education |  |  |  |  |
| No formal schooling | 28.7 | 756 | 19.6 | 569 |
| Primary | 7.8 | 662 | 5.4 | 662 |
| Secondary or higher | 5.1 | 832 | 3.2 | 987 |
| Religion |  |  |  |  |
| Christian | 9.5 | 890 | 3.2 | 828 |
| Muslim | 14.9 | 1,295 | 10.6 | 1,334 |
| Other | 24.1 | 65 | 9.8 | 56 |
| Total | 13.0 | 2,250 | 7.8 | 2,218 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.

With regards to religious affiliation, among female respondents Christians were least likely to not be exposed to mass media at least once a week (10\%), while those practicing faiths other than Christian or Muslim were most likely to not be exposed to mass media at least once a week ( $24 \%$ ). Among male respondents, the highest proportion of individuals not exposed to mass media at least once a week was among Muslims (11\%), while the lowest was among Christians (3\%). In general, except for age groups, females had a higher proportion of respondents not exposed to any form of mass media across all characteristics considered.

## CHAPTER 7: PRIMARY SCHOOL EDUCATION

## Nana Koram

This chapter describes the household's primary school-aged children's attendance patterns, promotion rates, and retention rates.

### 7.1 School Attendance

The attendance rates of primary school children, aged 6 to 14 years, and 6 to 11 years is shown below in table 7.1, by state and gender. The table reports on all primary school students in this data set, which comprises both age groups (that is, 6 to 11 years and 6 to 14 years), as different programs use different age groups to define school-aged children.

In general, for children aged 6 to 14 years, the percentages of males and females who attended school are similar: $39 \%$ for boys aged 6 to 14 years, and $38 \%$ for girls of a similar age. When looking at the combined data for Kano, Lagos, and Nasarawa states, a similar pattern is observed, with the percentage of boys aged 6 to 14 years who attended primary school being slightly higher at $41 \%$ versus $38 \%$ for girls. Both male and female attendance rates for children aged 6 to 14 years were highest in Nasarawa, with the attendance rate for girls in this area higher than that for boys: approximately $54 \%$ for girls, and roughly $51 \%$ for boys. The lowest attendance rates for both males and females were in Bauchi, but again with the attendance rate for girls slightly higher than that for boys: $33 \%$ for girls, and $29 \%$ for boys.

Among children aged 6 to 11 years, the overall attendance rate for girls was slightly higher than that for boys: $47 \%$ for girls, and $45 \%$ for boys. However, the combined data for Kano, Lagos, and Nasarawa show similar attendance rates for both boys and girls, approximately $48 \%$. While the highest attendance rate for boys aged 6 to 11 years was reported in Nasarawa (roughly 55\%), the highest attendance rate for girls was reported in FCT at $59 \%$. The lowest attendance rates for both boys and girls were reported in Bauchi, with that for boys lower than that for girls: approximately $32 \%$ attendance rate for boys; and $41 \%$ attendance rate for girls.

Figure 7.1 illustrates the gender parity index for primary school children in both age groups (6 to 11 years, and 6 to 14 years) by state. The gender parity index is calculated as follows:

Gross female enrollment in primary school/Total females of primary school age $=$ index Gross male enrollment in primary school/Total males of primary school age

Table 7.1: Attendance Rate of Primary School Children Ages 6-14 and Ages 6-11, by State and Gender, 2009

|  | Bauchi | FCT | Kano | Lagos | Nasarawa | KLN ${ }^{\dagger}$ | Total ${ }^{*}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ages 6-14 |  |  |  |  |  |  |  |
| Male ( n ) | 29.0 ( $\mathrm{n}=456$ ) | $45.3(\mathrm{n}=369)$ | 40.4 ( $\mathrm{n}=998$ ) | 39.8 ( $n=407$ ) | $51.4(n=428)$ | 41.2 ( $\mathrm{n}=1,833$ ) | $38.9(\mathrm{n}=2,658)$ |
| Female (n) | 33.4 ( $n=350$ ) | $50.6(\mathrm{n}=344)$ | 35.7 ( $\mathrm{n}=929$ ) | 38.0 ( $n=379$ ) | $54.4(\mathrm{n}=414)$ | 38.4 ( $\mathrm{n}=1,722$ ) | $38.1(n=2,416)$ |
| Both sexes | 30.3 ( $\mathrm{n}=785$ ) | 48.0 ( $\mathrm{n}=709$ ) | 38.0 ( $\mathrm{n}=727$ ) | 39.0 ( $\mathrm{n}=784$ ) | 53.1 ( $\mathrm{n}=837$ ) | 39.8 ( $n=2,474$ ) | 20.6 ( $n=5,026$ ) |
| Ages 6-11 |  |  |  |  |  |  |  |
| Male (n) | $31.9(\mathrm{n}=321)$ | $53.6(\mathrm{n}=261)$ | $45.4(\mathrm{n}=703)$ | 48.8 ( $\mathrm{n}=289$ ) | 55.3 ( $n=295$ ) | 47.6( $\mathrm{n}=1,287$ ) | $44.7(n=1,869)$ |
| Female (n) | 41.2 ( $n=243$ ) | $58.7(n=254)$ | $43.4(n=634)$ | $51.2(\mathrm{n}=256)$ | $56.9(\mathrm{n}=313)$ | $47.7(n=1,203)$ | $47.1(n=1,483)$ |
| Both sexes | 35.0 ( $\mathrm{n}=548$ ) | 56.4 ( $\mathrm{n}=511$ ) | 44.5 ( $\mathrm{n}=1326$ ) | 50.0 ( $\mathrm{n}=544$ ) | 56.3 ( $\mathrm{n}=604$ ) | 47.7 ( $n=3,533$ ) | $45.8(n=3,533)$ |

Notes: * Total weighted by state.
$\dagger$ KLN refers to Kano, Lagos, and Nasawara.


Figure 7.1: Gender parity index for primary school children ages 6-14 and ages 6-11, by state, 2009.

### 7.2 School Retention and Promotion

Table 7.2 shows the repeater rates for primary school children by grade, state, and gender. For boys, the overall repeater rates were lowest in primary 5 (4\%) and primary 6 (2\%). For girls, the overall repeater rates were also lowest in primary 5 (2\%), and primary 6 (1\%). In Bauchi, the highest repeater rates for both boys and girls were in primary 1 ( $19 \%$ and $14 \%$, respectively). In FCT, however, the highest repeater rate was in primary 2 for both boys and girls ( $16 \%$ and $11 \%$, respectively). In Kano, boys were more likely to repeat primary 1 (17\%) or primary 2 (14\%), while girls were more likely to repeat primary 3 (14\%) or primary 1 , primary 2 , or primary 4 ( $11 \%$ in each class). A similar pattern of repetition for boys was observed in Lagos. Boys were also more likely to repeat primary 1 and/or primary 2 (both at a rate of approximately $11 \%$ ). For girls in Lagos, the highest repeater rate was reported in primary 1 (19\%), with lower rates reported for primary 2 (6\%), and primary 3 (4\%).

Table 7.2: Percentage of Primary School Children Repeaters per Grade, by State and Gender, 2009

|  | Bauchi | FCT | Kano | Lagos | Nasarawa | KLN $^{+}$ | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male |  |  |  |  |  |  |  |
| Primary 1 | 18.5 | 8.3 | 17.4 | 10.5 | 13.3 | 13.9 | 14.4 |
| Primary 2 | 6.7 | 15.6 | 14.0 | 11.1 | 8.5 | 12.4 | 11.7 |
| Primary 3 | 9.5 | 3.2 | 5.7 | 8.3 | 8.0 | 9.0 | 8.7 |
| Primary 4 | $(10.0)$ | 0.0 | 17.8 | $(0.0)$ | $(6.3)$ | 9.9 | 9.3 |
| Primary 5 | $(20.0)$ | 4.8 | 3.6 | $(2.3)$ | $(0.0)$ | 1.7 | 3.5 |
| Primary 6 | $(0.0)$ | $(14.3)$ | $(0.0)$ | $(0.0)$ | $(0.0)$ | 0.0 | 1.5 |
| Female |  |  |  |  |  |  |  |
| Primary 1 | 13.9 | 3.5 | 10.6 | 19.4 | 19.1 | 15.1 | 14.3 |
| Primary 2 | 9.4 | 10.5 | 10.5 | 5.7 | 16.4 | 9.4 | 9.4 |
| Primary 3 | $(8.3)$ | 6.7 | 13.6 | 4.8 | 3.1 | 8.7 | 8.5 |
| Primary 4 | $(9.1)$ | 8.6 | 11.9 | 5.0 | 8.3 | 8.7 | 8.9 |
| Primary 5 | $(0.0)$ | $(0.0)$ | $(0.0)$ | $(0.0)$ | $(5.9)$ | 0.7 | 1.5 |
| Primary 6 | $(0.0)$ | $(0.0)$ | $(0.0)$ | $(0.0)$ | $(0.0)$ | 0.0 | 0.6 |
| Both sexes |  |  |  |  |  |  |  |
| Primary 1 | 15.7 | 5.2 | 15.8 | 14.1 | 18.2 | 15.5 | 15.1 |
| Primary 2 | 8.3 | 11.4 | 14.4 | 7.8 | 8.8 | 12.5 | 11.7 |
| Primary 3 | 10.0 | 4.3 | 10.9 | 6.3 | 4.3 | 8.4 | 8.4 |
| Primary 4 | 12.5 | 4.9 | 13.7 | 4.9 | 8.9 | 10.2 | 10.1 |
| Primary 5 | 12.0 | 8.1 | 5.3 | 0.0 | 2.4 | 2.9 | 4.5 |
| Primary 6 | 0.0 | 7.7 | 6.1 | 0.0 | 5.9 | 3.6 | 3.7 |

Notes: $\quad$ KLN refers to Kano, Lagos, and Nasawara.

The highest repeater rates for both boys and girls in Nasarawa were reported for primary 1 and primary 2 . For boys, the repeater rates in primary 1 was approximately $13 \%$, while the repeater rate in primary 2 was close to $9 \%$. For girls in Nasarawa, repeater rates in both primary 1 and primary 2 were $19 \%$ and $16 \%$, respectively. When looking at the combined results for Kano, Lagos, and Nasarawa, repeater rates for both boys and girls were highest in primary 1 (14\% for boys, and $15 \%$ for girls) and primary 2 ( $12 \%$ for boys and $9 \%$ for girls).

Table 7.3 provides an overview of the percentage of primary school children who dropped out by grade, state, and gender. Overall, dropout rates for both boys and girls were relatively low: the overall highest dropout rate for boys was in primary 2 ( $0.8 \%$ ), while that for girls was in primary 1 and primary 3 (1\%). The overall lowest dropout rates for boys were in primary 3, 4 and 5 ( $0 \%$ in all states), while that for girls were in primary 4 and 5 ( $0 \%$ in all states). No male students in FCT, Kano, or Lagos reported discontinuing their education, while the same was seen for female students in Bauchi and Kano. The highest dropout rate for boys was observed in Bauchi at primary 6 ( $17 \%$ dropout rate), while that for girls was observed in Nasarawa, also at primary 6 ( $13 \%$ dropout rate). These numbers are relatively high in comparison to other dropout rates observed across all states Note, however, that sample size for certain school levels are very small, and thus these results may not be generalizable to an entire state.

Table 7.3: Percentage of Primary School Children Dropouts per Grade, by State and Gender, 2009

|  | Bauchi | FCT | Kano | Lagos | Nasarawa | KLN $^{\dagger}$ | Total $^{*}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male |  |  |  |  |  |  |  |
| Primary 1 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.3 | 0.2 |
| Primary 2 | 4.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 |
| Primary 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Primary 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Primary 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Primary 6 | 16.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Female |  |  |  |  |  |  |  |
| Primary 1 | 0.0 | 0.0 | 0.0 | 2.4 | 0.0 | 1.4 | 1.1 |
| Primary 2 | 0.0 | 0.0 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 |
| Primary 3 | 0.0 | 7.1 | 0.0 | 0.0 | 3.4 | 0.6 | 0.9 |
| Primary 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Primary 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Primary 6 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5 | 0.0 | 0.8 |

[^2]Figure 7.2 illustrates the combined survival rate of primary school students in Kano, Lagos, and Nasarawa states by cohort. This graph shows the proportion of pupils who move from one grade of primary school to the next. The numbers are based on promotion and retention rates derived from household data and applied to a hypothetical cohort of 1,000 children. Overall, survival was high among all grades, more than $96 \%$. However, the survival rates for female students was lower than for male students at all grades.


Figure 7.2: Survival rate of primary school pupils by cohort: the proportion of pupils who move from one grade of primary school to the next: Kano, Lagos, and Nasarawa, 2009.

## CHAPTER 8: TRENDS IN HOUSEHOLD LEVEL INDICATORS

## Nana Koram and Anastasia J. Gage

This chapter compares results obtained in 2005 from the baseline survey to those obtained in 2009 from the end-of-project survey. It examines trends in family planning methods, child bearing, antenatal care and breastfeeding, childhood illness and vaccinations, and primary school education within COMPASS LGAs, and reports on statistically significant changes.

### 8.1 Family Planning Methods

Table 8.1 compares the current use of specific family planning methods by gender and state within COMPASS areas according to baseline and final evaluation results. Overall in 2005, current use of specific family planning methods was highest in FCT ( $10 \%$ of females and approximately $15 \%$ of males), and Lagos (approximately $14 \%$ of females and nearly $21 \%$ of males). Similarly in 2009, the highest numbers were also reported in FCT (16\% of females and $16.8 \%$ of males) and Lagos ( $18 \%$ of females and $29 \%$ of males). The 2009 final evaluation results show that, compared to the baseline results, there was an overall increase in current use of specific family planning methods in both FCT and Lagos, as well as in Nasarawa. However, in states such as Bauchi, there was an overall decrease in current use of specific family planning methods. At baseline, while $2 \%$ of females and $3 \%$ of males reported current use of specific family planning methods, final evaluation results shows a slight decrease in this indicator among both females and males in this state: only $2 \%$ of females and $2 \%$ of males reported current use of specific family planning methods. In Kano, while there was an overall increase in the percent of females reporting current use of specific family planning methods (1\% in 2005 to $3 \%$ in 2009), there was a 0.3 percentage point decrease in the overall percent of males (from 1.5\% in 2005 to $1.2 \%$ in 2009). However, the majority of these changes were not statistically significant with the exception of two changes. In FCT, among females, the 6 percentage point increase in the percent of women reporting current use of specific family planning methods from baseline to final evaluation was statistically significant at the 5\% significance level, thus suggesting that this increase is real and did not occur by chance. In Lagos, among females, the 4 percentage point increase in the percent of women reporting current use of specific family planning methods from baseline to final evaluation was also statistically significant ( $\mathrm{p}<0.01$ ).

Both at baseline and final evaluation, the male condom was the most commonly reported method of contraception, followed by the oral contraceptive pill. The least reported methods of contraception in both years were foam/jelly, followed by the diaphragm. In both 2005 and 2009, the use of injectables was highest in Nasarawa, while IUD use was highest in Lagos.

Table 8.1: Percentage of Respondents Who Report Current Use of Specific Family Planning Methods, by Gender and State: Baseline and End-of-Project Surveys

|  | Bauchi |  | FCT |  | Kano |  | Lagos |  | Nasarawa |  | KLN ${ }^{+}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male |
| 2005 Baseline Survey |  |  |  |  |  |  |  |  |  |  |  |  |
| Female sterilization | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 1.1 | 0.0 | 1.2 | 0.0 | 0.0 | 0.8 |
| Male sterilization | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 1.4 | 0.0 | 1.6 | 0.9 | 0.0 |
| Pill | 0.4 | 0.6 | 3.5 | 2.0 | 0.2 | 0.2 | 3.5 | 1.4 | 0.8 | 2.1 | 1.0 | 2.2 |
| IUD | 0.0 | 0.0 | 0.8 | 0.3 | 0.0 | 0.2 | 1.3 | 0.5 | 0.0 | 0.0 | 0.0 | 0.1 |
| Injectables | 1.1 | 0.0 | 1.5 | 1.6 | 0.5 | 0.2 | 0.8 | 1.3 | 3.5 | 3.4 | 1.1 | 0.1 |
| Implants | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Male condom | 0.8 | 1.9 | 5.0 | 11.2 | 0.5 | 1.1 | 8.5 | 16.5 | 3.1 | 5.0 | 10.3 | 5.6 |
| Female condom | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.4 | 0.0 | 0.1 | 0.1 |
| Diaphragm | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.1 |
| Foam/jelly | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Any modern method | 2.3 | 2.8 | 10.0 | 15.3 | 1.2 | 1.5 | 14.1 | 20.9 | 7.8 | 12.1 | 11.3 | 8.6 |
| N | 287 | 363 | 279 | 365 | 642 | 661 | 658 | 638 | 270 | 380 | 1570 | 1679 |
| 2009 End-of-Project Survey |  |  |  |  |  |  |  |  |  |  |  |  |
| Female sterilization | 0.0 | 0.3 | 0.9 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | 0.0 | 0.0 | 0.2 | 0.1 |
| Male sterilization | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Pill | 0.4 | 0.5 | 4.6 | 1.3 | 1.9 | 0.4 | 4.9 | 0.5 | 1.7 | 1.0 | 0.0 | 3.9 |
| IUD | 0.0 | 0.3 | 1.8 | 0.0 | 0.4 | 0.0 | 1.1 | 0.5 | 0.0 | 0.0 | 0.0 | 0.1 |
| Injectables | 0.0 | 0.0 | 3.1 | 1.0 | 0.8 | 0.3 | 1.8 | 0.0 | 7.0 | 4.2 | 0.0 | 1.8 |
| Implants | 0.4 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 |
| Male condom | 0.8 | 1.3 | 4.9 | 15.2 | 0.0 | 0.6 | 9.5 | 26.9 | 2.6 | 7.4 | 15.9 | 6.2 |
| Female condom | 0.0 | 0.0 | 0.6 | 0.3 | 0.0 | 0.0 | 0.8 | 0.4 | 0.3 | 0.0 | 0.2 | 0.5 |
| Diaphragm | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Foam/jelly | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Any modern method | 1.7 | 2.1 | 16.2* | 16.8 | 2.8 | 1.2 | 17.8** | 28.6 | 11.3 | 12.5 | 13.6 * | 11.1* |
| N | 268 | 380 | 356 | 300 | 617 | 677 | 714 | 578 | 334 | 312 | 1665 | 1567 |

Notes: $\quad \dagger$ KLN refers to Kano, Lagos, and Nasawara.
Significantly different between baseline and final values $\left(\chi^{2}\right):{ }^{*} \mathrm{p}<0.05,{ }^{* *} \mathrm{p}<0.01$.

Table 8.2 compares the percentage, at baseline and at the final evaluation, of respondents who currently use any modern contraception by subgroups and socio-demographic factors. Overall, both females and males reported higher current use of family planning methods at final evaluation ( $11.8 \%$ of females and $15 \%$ of males) compared to at baseline ( $9 \%$ of females and $12 \%$ of males). Among female respondents, contraceptive use at both baseline and final evaluation was highest among residents of Lagos (14\% of females at baseline and 18\% of females at final evaluation). In addition, with the exception of Bauchi for which there was a decrease, there was an increase in contraceptive use in all states from baseline to final evaluation. Among females, the increases in any contraceptive use by state from baseline to final evaluation were all statistically significant with the exception of the changes observed in Bauchi and Nasarawa. That is, among female residents of Bauchi, the decrease in the percentage of women using any contraceptive from baseline to final evaluation was not statistically significant and thus may have been due to chance. Similarly, in Nasarawa, the increase in any contraceptive use among female residents was not statistically significant. The combined results from Kano, Lagos, and Nasarawa show a statistically significant increase ( $\mathrm{p}<0.01$ ) in any contraceptive use among female residents of these areas from baseline to final evaluation. Among males, the increase in any contraceptive use among male residents of Lagos was statistically significant ( $\mathrm{p}<0.01$ ), although none of the other changes observed in the other states were significant.

Any contraceptive use at both baseline and final evaluation among females was also highest in urban areas ( $12 \%$ at baseline and $16 \%$ at final evaluation; $\mathrm{p}<0.01$ ). Among males, it was also highest in urban areas, although these results were not statistically significant. With respect to age, while contraceptive use was highest at baseline among women aged 35 to 39 years (15\%), final evaluation results show that highest contraceptive use shifted to younger women aged 25 to 29 years (18\%). All age categories at final evaluation also showed overall increases in the percentage of women using any modern contraception. The $7 \%$ increase in the percentage of women aged 25 to 29 years using any modern contraceptive was statistically significant at the $1 \%$ significance level. Among men, the highest percentage of any contraceptive use at final evaluation was among those aged 30 to 34 years, and this increase was statistically significant from that obtained at baseline for this age group. Among men aged 15 to 19 years, there was a marked decrease in any contraceptive use from baseline to final evaluation, and this decrease was highly significant ( $\mathrm{p}<0.01$ ).

Results from the final evaluation also show that there were also marked increases in any contraceptive use among women regardless of marital status, although the highest reported contraceptive use at the final evaluation was among women in unions/living with their partners (14\%), while at baseline the highest percentage was among single women (10\%). Both increases in any contraceptive use observed from baseline to final evaluation among women in unions/living with partners and single women were statistically significant. There was also a statistically significant increase in any contraceptive use from baseline to final evaluation among women who have ever had a child. Among men, the highest percentage of any contraceptive use was among those in unions/living with their partners, and this increase among this group from baseline to final evaluation was statistically significant ( $\mathrm{p}<0.01$ ). However, the increase observed in any contraceptive use among men who have ever had a child from baseline to final evaluation was not statistically significant.

Table 8.2: Percentage of Respondents Who Currently Use any Modern Contraception, by Gender: Baseline (2005) and End-of-Project (2009) Surveys

| COMPASS LGAs | Female |  |  |  | Male |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2005 |  | 2009 |  | 2005 |  | 2009 |  |
|  | \% | n | \% | n | \% | n | \% | n |
| State |  |  |  |  |  |  |  |  |
| Bauchi | 2.3 | 265 | 1.7 | 237 | 2.8 | 363 | 2.1 | 373 |
| FCT | 10.0 | 261 | $16.2^{*}$ | 327 | 15.3 | 365 | 16.8 | 297 |
| Kano | 1.5 | 604 | $2.8{ }^{* *}$ | 532 | 1.5 | 661 | 1.2 | 670 |
| Lagos | 14.1 | 632 | $17.8{ }^{* *}$ | 656 | 20.9 | 638 | 28.6** | 566 |
| Nasarawa | 7.8 | 256 | 11.3 | 302 | 12.1 | 380 | 12.5 | 312 |
| $\mathrm{KLN}^{\dagger}$ total | 10.3 | 1,492 | $13.0{ }^{* *}$ | 1,636 | 13.6 | 1,679 | 17.3 | 1,548 |
| Location |  |  |  |  |  |  |  |  |
| Urban | 11.5 | 1,075 | $16.0{ }^{* *}$ | 901 | 16.5 | 1,153 | 21.6 | 887 |
| Semi-urban | 7.2 | 176 | 9.5 | 418 | 14.9 | 213 | 15.8 | 422 |
| Rural | 1.8 | 767 | 3.6 | 706 | 2.8 | 104 | 2.8 | 879 |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 1.5 | 337 | 1.6 | 317 | 7.1 | 348 | $1.14{ }^{* *}$ | 308 |
| 20-24 | 8.4 | 338 | 9.7 | 342 | 13.3 | 293 | 12.8 | 311 |
| 25-29 | 10.7 | 395 | $17.6{ }^{* *}$ | 406 | 18.0 | 409 | 21.1 | 337 |
| 30-34 | 13.1 | 276 | 14.4 | 313 | 11.7 | 350 | 21.6* | 343 |
| 35-39 | 14.7 | 216 | 15.4 | 262 | 12.4 | 273 | 15.5 | 230 |
| 40-44 | 9.7 | 172 | 12.2 | 202 | 15.9 | 220 | 18.7 | 193 |
| 45-49 | 8.8 | 284 | 9.8 | 212 | 8.5 | 238 | 20.8 | 179 |
| $\geq 50$ | N/A | N/A | N/A | N/A | 6.9 | 276 | 6.9 | 317 |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 7.5 | 1,103 | 11.4 | 1,077 | 9.0 | 1,222 | 8.6 | 978 |
| In union/living with partner | 9.1 | 296 | $13.5{ }^{*}$ | 329 | 7.4 | 325 | $21.2{ }^{* *}$ | 282 |
| Not married/in union | 10.0 | 619 | 11.6* | 648 | 17.1 | 860 | 18.5 | 958 |
| Ever had a child | 9.2 | 1,575 | $12.6{ }^{*}$ | 1,364 | 10.3 | 773 | 12.2 | 1,078 |
| Education |  |  |  |  |  |  |  |  |
| No formal schooling | 2.2 | 769 | 3.9 | 697 | 3.3 | 713 | 2.7 | 569 |
| Primary | 7.5 | 410 | 13.3 ** | 591 | 6.6 | 530 | 13.9** | 662 |
| Secondary or higher | 13.6 | 839 | $16.4{ }^{*}$ | 766 | 18.6 | 1,164 | 21.3 | 987 |
| Religion |  |  |  |  |  |  |  |  |
| Christian | 13.5 | 836 | 17.3 ** | 830 | 18.1 | 945 | 26.1 | 828 |
| Muslim | 4.2 | 1,100 | $7.9{ }^{*}$ | 1,161 | 7.9 | 1,344 | 7.6 | 1334 |
| Other | 15.2 | 82 | 8.0 | 63 | 8.4 | 118 | 7.9 | 56 |
| Total | 9.0 | 2,018 | $11.8{ }^{* *}$ | 2,054 | 11.9 | 2,407 | 14.6 | 2,218 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara.
$\mathrm{N} / \mathrm{A}=$ not applicable. Significantly different between baseline and final values $\left(\chi^{2}\right):{ }^{*} \mathrm{p}<0.05, * * \mathrm{p}<0.01$.

With respect to education, among both women and men, the highest levels of any contraceptive use at both baseline and final evaluation were reported among those who were better educated, as compared to those with no formal schooling, though there was a general increase in any contraceptive use from baseline to final evaluation regardless of educational status. Among women, the increases observed at final evaluation among those with a primary school education and those with a secondary school education or higher were both statistically significant. However among men, only the increase observed at final evaluation among those with a primary school education was statistically significant. Statistically significant increases in any contraceptive use were also observed among Christian and Muslim women, although among men, no statistically significant results were obtained among men of any religious affiliation.

### 8.2 Antenatal Care and Breastfeeding

Table 8.3 compares the percentage of mothers who obtained ANC services during their last pregnancy from a trained provider at a hospital or clinic at baseline and final evaluation. Overall, among women who obtained ANC services at least once, there was a greater than 20 percentage points increase in use of ANC services at least once from baseline to final evaluation, and this increase was highly significant ( $\mathrm{p}<0.01$ ). However, with regards to women who obtained ANC services at least four times, the overall results obtained from baseline to final evaluation were not significantly different from each other.

In all states but Bauchi, there were highly significant increases ( $\mathbf{p}<0.01$ ) in the percentage of women who obtained ANC services from a trained provider at least once. The highest percentage of women who obtained ANC services at least once at both baseline and final evaluation was among those living in FCT. On the other hand, among women who obtained ANC services at least four times, statistically significant results were obtained only for those living in Nasarawa (increase of nearly 10 percentage points from baseline to final evaluation). By residence, the highest level of women who obtained ANC services at least once at both baseline and final evaluation was among urban residents; however, statistically significant increases from baseline to final evaluation were obtained from women living in all three types of residences. There was a sharp decrease (approximately 12 percentage points) among semi-urban women who obtained ANC services at least four times, and this result was statistically significant at the $5 \%$ significance level. Among rural residents, however, there was a statistically significant increase ( $\mathrm{p}<0.01$ ) in the percentage of women who obtained ANC services at least four times from a trained provider at a hospital or clinic. Although there was a slight decrease in the percentage of women in urban areas who obtained ANC services at least four times from baseline to final evaluation, this result was not statistically significant.

Statistically significant increases were obtained among women of all age categories who obtained ANC services at least once during their last pregnancy, although no statistically significant results were obtained among those who obtained ANC services at least four times. With regards to marital status, the percentage of single women who obtained ANC services at least once more than doubled from baseline to final evaluation, and this increase was statistically significant. Statistically significant increases were also obtained among married women and women in unions/living with their partners.

Table 8.3: Percentage of Mothers Who Obtained ANC Services during Their Last Pregnancy from a Trained Provider at a Hospital or Clinic, Baseline (2005) and End-ofProject (2009) Surveys

| COMPASS LGAs | Obtained ANC at Least Once |  |  |  | ANC Four or More Times |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2005 |  | 2009 |  | 2005 |  | 2009 |  |
|  | \% | n | \% | n | \% | n | \% | n |
| State |  |  |  |  |  |  |  |  |
| Bauchi | 35.8 | 232 | 39.1 | 192 | 26.7 | 232 | 22.4 | 192 |
| FCT | 49.3 | 201 | 72.5** | 233 | 41.3 | 201 | 39.9 | 233 |
| Kano | 22.7 | 520 | 44.9 ** | 381 | 18.1 | 520 | 23.4 | 381 |
| Lagos | 42.6 | 503 | 68.0 ** | 459 | 39.2 | 503 | 34.0 | 459 |
| Nasarawa | 43.5 | 207 | 58.2 ** | 239 | 27.1 | 207 | $37.2^{*}$ | 239 |
| $\mathrm{KLN}^{\dagger}$ total | 35.7 | 1,230 | $60.4 * *$ | 1,118 | 31.2 | 1,230 | 31.1 | 1,118 |
| Location |  |  |  |  |  |  |  |  |
| Urban | 43.1 | 862 | $68.4 * *$ | 636 | 38.6 | 862 | 37.1 | 636 |
| Semi-urban | 40.4 | 140 | $55.1{ }^{*}$ | 288 | 32.0 | 140 | 20.5* | 288 |
| Rural | 20.5 | 661 | $37.3{ }^{* *}$ | 558 | 14.2 | 661 | $21.3{ }^{* *}$ | 558 |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 21.6 | 183 | 42.9** | 55 | 16.4 | 183 | 27.3 | 55 |
| 20-24 | 36.5 | 256 | $56.4 * *$ | 182 | 31.2 | 256 | 28.7 | 182 |
| 25-29 | 42.5 | 344 | $68.8{ }^{* *}$ | 326 | 36.4 | 344 | 39.8 | 326 |
| 30-34 | 42.7 | 252 | 59.0 ** | 302 | 35.2 | 252 | 31.2 | 302 |
| 35-39 | 43.0 | 212 | 64.0 ** | 257 | 38.8 | 212 | 30.2 | 257 |
| 40-44 | 29.1 | 160 | 49.1*** | 192 | 23.8 | 160 | 24.6 | 192 |
| 45-49 | 30.2 | 256 | $46.8{ }^{* *}$ | 189 | 27.1 | 256 | 22.1 | 189 |
| $\geq 50$ | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/a |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 38.4 | 1,048 | $59.2{ }^{* *}$ | 1,079 | 31.5 | 1,048 | 30.8 | 1,079 |
| In union/living with partner | 45.8 | 286 | $59.4{ }^{* * *}$ | 331 | 43.3 | 286 | 28.9 ** | 331 |
| Not married/in union | 21.9 | 329 | $47.8{ }^{* *}$ | 147 | 18.7 | 329 | 30.4 | 147 |
| Number of partners in last 12 months |  |  |  |  |  |  |  |  |
| None | 27.6 | 198 | $54.1{ }^{* *}$ | 411 | 23.7 | 198 | 28.5 | 411 |
| 1 | 37.5 | 1,378 | $60.5{ }^{* *}$ | 1,053 | 32.0 | 1,378 | 32.0 | 1053 |
| 2 or more | 35.3 | 87 | 47.7 | 93 | 29.9 | 87 | 18.3 | 93 |
| Education |  |  |  |  |  |  |  |  |
| No formal schooling | 23.3 | 695 | 39.0 ** | 581 | 17.1 | 695 | 17.7 | 581 |
| Primary | 46.0 | 355 | 65.3 ** | 496 | 39.6 | 355 | 34.2 | 496 |
| Secondary or higher | 43.2 | 613 | $71.1{ }^{* *}$ | 427 | 39.2 | 613 | 39.8 | 427 |
| Religion |  |  |  |  |  |  |  |  |
| Christian | 43.6 | 624 | 67.3 ** | 560 | 38.1 | 624 | 36.5 | 560 |
| Muslim | 31.8 | 975 | $51.8{ }^{* *}$ | 905 | 26.6 | 975 | 26.3 | 905 |
| Other | 26.3 | 64 | 77.0 ** | 38 | 21.4 | 64 | 34.9 | 38 |
| Total | 36.2 | 1,663 | 58.1** | 1,563 | 30.9 | 1,663 | 30.3 | 1,563 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara.
N/A = not applicable.
Significantly different between baseline and final values $\left(\chi^{2}\right):{ }^{*} \mathrm{p}<0.05,{ }^{* *} \mathrm{p}<0.01$.

However, among women in unions/living with their partners, there was a marked decrease in the percentage of women who obtained ANC services at least four times from baseline to final evaluation, and this result was significant at the $1 \%$ significance level. No statistically significant results were obtained for women of other marital statuses.

With respect to number of partners in the last 12 months, among women with only one partner or no partner in the last 12 months, statistically significant increases in the percentage of women who obtained ANC services at least once from baseline to final evaluation were obtained. However the increase in the percentage observed among those with two or more partners was not statistically significant. Similarly, no statistically significant results were obtained in the percentages of women who obtained ANC services at least four times regardless of number of partners in the last 12 months. Among women who obtained ANC services at least once, there were significant increases in percentages from baseline to final evaluation regardless of educational status, with the highest level at final evaluation being among the most educated women (women with a secondary school education or higher) while at baseline the highest level was among women with only a primary school education. No statistically significant results were obtained among women who obtained ANC services at least four times regardless of education level. With regards to religion, statistically significant increases were observed from baseline to final evaluation among women who obtained ANC services at least once, regardless of religious affiliation. The highest percentage of women who obtained ANC services at least once at final evaluation was among women reporting other religions (77\%), while at baseline, the highest percentage was observed among Christian women (44\%). In contrast, no statistically significant results were obtained among women who obtained ANC services at least four times, regardless of religious affiliation.

Table 8.4 compares the percentage of women who received or were counseled on IPT for malaria with Fansidar at least once, among those women who obtained ANC services from a trained provider at a hospital or clinic at baseline and final evaluation. Overall, there was a significant increase in the percentage of women who received IPT for malaria with Fansidar at least once (from $9 \%$ at baseline to $14 \%$ at final evaluation; $\mathrm{p}<0.05$ ), among those women who obtained ANC services from a trained provider at a hospital or clinic. There was also a significant increase in the percentage of women who were counseled on IPT for malaria (from $48 \%$ at baseline to $55.6 \%$ at final evaluation; $\mathrm{p}<0.05$ ).

The breakdown of the results by state show that, for the most part, there were increases in the percentage of women who received IPT for malaria with Fansidar at final evaluation with the exception of FCT and Lagos, although these decreases were not statistically significant. There were significant sharp increases in the percentage of women who received IPT (Fansidar) in Kano (from 3\% at baseline to 23\% at final evaluation) and Nasarawa (1\% at baseline to 27\% at final evaluation). The combined results from Kano, Lagos, and Nasarawa also show that there was a significant increase in the percentage of women who received IPT (Fansidar). There were also increases at final evaluation in the percentages of women who were counseled on IPT in each state, although these changes were significant only in FCT ( $\mathrm{p}<0.05$ ), Kano ( $\mathrm{p}<0.05$ ) and Nasarawa ( $\mathrm{p}<0.01$ ). The highest percentage of women who were counseled on IPT at final evaluation was for FCT; at baseline, the highest percentage was for Lagos.

Table 8.4: Percentage of Women Who Received IPT (Fansidar) at Least Once, and Percentage Counseled on IPT, among Women Obtaining ANC Services from a Trained Provider at a Hospital or Clinic, Baseline (2005) and End-of-Project (2009) Surveys

| COMPASS LGAs | Given IPT (Fansidar) |  |  |  | Counseled on IPT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2005 |  | 2009 |  | 2005 |  | 2009 |  |
|  | \% | n | \% | $n$ | \% | $n$ | \% | n |
| State |  |  |  |  |  |  |  |  |
| Bauchi | 9.6 | 83 | 17.3 | 75 | 25.3 | 83 | 32.0 | 75 |
| FCT | 10.1 | 99 | 9.5 | 169 | 55.6 | 99 | 68.6** | 169 |
| Kano | 3.4 | 118 | 22.8** | 171 | 37.3 | 118 | 52.0 * | 171 |
| Lagos | 11.2 | 214 | 9.9 | 312 | 58.9 | 214 | 60.9 | 312 |
| Nasarawa | 1.1 | 90 | 26.6 ** | 139 | 20.0 | 90 | $36.7^{* *}$ | 139 |
| KLN ${ }^{\dagger}$ total | 8.8 | 422 | 14.0 * | 630 | 51.5 | 422 | 57.2 | 630 |
| Location |  |  |  |  |  |  |  |  |
| Urban | 11.2 | 381 | 14.1 | 438 | 54.0 | 381 | 61.5* | 438 |
| Semi-urban | 3.3 | 60 | 9.8* | 168 | 53.8 | 60 | 61.7 | 168 |
| Rural | 1.2 | 163 | $16.3 * *$ | 248 | 16.9 | 163 | 30.0 ** | 248 |
| Age 0.0 - ${ }^{\text {a }}$ ** |  |  |  |  |  |  |  |  |
| 15-19 | 0.0 | 42 | 31.6 ** | 25 | 34.0 | 42 | 51.1 | 25 |
| 20-24 | 6.7 | 99 | 28.8** | 107 | 44.2 | 99 | 49.0 | 107 |
| 25-29 | 13.2 | 150 | 10.9 | 224 | 52.7 | 150 | 59.6 | 224 |
| 30-34 | 7.4 | 103 | 12.4 | 178 | 52.4 | 103 | 55.8 | 178 |
| 35-39 | 10.9 | 90 | 13.0 | 161 | 51.4 | 90 | 58.9 | 161 |
| 40-44 | 8.3 | 48 | 11.9 | 88 | 43.9 | 48 | 57.3 | 88 |
| 45-49 | 8.3 | 72 | 9.5 | 92 | 43.4 | 72 | 46.1 | 92 |
| $\geq 50$ | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 10.3 | 409 | 14.8 | 615 | 48.8 | 409 | $56.6{ }^{*}$ | 615 |
| In union/living with partner | 5.6 | 122 | 11.3 | 197 | 48.2 | 122 | 52.2 | 197 |
| Not married/in union | 8.3 | 73 | 14.5 | 63 | 48.0 | 73 | 56.4 | 63 |
| Number of partners in last 12 months |  |  |  |  |  |  |  |  |
| None | 5.9 | 57 | 9.6 | 218 | 44.7 | 57 | 56.8 | 218 |
| 1 | 9.2 | 518 | $15.2{ }^{* *}$ | 619 | 49.1 | 518 | 55.0 | 619 |
| 2 or more | 10.2 | 29 | 17.6 | 38 | 37.2 | 29 | 59.1 | 38 |
| Education |  |  |  |  |  |  |  |  |
| No formal schooling | 6.2 | 173 | 17.1** | 233 | 30.2 | 173 | 41.2* | 233 |
| Primary | 5.4 | 170 | 11.9* | 324 | 51.2 | 170 | 55.8 | 324 |
| Secondary or higher | 12.1 | 261 | 14.2 | 309 | 55.1 | 261 | 63.9 | 309 |
| Religion |  |  |  |  |  |  |  |  |
| Christian | 9.5 | 271 | 13.3 | 379 | 47.9 | 271 | 60.6** | 379 |
| Muslim | 8.9 | 313 | $14.9{ }^{*}$ | 462 | 49.1 | 313 | 51.5 | 462 |
| Other | - | - | 7.3 | 25 | 29.6 | - | 55.9 | 25 |
| Total | 9.0 | 604 | 14.0 * | 875 | 48.0 | 604 | $55.6{ }^{*}$ | 875 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara.
N/A = not applicable.
Significantly different between baseline and final values $\left(\chi^{2}\right):{ }^{*} \mathrm{p}<0.05,{ }^{* *} \mathrm{p}<0.01$.

With respect to type of residence, significant increases in the percentages of women who received IPT (Fansidar) were reported among those living in semi-urban and rural areas only. Although there was a nearly three-percentage-point increase of women who received IPT (Fansidar) among those living in urban areas, this change was not statistically significant. However, among those who were counseled on IPT, significant increases were reported among women living in urban and rural areas. The highest percentages of women who received ITP (Fansidar) at least once at final evaluation were among those in the youngest age categories (15 to 19 years, $32 \%$; and 20 to 24 years, 29\%), and both these increases were significantly different from those obtained at baseline. In contrast, there were no significant changes by age group observed at final evaluation among women who were counseled on IPT. With respect to marital status, a significant increase was reported only among married women who were counseled on IPT. No significant changes were observed among women who received IPT (Fansidar), regardless of marital status. While increases in the percentage of women who received IPT (Fansidar) from baseline to final evaluation were observed among all women regardless of number of partners reported in the last 12 months, results were significant only among those women who reported having had only one partner in the last 12 months ( $\mathrm{p}<0.01$ ). No significant results were observed among women who were counseled on IPT.

Although at baseline the highest percentage of women who received IPT (Fansidar) was reported among those with a secondary school education or higher (12.1\%), at final evaluation, the highest percentage was among women with no formal school (17.1\%; $\mathrm{p}<0.01$ ). There was also a significant seven-percentage-point increase from baseline to final evaluation among women with only a primary school education who had received IPT (Fansidar). Among those who were counseled on IPT, the highest percentages at baseline and at final evaluation were among women with a secondary school education or higher; however, the change between baseline and final evaluation for this group was not statistically significant. Statistically significant results were obtained among those women with no formal schooling (an 11 percentage point increase from baseline to final evaluation, $\mathrm{p}<0.05$ ). With respect to religious affiliation, among women who received IPT (Fansidar), statistically significant results were obtained only for Muslim women (from 9\% at baseline to $15 \%$ at final evaluation). However, among women who were counseled on IPT, statistically significant results were obtained only for Christian women (from $48 \%$ at baseline to $61 \%$ at final evaluation).

Table 8.5 reports on the percentage of women who obtained ANC services during their last pregnancy who received tetanus toxoid vaccine if needed, and compares the results obtained at baseline to those obtained at the final evaluation. In general, there were decreases in the overall percentages of women who received two doses of TT ( $49 \%$ at baseline compared to $47 \%$ at final evaluation), as well as those who received at least one dose of TT (65\% at baseline to $59 \%$ at final evaluation); however, none of these changes were statistically significant. By state, there were no statistically significant changes in the results obtained for women who received two doses of TT. Although statistically significant results were obtained among those who received at least one dose of TT and who were resident in Bauchi and FCT, these changes were decreases. That is, among residents of Bauchi, there was an approximately 19 percentage point statistically significant decrease among women who received at least one dose of TT at final evaluation, while among residents of FCT, there was a 17 percentage point statistically significant decrease in the percentage of women who received at least one dose of TT at final evaluation.

Table 8.5: Percentage of Women Who Obtained ANC Services during Last Pregnancy Who Received Two Doses of TT, and Percent Who Received at Least One Dose of TT, If Needed, Baseline (2005) and End-of-Project (2009) Surveys

| COMPASS LGAs | Two Doses TT |  |  |  | At Least One Dose TT |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2005 |  | 2009 |  | 2005 |  | 2009 |  |
|  | \% | n | \% | $n$ | \% | n | \% | n |
| State |  |  |  |  |  |  |  |  |
| Bauchi | 49.4 | 81 | 36.5 | 74 | 69.1 | 81 | 50.0 * | 74 |
| FCT | 50.0 | 98 | 45.2 | 166 | 81.6 | 98 | $64.5 *$ | 166 |
| Kano | 36.6 | 112 | 45.2 | 168 | 58.0 | 112 | 66.1 | 168 |
| Lagos | 53.7 | 214 | 49.8 | 309 | 65.9 | 214 | 57.6 | 309 |
| Nasarawa | 37.1 | 89 | 43.1 | 137 | 52.8 | 89 | 62.8 | 137 |
| KLN ${ }^{\dagger}$ total | 49.0 | 415 | 48.4 | 622 | 63.1 | 415 | 59.8 | 622 |
| Location |  |  |  |  |  |  |  |  |
| Urban | 51.9 | 369 | 51.5 | 433 | 65.9 | 375 | 63.0 | 433 |
| Semi-urban | 46.7 | 60 | 43.7 | 165 | 76.7 | 60 | $55.1{ }^{*}$ | 165 |
| Rural | 37.2 | 159 | 33.5 | 244 | 55.6 | 159 | 49.1 | 244 |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 57.8 | 39 | 67.9 | 25 | 69.2 | 39 | 81.3 | 25 |
| 20-24 | 47.8 | 96 | 43.7 | 105 | 73.3 | 96 | 64.2 | 105 |
| 25-29 | 49.8 | 149 | 47.8 | 222 | 63.0 | 149 | 59.2 | 222 |
| 30-34 | 53.0 | 102 | 51.8 | 176 | 70.2 | 102 | 63.6 | 176 |
| 35-39 | 54.0 | 89 | 52.2 | 155 | 69.6 | 89 | 64.2 | 155 |
| 40-44 | 42.8 | 47 | 36.6 | 88 | 55.1 | 47 | 46.2 | 88 |
| 45-49 | 38.8 | 72 | 38.4 | 92 | 51.8 | 72 | 46.7 | 92 |
| $\geq 50$ | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Marital status |  |  |  |  |  |  |  |  |
| Married | 50.5 | 403 | 48.4 | 608 | 64.9 | 403 | 61.0 | 608 |
| In union/living with partner | 43.0 | 119 | 46.7 | 192 | 64.7 | 119 | 60.4 | 192 |
| Not married/in union | 52.7 | 72 | 36.6 | 63 | 65.7 | 72 | 40.1** | 63 |
| Number of partners in last 12 months |  |  |  |  |  |  |  |  |
| None | 40.9 | 55 | 38.5 | 217 | 53.9 | 55 | 53.4 | 217 |
| 1 | 50.3 | 510 | 51.4 | 609 | 66.5 | 510 | 62.9 | 609 |
| 2 or more | 43.8 | 29 | 24.3 | 37 | 59.4 | 29 | 29.7* | 37 |
| Education |  |  |  |  |  |  |  |  |
| No formal schooling | 33.2 | 167 | 43.2 | 232 | 51.3 | 167 | 55.3 | 232 |
| Primary | 45.4 | 168 | 44.3 | 316 | 65.5 | 168 | 56.0 | 316 |
| Secondary or higher | 58.2 | 259 | 52.0 | 306 | 71.1 | 259 | 64.5 | 306 |
| Religion |  |  |  |  |  |  |  |  |
| Christian | 54.0 | 268 | 50.7 | 374 | 66.7 | 268 | 61.7 | 374 |
| Muslim | 45.2 | 306 | 44.7 | 455 | 63.5 | 306 | 58.1 | 455 |
| Other | 35.2 | 20 | 38.9 | 25 | 63.0 | 20 | 41.6 | 25 |
| Total | 49.1 | 594 | 47.1 | 863 | 65.0 | 594 | 59.2 | 863 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara. N/A = not applicable.
Significantly different between baseline and final values $\left(\chi^{2}\right):{ }^{*} \mathrm{p}<0.05,{ }^{* *} \mathrm{p}<0.01$.

With respect to type of residence, no statistically significant changes were observed among women who received two doses of TT, although among women who received at least one dose of TT, there was a statistically significant decrease in the percentage of semi-urban residents (from $77 \%$ at baseline to $55 \%$ at final evaluation; $\mathrm{p}<0.05$ ). The breakdown of the results by age categories also show no statistically significant changes at baseline among women who received two doses of TT and also among women who received at least one dose of TT.

With respect to marital status, there was a nearly 26 percentage point decrease among single women who received at least one dose of TT and this change was statistically significant ( $\mathrm{p}<0.01$ ); however no statistically significant changes were reported among women who received two doses of TT, regardless of their marital status, although there were decreases in the percentages at final evaluation. Among those who reported having two or more partners in the last 12 months, there was a statistically significant decrease in the percentage of women who received at least one dose of TT ( $59 \%$ at baseline to $30 \%$ at final evaluation; $\mathrm{p}<0.05$ ). No other statistically significant results were observed at final evaluation for this particular characteristic. Across all educational levels, although there were changes in the percentages of women who received two doses of TT as well as changes in the percentages of women who received at least one dose of TT from baseline to endline, none of these changes were statistically significant. A similar trend was observed for religious affiliation. That is, regardless of religious affiliation, among women who received two doses of TT and among those who received at least one dose of TT, there were no statistically significant changes observed from baseline to endline.

Table 8.6 shows the percentage of infants less than six months old exclusively breastfed over the last 24 hours at the time of data collection, and compares results obtained at baseline to those obtained at final evaluation. Overall, there was an approximately 2 percentage point increase from baseline to endline among infants who were exclusively breastfed. However, these results were not statistically significant. With regards to type of residence, again although there were increases at endline in the percentages of infants who were exclusively breastfed over the last 24 hours at the time of data collection, none of these changes were statistically significant. Also, no statistically significant changes were observed with regards to religious affiliation. Due to small cell sizes, results stratified by education could not be calculated.

### 8.3 Child Health

Table 8.7 compares baseline and endline results obtained for the percentage of children 6 to 59 months who received vitamin A supplements in the past six months, according to their health cards or their mothers' recall. Overall, there was an increase in the percentage of children 6 to 59 months who received vitamin A supplements from baseline (23\%) to endline (29\%), and this change was statistically significant ( $\mathrm{p}<0.05$ ). Results obtained by state show that from 2005 to 2009, there were increases across all states in the percentage of children 6 to 59 months who received vitamin A supplements. However, only results obtained in Kano were statistically significant. In Kano, there was a nearly 10 percentage point increase in the vitamin A supplementation rate among children aged 6 to 59 months and this increase was highly significant ( $\mathrm{p}<0.01$ ).

Table 8.6: Percentage of Infants Less than Six Months Old Exclusively Breastfed over Last 24 Hours, Baseline (2005) and End-of-Project (2009) Surveys

| Characteristic of mother | 2005 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | n | \% | n |
| Location |  |  |  |  |
| Urban | 20.4 | 75 | 27.3 | 44 |
| Semi-urban | 13.9 | 11 | 25.0 | 23 |
| Rural | 30.0 | 40 | 14.1 | 45 |
| Education |  |  |  |  |
| No formal schooling | - | 0 | - | 1 |
| Primary | - | 2 | - | 3 |
| Secondary or higher | - | 0 | - | 1 |
| Religion |  |  |  |  |
| Christian | 28.9 | 51 | 14.6 | 46 |
| Muslim | 17.2 | 70 | 30.2 | 64 |
| Other | 16.9 | 5 | 22.4 | 3 |
| Total | 21.8 | 126 | 24.1 | 113 |

The highest level of vitamin A supplementation at baseline was in semi-urban areas (32\%), while at final evaluation the highest level was reported in urban areas (35\%). However, statistically significant results were obtained only for rural areas, where there was a greater than two-fold increase in the percentage of vitamin A supplementation among children aged 6 to 59 months (from $9 \%$ at baseline to $19 \%$ at final evaluation; $\mathrm{p}<0.01$ ). There was an 11 percentage point increase in vitamin A supplementation among children aged 6 to 59 months whose mothers were aged 30 to 34 years, and this change was statistically significant at the $5 \%$ significance level. However, no statistically significant changes were noted for children of mothers in other age groups. Among children aged 6 to 59 months whose mothers were married, the percentage of vitamin A supplementation increased from $20 \%$ in 2005 to $27 \%$ in 2009, and this change was statistically significant ( $\mathrm{p}<0.05$ ). No statistically significant results were obtained for children of single mothers and children of mothers who were in unions or living with their partners.

With regards to education, although there was a four percentage point decrease in vitamin A supplementation among children of mothers with a secondary school education or higher, this change was not statistically significant. In contrast, the 11 percentage point increase in the percentage of vitamin A supplementation among children whose mothers had no formal schooling was highly significant ( $\mathrm{p}<0.01$ ), and the nearly 10 percentage point increase in the percentage of vitamin A supplementation among children whose mothers only had a primary school education was also statistically significant ( $\mathrm{p}<0.05$ ). Lastly, among children of Muslim mothers, there was a statistically significant increase in the percentage of vitamin A supplementation (from $17 \%$ at baseline to $24 \%$ at final evaluation; $\mathrm{p}<0.05$ ), although no statistically significant results were obtained among children of Christian mothers or mothers who practiced other religions.

Table 8.7: Percentage of Children 6-59 Months Old Who Received Vitamin A Supplement in Past Six Months, According to Health Card or Recall, Baseline (2005) and End-of-Project (2009) Surveys

| Characteristic of mother | 2005 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | $n$ | \% | n |
| State |  |  |  |  |
| Bauchi | 8.1 | 174 | 13.3 | 113 |
| FCT | 35.6 | 132 | 39.4 | 104 |
| Kano | 6.5 | 261 | $16.1^{* *}$ | 267 |
| Lagos | 37.0 | 249 | 39.3 | 224 |
| Nasarawa | 36.1 | 133 | 43.7 | 174 |
| $\mathrm{KLN}^{\dagger}$ total | 26.4 | 643 | 31.3 | 674 |
| Location |  |  |  |  |
| Urban | 30.4 | 457 | 34.5 | 357 |
| Semi-urban | 32.4 | 86 | 28.1 | 158 |
| Rural | 8.7 | 406 | $18.5{ }^{* *}$ | 357 |
| Age |  |  |  |  |
| 15-19 | 16.0 | 92 | 17.4 | 43 |
| 20-24 | 20.0 | 179 | 18.5 | 171 |
| 25-29 | 25.8 | 260 | 34.8 | 266 |
| 30-34 | 20.3 | 185 | $30.8{ }^{*}$ | 208 |
| 35-39 | 33.7 | 119 | 26.1 | 128 |
| 40-44 | 23.1 | 42 | 42.6 | 46 |
| 45-49 | 20.7 | 72 | 30.9 | 29 |
| $\geq 50$ | N/A | N/A | N/A | N/A |
| Marital status |  |  |  |  |
| Married | 20.1 | 694 | 26.5* | 699 |
| In union/living with partner | 30.4 | 180 | 40.8 | 160 |
| Not married/in union | 32.1 | 75 | 24.1 | 40 |
| Education |  |  |  |  |
| No formal schooling | 9.3 | 413 | $20.7{ }^{* *}$ | 320 |
| Primary | 22.5 | 210 | $32.4{ }^{*}$ | 309 |
| Secondary or higher | 37.4 | 326 | 33.9 | 253 |
| Religion |  |  |  |  |
| Christian | 31.6 | 371 | 38.0 | 310 |
| Muslim | 17.3 | 553 | 24.3 * | 558 |
| Other | - | 25 | 32.1 | 14 |
| Total | 23.2 | 949 | $29.1{ }^{*}$ | 899 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara.
N/A = not applicable.
Significantly different between baseline and final values $\left(\chi^{2}\right):{ }^{*} \mathrm{p}<0.05,{ }^{* *} \mathrm{p}<0.01$.
Table 8.8 shows the percentage of children who slept under an insecticide-treated bed net the night before the survey, and compares the results obtained in 2005 at baseline to those obtained in 2009 at final evaluation. Overall, there was a highly significant increase in the percentage of
children who slept under an ITN the night before the survey (from about 3\% at baseline in 2005 to $13 \%$ at final evaluation in 2009; $\mathrm{p}<0.01$ ).

Table 8.8: $\quad$ Percentage of Children Under Five Years Old Who Slept under ITN the Night Before the Survey, Baseline (2005) and End-of-Project (2009) Surveys

| Characteristic of mother | 2005 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | n | \% | n |
| State |  |  |  |  |
| Bauchi | 1.7 | 175 | $6.3{ }^{*}$ | 126 |
| FCT | 6.8 | 133 | $18.3{ }^{* *}$ | 126 |
| Kano | 1.1 | 277 | $16.2^{* *}$ | 278 |
| Lagos | 3.3 | 270 | $12.2{ }^{* *}$ | 262 |
| Nasarawa | 7.5 | 146 | $17.8{ }^{* *}$ | 197 |
| $\mathrm{KLN}^{\dagger}$ total | 2.9 | 693 | $14.1{ }^{* *}$ | 746 |
| Location |  |  |  |  |
| Urban | 3.1 | 483 | $15.6{ }^{* *}$ | 400 |
| Semi-urban | 4.5 | 90 | $11.7{ }^{*}$ | 180 |
| Rural | 1.9 | 428 | $9.5{ }^{* *}$ | 398 |
| Age |  |  |  |  |
| 15-19 | 6.0 | 101 | 7.8 | 49 |
| 20-24 | 1.1 | 188 | $13.4{ }^{* *}$ | 191 |
| 25-29 | 3.6 | 277 | $15.6{ }^{* *}$ | 296 |
| 30-34 | 3.5 | 196 | $12.0{ }^{* *}$ | 233 |
| 35-39 | 1.3 | 119 | $13.0{ }^{* *}$ | 148 |
| 40-44 | 0.0 | 48 | $13.6{ }^{*}$ | 50 |
| 45-49 | 1.8 | 72 | 0.0 | 22 |
| $\geq 50$ | N/A | N/A | N/A | N/A |
| Marital status |  |  |  |  |
| Married | 2.7 | 728 | $14.7{ }^{* *}$ | 768 |
| In union/living with partner | 2.1 | 188 | $10.4 *$ | 194 |
| Not married/in union | 5.1 | 85 | 0.8 | 43 |
| Education |  |  |  |  |
| No formal schooling | 0.1 | 435 | $9.1{ }^{* *}$ | 347 |
| Primary | 1.9 | 224 | $16.0{ }^{*}$ | 347 |
| Secondary or higher | 5.5 | 342 | $14.2{ }^{* *}$ | 295 |
| Religion |  |  |  |  |
| Christian | 4.1 | 392 | $15.2{ }^{* *}$ | 356 |
| Muslim | 1.7 | 582 | $12.3{ }^{* *}$ | 616 |
| Other | - | 27 | 2.8 | 17 |
| Total | 2.8 | 1,001 | $13.2{ }^{* *}$ | 1,005 |

Notes: † KLN refers to Kano, Lagos, and Nasawara.
N/A = not applicable.
Significantly different between baseline and final values $\left(\chi^{2}\right):{ }^{*} \mathrm{p}<0.05,{ }^{* *} \mathrm{p}<0.01$.

Across all states, there were significant increases in the percentage of children who slept under an ITN the night before the survey. At baseline, the highest percentage was reported in Nasarawa (8\%), while at the final evaluation in 2009, the highest percentage was in FCT (18.3\%). There were also significant increases in the percentage of children who slept under an ITN across all types of residences; however, the highest increase was reported among children living in urban areas (from $3 \%$ at baseline to $16 \%$ at final evaluation; $\mathrm{p}<0.01$ ).

With the exception of children of mothers in the youngest (15 to 19 years) and oldest ( 45 to 49 years) age groups, among children of mothers in all other age categories, there were significant increases in the percentage that slept under an ITN the night before the survey at final evaluation. There was a significant 12 percentage point increase ( $\mathrm{p}<0.01$ ) among children of married mothers who slept under an ITN the night before the survey. Among children of mothers who were in union or living with their partner, there was also a significant increase in the percentage that slept under an ITN the night before (from $2 \%$ at baseline to $10 \%$ at the final evaluation; $\mathrm{p}<0.05$ ). Contrarily, there was an approximately four percentage point decrease among children of single mothers who slept under an ITN; however, this change was not statistically significant.

Among children of mothers of all educational levels, there were significant increases in the percentage that slept under an ITN the night before the survey. At final evaluation, the highest percentage was reported among children of mothers with a primary school education (16\%), although at baseline, the highest percentage was reported among children of mothers with a secondary school education or higher (5.5\%). Statistically significant increases in the percentage that slept under an ITN the night before the survey were also obtained for children of Christian and Muslim mothers (11 percentage point increases, $\mathrm{p}<0.01$, for both groups). However, among children of mothers of other religious affiliations, statistical significance tests could not be calculated due to small cell sizes.

Table 8.9 shows the percentage of children who received three doses of diphtheria, pertussis, and tetanus immunizations before their first birthday, according to their health cards, among children aged 12 to 23 months, and compares results obtained in 2005 at baseline to those obtained in 2005 at final evaluation. Overall, although there was a nearly two percentage point decrease among children aged 12 to 23 months who received three doses of DPT (from $12 \%$ at baseline to $10 \%$ at final evaluation), this change was not statistically significant. With the exception of Kano and Nasarawa, no statistically significant results were obtained across states for the percentage of children who received three doses of DPT before their first birthday. In Kano, there was a significant increase in the percentage of children aged 12 to 23 months who received three doses of DPT before their first birthday (from $1 \%$ at baseline to $9 \%$ at final evaluation; $\mathrm{p}<0.05$ ). In contrast, in Nasarawa, there was a drop in the percentage of children who received three doses of DPT before their first birthday - at baseline, $31.7 \%$ of children aged 12 to 23 months received three doses of DPT before their first birthday; but at the final evaluation, the results showed that only $24 \%$ of children received the required three doses, and this decrease was statistically significant at the $5 \%$ significance level. Among children of mothers living in rural areas, there was a statistically significant increase in the percentage that received the required three doses (from $0.4 \%$ at baseline to $8 \%$ at final evaluation; $\mathrm{p}<0.01$ ). Although among children of mothers living in urban areas there was a decrease in the percentage ( $18 \%$ at baseline to $11 \%$ at final evaluation) that received three doses of DPT before their first birthday; however, this change was
not statistically significant. Among semi-urban mothers, statistical significance tests could not be calculated due to small cell sizes.

Table 8.9: Percentage of Children Who Received Three Doses of DPT before Their First Birthday According to Health Card, among Children Ages 12-23 Months, Baseline (2005) and End-of-Project (2009) Surveys

| Characteristic of mother | 2005 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | n | \% | $n$ |
| State |  |  |  |  |
| Bauchi | 6.5 | 31 | 0.0 | 26 |
| FCT | 20.6 | 34 | 21.4 | 28 |
| Kano | 1.3 | 75 | 8.5* | 71 |
| Lagos | 21.3 | 61 | 12.0 | 50 |
| Nasarawa | 31.7 | 27 | 23.7* | 38 |
| KLN ${ }^{\dagger}$ total | 12.6 | 163 | 11.6 | 162 |
| Location |  |  |  |  |
| Urban | 18.1 | 116 | 10.7 | 93 |
| Semi-urban | - | 14 | 15.0 | 42 |
| Rural | 0.4 | 98 | $7.6{ }^{* *}$ | 77 |
| Age |  |  |  |  |
| 15-19 | - | 25 | 0.0 | 13 |
| 20-24 | 7.5 | 40 | 14.6 | 48 |
| 25-29 | 15.1 | 65 | 9.6 | 62 |
| 30-34 | 11.9 | 51 | 11.3 | 48 |
| 35-39 | - | 26 | 12.8 | 30 |
| 40-44 | - | 7 | 3.3 | 11 |
| 45-49 | - | 14 | 0.0 | 1 |
| $\geq 50$ | N/A | N/A | N/A | N/A |
| Marital status |  |  |  |  |
| Married | 12.6 | 160 | 9.5 | 176 |
| In union/living with partner | 7.4 | 48 | 18.2 | 30 |
| Not married/in union | - | 20 | 0.0 | 10 |
| Education |  |  |  |  |
| No formal schooling | 2.9 | 97 | 2.0 | 73 |
| Primary | 13.0 | 56 | 8.0 | 74 |
| Secondary or higher | 21.1 | 75 | 20.9 | 66 |
| Religion |  |  |  |  |
| Christian | 17.2 | 84 | 13.2 | 72 |
| Muslim | 9.5 | 138 | 8.0 | 137 |
| Other | - | 6 | 43.1 | 4 |
| Total | 12.1 | 228 | 10.4 | 216 |

Notes: † KLN refers to Kano, Lagos, and Nasawara.
N/A = not applicable.
Significantly different between baseline and final values $\left(\chi^{2}\right):{ }^{*} \mathrm{p}<0.05,{ }^{* *} \mathrm{p}<0.01$.

With respect to age categories, marital status, educational levels, and religious affiliation, although some changes in the percentage of children aged 12 to 23 months who received the required three doses of DPT before their first birthday, none of these changes were statistically significant at either the $5 \%$ or $1 \%$ significance levels. Also, statistical significance could not be determined where cell sizes were very small.

Table 8.10 shows the percentage of children aged 12 to 59 months who were fully immunized before their first birthdays, according to their health cards, and compares the results obtained at baseline in 2005 to endline at final evaluation. Overall, there was only a $0.2 \%$ percentage point increase among children who were fully immunized before their first birthdays from baseline to final evaluation, and this change was not statistically significant. By state, statistically significant results were obtained only for Kano and Nasarawa. In Kano, the percentage of children aged 12 to 59 months who were fully immunized before their first birthday increased from $0.5 \%$ at baseline to $3.1 \%$ at final evaluation, and this change was statistically significant at the $5 \%$ significance level. In Nasarawa, there was a nearly seven percentage point increase between 2005 and 2009 among children who were fully immunized before their first birthday, and this change was also statistically significant at the $5 \%$ significance level. With regards to type of residence, although changes were obtained in the percentage of children who were fully immunized before their first birthday across all types of residence, statistically significant results were obtained only for children of mothers living in rural areas. Among these children, the percentage of those who were fully immunized before their first birthday increased from $0.1 \%$ at baseline to $3 \%$ at final evaluation ( $\mathrm{p}<0.01$ ).

With regards to age groups, marital status, educational levels, and religious affiliation, no statistically significant differences were noted in the percentage of children who were fully immunized before their first birthday according to their health cards. Also, statistical significance could not be determined for those categories with very small cell sizes.

Table 8.10: Percentage of Children Who Who Are Fully Immunized Before Their First Birthday According to Health Card, among Children Ages 12-59 Months Old, Baseline (2005) and End-of-Project (2009) Surveys

| Characteristic of mother | 2005 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | $n$ | \% | n |
| State |  |  |  |  |
| Bauchi | 1.4 | 147 | 0.0 | 80 |
| FCT | 6.3 | 112 | 8.0 | 75 |
| Kano | 0.5 | 213 | 3.1* | 194 |
| Lagos | 6.1 | 215 | 4.3 | 139 |
| Nasarawa | 1.0 | 104 | 7.9* | 114 |
| $\mathrm{KLN}^{\dagger}$ total | 3.9 | 532 | 4.2 | 452 |
| Location |  |  |  |  |
| Urban | 5.2 | 392 | 4.0 | 241 |
| Semi-urban | 4.1 | 68 | 5.6 | 113 |
| Rural | 0.1 | 331 | 2.5** | 241 |
| Age |  |  |  |  |
| 15-19 | 3.5 | 76 | 0.0 | 33 |
| 20-24 | 2.1 | 145 | 5.9 | 118 |
| 25-29 | 4.3 | 222 | 3.2 | 194 |
| 30-34 | 3.9 | 156 | 4.2 | 128 |
| 35-39 | 3.3 | 104 | 3.8 | 88 |
| 40-44 | - | 35 | 1.4 | 28 |
| 45-49 | 4.1 | 54 | 0.0 | 13 |
| $\geq 50$ | N/A | N/A | N/A | N/A |
| Marital status |  |  |  |  |
| Married | 3.6 | 576 | 3.4 | 487 |
| In union/living with partner | 2.3 | 148 | 6.1 | 98 |
| Not married/in union | 5.6 | 67 | 0.0 | 29 |
| Education |  |  |  |  |
| No formal schooling | 0.9 | 335 | 0.7 | 225 |
| Primary | 3.8 | 176 | 2.7 | 216 |
| Secondary or higher | 5.7 | 280 | 8.5 | 161 |
| Religion |  |  |  |  |
| Christian | 4.5 | 314 | 4.5 | 203 |
| Muslim | 2.9 | 456 | 2.8 | 390 |
| Other | - | 21 | 26.1 | 9 |
| Total | 3.5 | 791 | 3.7 | 614 |

Notes: $\dagger$ KLN refers to Kano, Lagos, and Nasawara.
N/A = not applicable.
Significantly different between baseline and final values $\left(\chi^{2}\right):{ }^{*} \mathrm{p}<0.05,{ }^{* *} \mathrm{p}<0.01$.

### 8.4 Primary School Education

This section describes changes between the baseline and the endline surveys in the household's primary school-age children's attendance, promotion, and retention rates; and gender equity. Table 8.11 shows the attendance rates of primary school children by state and gender for two age groups (ages 6-11 and ages 6-14) in order to account for differences across programs in the definition of school-age children. More states showed a significant increase over time in girls' school attendance as compared to boys' school attendance.

Table 8.11: Attendance Rate of Primary School Children Ages 6-14 and Ages 6-11, by State and Gender, Baseline (2005) and End-of-Project (2009) Surveys, Total Weighted by State

|  | Bauchi | FCT | Kano | Lagos | Nasarawa | KLN ${ }^{\dagger}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males 6-11 |  |  |  |  |  |  |  |
| 2005 \% (n) | 28.7 (345) | 52.0 (231) | 36.9 (674) | 56.1 (305) | 55.1 (374) | 46.5 (1353) | 43.0 (1929) |
| 2009 \% (n) | 31.9 (321) | 53.6 (261) | 45.4 (703)** | 48.8 (289) | 55.3 (295) | 47.6 (1287) | 44.7 (1869) |
| Females 6-11 |  |  |  |  |  |  |  |
| 2005 \% (n) | 29.7 (313) | 51.7 (230) | 35.5 (664) | 57.3 (274) | 46.4 (358) | 44.9 (1296) | 42.1 (1839) |
| 2009 \% (n) | 41.1 (243)** | 58.7 (254) | 43.4 (634)** | 51.2 (256) | 56.9 (313)** | 47.7 (1203) | 47.1 (1700)** |
| Both 6-11 |  |  |  |  |  |  |  |
| 2005 \% (n) | 29.2 (651) | 52.0 (460) | 36.4 (1318) | 57.0 (572) | 50.6 (727) | 46.0 (2617) | 42.8 (3768) |
| 2009 \% (n) | 35.0 (548) ${ }^{\text {* }}$ | 56.4 (511) | 44.5 (1326) ${ }^{* * *}$ | 50.0 (544)* | 56.3 (604)* | 47.7 (2474) | 45.8 (3569)* |
| Males 6-14 |  |  |  |  |  |  |  |
| 2005 \% (n) | 28.4 (479) | 47.4 (346) | 34.5 (921) | 46.5 (437) | 53.9 (286) | 41.5 (1889) | 39.1 (2714) |
| 2009 \% (n) | 29.0 (456) | 45.3 (369) | 40.4 (998)** | 39.8 (407) | 51.4 (220) | 41.2 (1833) | 38.9 (2658) |
| Females 6-14 |  |  |  |  |  |  |  |
| 2005 \% (n) | 26.5 (446) | 45.4 (344) | 34.1 (939) | 45.4 (425) | 47.1 (482) | 39.9 (1846) | 37.5 (2636) |
| 2009 \% (n) | 33.4 (350)* | 50.6 (344) | 35.7 (929) | 38.0 (379)* | 54.4 (414)* | 38.4 (1722) | 38.1 (2416) |
| Both 6-14 |  |  |  |  |  |  |  |
| 2005 \% (n) | 27.5 (915) | 46.6 (687) | 34.5 (632) | 46.1 (854) | 50.5 (1008) | 40.9 (3696) | 38.4 (5298) |
| 2009 \% (n) | 30.3 (785) | 48.0 (709) | 38.0 (727)* | 39.0 (784)** | 53.1 (837) | 39.8 (3532) | 38.5 (5026) |

Notes: † KLN refers to Kano, Lagos, and Nasawara.
Tests of significance ( $\chi^{2}$ ) pertain to the differences between the baseline and end-of-project surveys:
*** p , .001; ** p < .01; * p < . 05 .
Although no significant changes in the attendance rates of primary school-age children were observed in the KLN states between 2005 and 2009, some individual states showed changes in access to schooling between surveys. In 2005, Bauchi and Kano had the lowest attendance rates of primary school age children (less than 40\%). While Kano witnessed a significant increase in attendance rates over time for both boys and girls aged 6-11 years, in Bauchi, the increase in access to schooling was significant only for girls and resulted in a slightly higher school attendance rates for girls than for boys in 2009. For example, the percentage of children aged 611 in Bauchi who were currently attending school increased from $29 \%$ in 2005 to $32 \%$ in 2009
for males and from 30\% in 2005 to 41\% in 2009 for females. In Nasarawa, the school attendance rates for girls also increased significantly between 2005 and 2009 in both age groups. Similar improvements in access to schooling did not occur for boys in that state. Kano was the only state that showed a significant increase in the school attendance rate for boys between 2005 and 2009. In the 6-14 age group for example, the percentage of boys who were currently attending school in Kano increased from 35\% in 2005 to $40 \%$ in 2009. When both sexes were considered, Lagos showed an overall decline in attendance rates of primary school age children during the intersurvey period. This decline was statistically significant ( $\mathrm{p}<0.05$ ) for girls aged 6-14 ( $45 \%$ in 2005 versus $38 \%$ in 2009) but not for boys of a similar age.

Table 8.12 compares repeater rates for primary school children in 2005 and 2009 by state and sex. As the small sample sizes for Bauchi, FCT, and Nasarawa preclude a meaningful gender analysis of repeater rates, inter-state comparisons will focus on the rates for both males and females combined. Few changes are noted in repeater rates.

Table 8.12: Repeater Rates of Primary School Children per Grade, by State and Gender (Totals Weighted by State), Baseline (2005)and End-of-Project (2009) Surveys

|  | Bauchi ${ }^{\text {a }}$ |  | $\mathrm{FCT}^{\text {a }}$ |  | Kano |  | Lagos |  | Nasarawa ${ }^{\text {a }}$ |  | $\mathrm{KLN}^{\dagger}$ |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2005 | 2009 | 2005 | 2009 | 2005 | 2009 | 2005 | 2009 | 2005 | 2009 | 2005 | 2009 | 2005 | 2009 |
| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Primary 1 | 5.6 | 18.5 | 0.0 | 8.3 | 4.2 | 17.4* | 0.0 | 10.5 | 5.0 | 13.3 | 2.7 | 13.9 *** | 2.7 | $14.4{ }^{* * *}$ |
| Primary 2 | 0.0 | 6.7 | 24.0 | 15.6 | 9.8 | 14.0 | 2.6 | 11.1 | 9.1 | 8.5 | 6.4 | 12.4 | 6.2 | 11.7 |
| Primary 3 | 7.4 | 9.5 | 4.2 | 3.2 | 7.6 | 5.7 | 0.0 | 8.3 | 7.7 | 8.0 | 7.9 | 9.0 | 7.7 | 8.7 |
| Primary 4 | 0.0 | 1.0 | 11.1 | 0.0 | 13.0 | 17.8 | 4.4 | 0.0 | 5.1 | 6.3 | 8.4 | 9.9 | 7.3 | 9.3 |
| Primary 5 | 0.0 | 20.0 | 7.4 | 4.8 | 15.8 | 3.6 | 3.5 | 2.3 | 8.0 | 0.0 | 6.9 | 1.7 | 6.7 | 3.5 |
| Primary 6 | 12.5 | 0.0 | 0.0 | 14.3 | 6.3 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 | 5.0 | 0.0 | 5.9 | 1.5 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Primary 1 | 0.0 | 13.9 | 7.1 | 3.5 | 9.8 | 10.6 | 0.0 | 19.4* | 5.1 | 19.1 | 4.4 | 15.1** | 3.9 | $14.3{ }^{* * *}$ |
| Primary 2 | 8.7 | 9.4 | 8.3 | 10.5 | 12.5 | 10.5 | 0.0 | 5.7 | 11.8 | 16.4 | 7.2 | 9.4 | 7.5 | 9.4 |
| Primary 3 | 8.3 | 8.3 | 8.7 | 6.7 | 8.2 | 13.6 | 0.0 | 4.8 | 3.8 | 3.1 | 4.1 | 8.7 | 4.9 | 8.5 |
| Primary 4 | 0.0 | 9.1 | 8.3 | 8.6 | 12.1 | 11.9 | 10.0 | 5.0 | 6.7 | 8.3 | 10.5 | 8.7 | 8.9 | 8.9 |
| Primary 5 | 0.0 | 0.0 | 0.0 | 0.0 | 13.8 | $0.0{ }^{*}$ | 0.0 | 0.0 | 0.0 | 5.9 | 5.8 | $0.7{ }^{*}$ | 6.2 | 1.5* |
| Primary 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 0.6 |
| Both |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Primary 1 | 2.9 | 15.7 | 3.0 | 5.2 | 6.4 | 15.8* | 1.6 | $14.1{ }^{* *}$ | 6.0 | 18.2** | 4.1 | $15.5 * *$ | 3.9 | $15.1{ }^{* * *}$ |
| Primary 2 | 3.8 | 8.3 | 13.9 | 11.4 | 13.0 | 14.4 | 2.5 | 7.8 | 3.5 | 8.8* | 7.8 | $12.5{ }^{*}$ | 7.5 | $11.7^{*}$ |
| Primary 3 | 6.4 | 10.0 | 8.8 | 4.3 | 10.6 | 10.9 | 0.0 | 6.3 * | 5.0 | 4.3 | 5.8 | 8.4 | 6.0 | 8.4 |
| Primary 4 | 0.0 | 12.5* | 9.4 | 4.9 | 12.6 | 13.7 | 8.6 | 4.9 | 3.8 | 8.9 | 9.9 | 10.2 | 8.3 | 10.1 |
| Primary 5 | 5.3 | 12.0 | 8.9 | 8.1 | 13.9 | 5.3 | 1.7 | 0.0 | 6.0 | 2.4 | 6.8 | 2.9 | 6.8 | 4.5 |
| Primary 6 | 5.3 | 0.0 | 2.8 | 7.7 | 9.5 | 6.1 | 4.3 | 0.0 | 5.1 | 5.9 | 6.0 | 3.6 | 5.7 | 3.7 |

Notes: $\quad a$. Small sample size precludes meaningful gender analysis.
$\dagger$ KLN refers to Kano, Lagos, and Nasawara.
Tests of significance $\left(\chi^{2}\right)$ pertain to the differences between the baseline and end-of-project surveys: ${ }^{* * *} \mathrm{p}, .001$; ** $\mathrm{p}<.01$; *p $<.05$.

For males, repeater rates in primary 1 increased significantly from the 2005 baseline to the 2009 end-of-project surveys in Kano, the KLN states, and the total population. Among females, significant increases in repeater rates were observed in Lagos, the KLN states and the total population. For example, in the KLN states, repeater rates for primary 1 more than tripled between 2005 and 2009, from $3 \%$ to $14 \%$ among males and from $4 \%$ to $15 \%$ among females. When both sexes are considered, significant increases are also seen in repeater rates at the primary 4 level in Bauchi, at the primary 3 level in Lagos, and at the primary 2 level in Nasarawa, the KLN states, and the total population. However, significant reductions in repeater rates were observed at the primary 5 level among female pupils residing in Kano (14\% in 2005 versus 0\% in 2009), the KLN states ( $6 \%$ in 2005 versus 1\% in 2009) and the total population ( $6 \%$ in 2005 versus $2 \%$ in 2009).

Table 8.13 presents dropout rates of school children per grade, by state and gender. In general, dropout rates were low and no meaningful changes were noted between the baseline and the end-of-project surveys. This may have been due in part to the small sample size. The largest percentage point differences in dropout rates between surveys were noted at the primary 6 level among male pupils in Bauchi and among female pupils in Nasarawa.

Table 8.13: Dropout Rates of Primary School Children per Grade, by State and Gender (Totals Weighted by State), Baseline (2005) and End-of-Project (2009) Surveys

|  | Bauchi ${ }^{\text {a }}$ |  | $\mathrm{FCT}^{\text {a }}$ |  | Kano |  | Lagos |  | Nasarawa ${ }^{\text {a }}$ |  | KLN ${ }^{+}$ |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2005 | 2009 | 2005 | 2009 | 2005 | 2009 | 2005 | 2009 | 2005 | 2009 | 2005 | 2009 | 2005 | 2009 |
| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Primary 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 0.0 | 0.3 | 0.0 | 0.2 |
| Primary 2 | 0.0 | 4.5 | 3.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.8 |
| Primary 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Primary 4 | 0.0 | 0.0 | 0.0 | 0.0 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 | 0.0 | 1.6 | 0.0 |
| Primary 5 | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Primary 6 | 0.0 | 16.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Primary 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5 | 2.4 | 0.0 | 0.0 | 2.9 | 1.4 | 2.3 | 1.1 |
| Primary 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Primary 3 | 0.0 | 0.0 | 0.0 | 7.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 | 0.0 | 0.6 | 0.0 | 0.9 |
| Primary 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Primary 5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Primary 6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Both |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Primary 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4 | 1.4 | 0.0 | 0.9 | 1.1 | 0.7 | 0.9 | 0.6 |
| Primary 2 | 0.0 | 2.6 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 1.0 |
| Primary 3 | 0.0 | 0.0 | 0.0 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.0 | 0.0 | 0.0 | 0.4 |
| Primary 4 | 0.0 | 0.0 | 0.0 | 0.0 | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.6 | 0.0 |
| Primary 5 | 0.0 | 0.0 | 0.0 | 0.0 | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 |
| Primary 6 | 0.0 | 11.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.6 | 0.0 | 0.0 | 0.0 | 1.4 |

Notes: $\quad a$. Small sample size precludes meaningful gender analysis.
$\dagger$ KLN refers to Kano, Lagos, and Nasawara.
Tests of significance ( $\chi^{2}$ ) pertain to the differences between the baseline and end-of-project surveys:
*** p , .001; ** p < .01; * p < . 05 .
Table 8.14 reports on parents' satisfaction with their sons' or daughters' school experience in the last week. The data were derived from the following questions: "Do you have any daughters whose age is for primary school? Are these girls presently attending primary school? Do they attend the same primary school? What is (are) the name(s) of the school(s) the girls are attending? How satisfied are you with the school(s) they are attending during the past week? (If more than one school, ask about their satisfactions with each school)." Corresponding questions were asked about parental satisfaction with sons' school experiences. The number of cases presented in Table 8.14 reflects, therefore, parent exposure per school. Total satisfaction increased significantly from 39\% at baseline to $57 \%$ by the end of COMPASS. The magnitude of improvement in parent satisfaction with schools in Kano, Lagos, and Nasarawa combined during the inter-survey period was similar to that observed in the total population. There were no improvements in parent satisfaction with children’s school experience in Kano and Nasarawa. The remaining states had significant increases in parental satisfaction with schools for both sons
and daughters. For both the baseline and end-of-project surveys, parents reported higher levels of satisfaction for daughters' than for sons’ school experience. No change was detected in parental school satisfaction in semi-urban and rural areas. Among urban parents, levels of satisfaction with schools increased from $24 \%$ in 2005 to $37 \%$ in 2009 with regard to sons' experiences and from $67 \%$ in 2005 to $85 \%$ in 2009 with regard to daughters' experiences.

Table 8.14: Percentage of Parents Who Are Satisfied or Somewhat Satisfied with Their Child's School Experience in the Last Week Baseline (2005) and End-of-Project (2009) Surveys

|  | Male |  |  |  | Female |  |  |  | Total |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2005 |  | 2009 |  | 2005 |  | 2009 |  | 2005 |  | 2009 |  |
|  | \% | n | \% | n | \% | n | \% | n | \% | n | \% | n |
| State |  |  |  |  |  |  |  |  |  |  |  |  |
| Bauchi | 21.2 | 163 | $34.9{ }^{*}$ | 131 | 54.7 | 78 | 84.6*** | 108 | 28.7 | 203 | $52.6{ }^{* *}$ | 202 |
| FCT | 32.1 | 79 | $48.5{ }^{* * *}$ | 59 | 78.1 | 47 | $90.9^{* * *}$ | 57 | 44.9 | 103 | $71.1^{* * *}$ | 85 |
| Kano | 43.1 | 431 | 40.2 | 363 | 80.8 | 248 | 82.8 | 278 | 48.9 | 527 | 54.2 | 491 |
| Lagos | 19.3 | 700 | $37.5^{* * *}$ | 487 | 64.0 | 357 | 87.6*** | 409 | 31.2 | 911 | $57.1^{* * *}$ | 714 |
| Nasarawa | 48.4 | 111 | 43.2 | 98 | 87.0 | 82 | 82.3 | 88 | 56.7 | 144 | 58.3 | 146 |
| $\mathrm{KLN}^{\dagger}$ total | 30.2 | 1242 | $39.2{ }^{* * *}$ | 948 | 72.8 | 687 | $85.3{ }^{* * *}$ | 775 | 39.4 | 1582 | $56.2^{* * *}$ | 1351 |
| Location |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 24.0 | 954 | $37.3{ }^{* * *}$ | 624 | 67.3 | 505 | $85.1{ }^{* * *}$ | 500 | 34.0 | 1229 | $54.7{ }^{* * *}$ | 882 |
| Semi-urban | 51.2 | 415 | 40.1 | 194 | 87.4 | 81 | 87.9 | 156 | 59.7 | 150 | 56.2 | 275 |
| Rural | 36.6 | 402 | 43.1 | 305 | 75.7 | 218 | 85.1 | 266 | 44.0 | 492 | $59.4{ }^{* * *}$ | 459 |
| Total | 29.3 | 1484 | $39.7^{* * *}$ | 1138 | 71.4 | 812 | $85.5{ }^{* * *}$ | 940 | 38.5 | 1888 | 56.5 | 1638 |

Notes: † KLN refers to Kano, Lagos, and Nasawara. Significantly different between baseline and final values $\left(\chi^{2}\right):{ }^{* * *} \mathrm{p}, .001 ;{ }^{* *} \mathrm{p}<.01$; * $\mathrm{p}<.05$.

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## APPENDIX A: LIST OF COMPASS PROJECT LOCAL GOVERNMENT AREAS

| Bauchi | FCT | Kano | Lagos | Nasarawa |
| :---: | :---: | :---: | :---: | :---: |
| Alkaleri <br> Bauchi <br> Giade <br> Kirfi <br> Misau <br> Ningi <br> Taf Bal <br> Zaki | Abaji <br> Abuja Mun <br> Bw ari <br> Gwagwalada <br> Kuje <br> Kwali | Ajingi <br> Bebeji <br> Bichi <br> Dala <br> Garbasawa <br> Garko <br> Gaya <br> Gwale <br> Gwarzo <br> Gale <br> Kano Mun <br> Kibiya <br> Kula <br> Nasawara <br> Tsanyawa <br> Warawa | Ajerome- Ife Alimosho Badagary Baju Lek Eti Osa Ikorodu Kosofe Lagos Island Lagos Main Mushin Ojo Oshodi Is Shomolu Surulere | Akwanga <br> Doma <br> Karu <br> Keana <br> Keffi <br> Kokona <br> Wamba |

## APPENDIX B: SUPERVISORS AND DATA COLLECTORS

## Bauchi Survey Team

| Supervisors | Fieldworkers/Interviewers |
| :--- | :--- |
| Dr. Orimoogunje,O.I | Isty A. Yusuf |
| Dr. S.O. Ajadi | Jumai Joshua |
| Dr. Anthony Dami | Paul B. Daniel |
| Dr. L. Bisiriyu | Salihu Moh. Bello |
| M.O. Olawole | Amos E Emmanuel |
| A.A. Akinjokun | Grace U. Leman |
| A. Alabi | Asabe Simon |
| Dr. S. Adekilekun | Elizabeth Gajere |
| O.M. Agunbiade | Regina Wakama Lee |
|  | Eng. Fidelis Dami |
|  | Watah Jimmy Daniel |
|  | Michael Dami |
|  | Illya A. Ahmed |
|  | Grace John |
|  | Abubakar Baraza |
|  | Naomi Yar'da |
|  | Asabe Lekwot |
|  | Charity Alabi |
|  | Juliana Enock |
|  | Musibau Ajadi |
|  | Yakubu Adamu |
|  | Abdul Salihu Isah |
|  | Sulismaya Rose |
|  | Sanni Yinusa |
|  | Vashiti Yakubu |
|  | Mayowa Adesina |
|  | Odu Ibidapo |
|  | Olorunfemi Tooyin |
|  | Olukoga E. Olutunde |
|  | Shittu S. Babatunde |
|  | Uthman Abiodun |


| Supervisors | Fieldworkers/Interviewers |
| :--- | :--- |
| Dr. Folorunso B. A. | Akhidenor Lawrence O. |
| Dr. Ajala O. A. | Sunday Anieti Udo |
| Dr. Osezua E. M. | Emmanuel I. Uzoanaya |
| Dr. Adeoye Nathaniel | Osemene Hilary O. |
| Dr. Ojo Bukky (Mrs.) | Mrs. Eniola Odunewu |
| Dr. Aregbesola (Mrs.) | Hajiya Hadiza Aliyu |
| Miss. Tayo Odu | Mrs. Aishat Ladan |
| Bello Richard | Mrs. Foluke Adejuyitan |
|  | Abdullahi Moses Akeem (Bwari) |
|  | Akaiku Adama (Kwali) |
|  | Gana Adamu (Abaji) |
|  | Kolo Timothy |
|  | Tammi Hajjatu |
|  | Tifase Ololade Grace |
|  | Idowu Oludare |
|  | Nancy Osuya |
|  | Akinlo Bayo |
|  | Yemi Osuntuyi |
|  | Lola Ojo |
|  | Janet Adedeji O. |
|  | Asa Folasade M |
|  | Olomola Omolara |
|  | Joy Imafidon |
|  | Adesina Sunday |
|  | Augustina Osadebe |
|  | Daniel Abigael Mapis |
|  | Aisha Adejo Ojeifo |
|  | Seun Awoyale |
|  | Ginikanwa C. Ihuoma |
|  | Mercy Abang |
|  | Friday Aguele |

## Kano Survey Team

| Supervisors | Fieldworkers/Interviewers |
| :---: | :---: |
| Dr. Akanni Akinyemi | Kulu Sulaieman |
| Mr. Damian Afolabi | Rakiya Isa Tahir |
| Mr. Ajibola Thomas | Charles Kaskumar |
| Mr. Sanya Oria | Ayeni Olaide |
| Mr. Sunday Adedini | Hafsat Yakassai |
| Mr Sikiru Adedokun | Fauziya Ibrahim |
| Dr. Adelodun | Bilkisu Sadi |
| Dr. Femi Osubitan | Modinat Ibrahim |
| Dr. Joshua Aransiola | Musa Haruna |
| Mr. Adisa | Fauziya Abdulahi |
| Mr. Albert Abegunde | Safiya Danmaraya |
| Mr. Mustapha Opatola | Aishat Abdulahi Mohammed |
| Mr. Lanre Ikuteyijo | Omoyeni Adeniyi |
|  | Semira Tafida |
|  | Madu Stephen |
|  | Munzali Hamza Baba |
|  | Hadiza Suleiman |
|  | Lu'ubatu Sule Adamu |
|  | Jummi Nafiu |
|  | Hauwa Miko Abdullahi |
|  | AbdulRasaq Suleiman |
|  | Abubakar Yakubu |
|  | Musa Sani Zakirai |
|  | Adebiyi Folakemi |
|  | Samara Muhammed |
|  | Emmanuel Umolo |
|  | Zahra Suleiman |
|  | Abereoje Rotimi |
|  | Habiba Ibrahim |
|  | Bunmi Adegoke |
|  | Hafsat Isa Ibrahim |
|  | Abdulmajid Sani |
|  | Fatima Suleiman |
|  | Ummu Suleiman Mohammed |
|  | Dauda Mohammed |
|  | Khadijat Suleiman |
|  | Olatunde Olapeju |
|  | Ramat Habib |
|  | Alabi Olatunji |
|  | Zainab Yussuf |
|  | Abdulahi Idris Fauziya |
|  | Ibrahim Aliu |
|  | Jumai Mijinyawa |
|  | Hassana Dikko |
|  | Maryam Tafida |


| Supervisors | Fieldworkers/Interviewers |
| :--- | :--- |
|  | Maimuna Yahaya |
|  | Nafisat Hassan |
|  | Jamilu Addo |
|  | Obisesan Oluwasanmi |
|  | Zainab Abdulahi |

Lagos Survey Team

| Supervisors | Fieldworkers/Interviewers |
| :---: | :---: |
| Prof. A. A. Adewuyi | O.J. Sogunle |
| Dr. P.O. Ogunjuyigbe | M.A. Ogundiran |
| Dr. Akintokun | R. Azeez |
| Dr. Adeoye Ikeola | O. Oyetunji |
| Dr. Yinka Adesina | K. Oyebanji |
| Mrs. Adeyemi | T. Adeyanju |
| Dr. A.B. Adeyemi | Iyasara Jovita |
| Dr. Adeoye Imoniche | A. Odeyemi |
| Mr. Akeem Babatunde | A. Ajayi |
| Eng. Joshua Adelakun | M. Ipaye |
| Dr. (Mrs) Akintokun | A. Ajadi |
| Mrs. Banjo | O. Suleiman |
| Dr. Akande | F. Omofioye |
| Kehinde Oyeniran | N. Akhidenor |
| Dr. Adediji | J. Victory |
|  | U. Oagbai |
|  | A. Mohammed |
|  | A. Adeniyi |
|  | R. Oyelere |
|  | Yinka Asubiaro |
|  | O. Oluwatope |
|  | S. Adejumo |
|  | A. Adeniyi |
|  | R. Ogunbameru |
|  | A. Akapo |
|  | K. Afuwape |
|  | V. Adeyemi |
|  | A. Taiwo |
|  | A. Aregbesola |
|  | A. Adeoye |
|  | A. Awogbade |
|  | T. Nanakumo |
|  | N. Owolewa |
|  | T. Dorotoye |
|  | O. Onasanya |
|  | T. Ajibade |
|  | T. Oladokun |
|  | R. Pitan |
|  | A Atat |
|  | S. Adeyemi |
|  | Mrs. Agunbiade |
|  | Mrs. Toyin Ikuteyijo |
|  | R. Adebiyi |

## Nasarawa Survey Team

| Supervisors | Fieldworkers/Interviewers |
| :--- | :--- |
| Prof. F. A. Adesina Adesina | Ogah Lois |
| Ambrose Akinlo | Yiga Esther |
| Caleb Aborisade | Abraham Odeh |
| Emmanuel Dung | Tahib Anderew |
| Dr. Adediwura | Aranilu Toba |
| Ayotunde Titilayo | Emmanuel Esther |
| Dr. Bamidele Faleye | Tanze D.S |
| Victor Akamen | Salamatu A. Oga |
| Dr. Oluyemisi Obilade | Esther J.A. |
| Olusola Ologunde (Mrs) | Lucas |
|  | Francis Abami |
|  | R. A. Alabi |
|  | Tijani A. Tanko |
|  | Mary Gogo |
|  | Doris Anto |
|  | Christianah John |
|  | Sakuma R.M. |
|  | Esther Shade |
|  | Yahaya Haruna |
|  | Pam Ayuba |
|  | Esther Auta |
|  | Gyang Dung |
|  | Abosede Gbenga-Akinbiola |
|  | Siyaka Itopa |
|  | Martina Kaura |
|  | Hannah David |
|  | Dauda Amos Nunghe |

## APPENDIX C: HOUSEHOLD SURVEY QUESTIONNAIRE

MEASURE EVALUATION FINAL HEALTH AND EDUCATION SURVEY 2009
for COMPASS PROJECT
INDIVIDUAL FEMALE/MALE QUESTIONNAIRE



| $\begin{aligned} & \text { LINE } \\ & \text { NO. } \end{aligned}$ | USUAL <br> RESIDENTS <br> AND <br> VISITORS | RELATIONSHIP TO HEAD OF HOUSEHOLD | SEX | RESIDENCE |  | AGE | ELIGIBILITY |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Please give me the names of the persons who usually live in your household who stayed here last night, starting with the head of the household. | What is the relationship of (NAME) to the head of the household?* | Is (NAME) male or female? | Does <br> (NAME) <br> usually live here? | Did <br> (NAME) <br> stay here last night? | How old is (NAME) as of last birthday? | CIRCLE <br> LINE \# <br> OF ALL <br> WOMEN <br> 15-49 | CIRCLE <br> LINE \# <br> OF ALL <br> MEN <br> AGE <br> 15-69 | CIRCLE <br> LINE 3 OF ALL CHILDREN UNDER 5 |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (8A) | (9) |
| 01 |  |  |  | $\begin{array}{ll} \text { YES } & \text { NO } \\ 1 & 2 \\ \hline \end{array}$ | $\begin{array}{ll} \text { YES } & \text { NO } \\ 1 & 2 \\ \hline \end{array}$ | $1$ | 01 | 01 | 01 |
| 02 |  |  |  | YES NO <br> 1 2 | YES NO <br> 1 2 | $1$ | 01 | 01 | 01 |
| 03 |  |  |  | YES NO <br> 1 2 <br> YES  | YES NO <br> 1 2 <br>   | $T$ | 01 | 01 | 01 |
| 04 |  |  |  | $\begin{array}{ll} \text { YES } & \text { NO } \\ 1 & 2 \\ \hline \end{array}$ | $\begin{array}{ll} \text { YES } & \text { NO } \\ 1 & 2 \\ \hline \end{array}$ |  | 01 | 01 | 01 |
| 05 |  |  |  | $\begin{array}{ll} \hline \text { YES } & \text { NO } \\ 1 & 2 \\ \hline \end{array}$ | YES NO <br> 1 2 <br>   | $I$ | 01 | 01 | 01 |
| 06 |  |  |  | YES NO <br> 1 2 | YES NO <br> 1 2 |  | 01 | 01 | 01 |
| 07 |  | $1$ |  | YES NO <br> 1 2 <br>   | YES NO <br> 1 2 | $1$ | 01 | 01 | 01 |
| 08 |  |  |  | $\begin{array}{ll} \hline \text { YES } & \text { NO } \\ 1 & 2 \\ \hline \end{array}$ | YES NO <br> 1 2 |  | 01 | 01 | 01 |
| 09 |  | $1$ |  | YES NO <br> 1 2 | YES NO <br> 1 2 |  | 01 | 01 | 01 |



* CODES FOR Q. 3 RELATIONSHIP TO HEAD OF HOUSEHOLD:

01= HEAD
02=WIFE OR HUSBAND
03= SON OR DAUGHTER
04= SON-IN-LAW OR DAUGHTER IN-LAW
05=GRANDCHILD
06=PARENT
07=PARENT-IN-LAW

08= BROTHER OR SISTER
09=BROTHER OR SISTER-IN LAW 10=OTHER RELATIVE
11=ADOPTED/FOSTER STEPCHILD 12= NOT RELATED
98= DON'T KNOW

| $\begin{aligned} & \hline \text { LINE } \\ & \text { NO. } \end{aligned}$ | EDUCATION |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IF AGE 6-14 |  |  |  |  |  |  |  |  |
|  | Is (NAME) currently attending school? | During the current school year, did (NAME) attend school at any time? |  | During the current school year, what level and class/year [is/was] (NAME) attending?** |  | During the previous school year, did (NAME) attend school at any time? |  | During that school year, what level and class/year did (NAME) attend?** |  |
|  | (10) | (11) |  | (12) |  | (13) |  | (14) |  |
| 01 | YES NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{array}{cc} \begin{array}{c} 1 \rightarrow \\ \text { GO TO } 12 \end{array} & 2 \end{array}$ | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | $2 \rightarrow$ <br> NEXT LINE |  |  |
| 02 | YES NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{array}{cc} \stackrel{1 \rightarrow}{\rightarrow} & 2 \\ \text { GO TO } 12 & \end{array}$ | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | $2 \rightarrow$ <br> NEXT LINE |  |  |
| 03 | YES NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{gathered} \stackrel{1 \rightarrow}{\rightarrow} \\ \text { GO TO } 12 \end{gathered}$ | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | $2 \rightarrow$ <br> NEXT LINE |  |  |
| 04 | YES NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{gathered} \stackrel{1 \rightarrow}{2} \\ \text { GO TO } 12 \end{gathered}$ | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | $2 \rightarrow$ <br> NEXT LINE |  |  |
| 05 | YES NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{gathered} \stackrel{1}{-12} \\ \text { GO TO } 12 \end{gathered}$ | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | $2 \rightarrow$ <br> NEXT LINE |  |  |
| 06 | YES NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{gathered} \stackrel{1 \rightarrow}{ } \\ \text { GO TO } 12 \end{gathered}$ | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | $\stackrel{2 \rightarrow}{\text { NEXT LINE }}$ |  |  |
| 07 | YES NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{array}{cc} \stackrel{1 \rightarrow}{ } \\ \text { GO TO } 12 \end{array}$ | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | $2 \rightarrow$ <br> NEXT LINE |  |  |
| 08 | YES NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{array}{cc} \stackrel{1 \rightarrow}{ } & 2 \\ \text { GO TO } 12 \end{array}$ | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | $2 \rightarrow$ <br> NEXT LINE |  |  |


| 09 | YES | NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 1 \rightarrow \\ \text { GO TO } 12 \end{gathered}$ | 2 | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  | $\square$ | 1 | $2 \rightarrow$ <br> NEXT LINE |  |  |
| 10 | YES | NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{gathered} 1 \rightarrow \\ \text { GO TO } 12 \end{gathered}$ | 2 | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | $2 \rightarrow$ <br> NEXT LINE |  |  |
| 11 | YES | NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{gathered} 1 \rightarrow \\ \text { GO TO } 12 \end{gathered}$ | 2 | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | $2 \rightarrow$ <br> NEXT LINE |  |  |
| 12 | YES | NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{gathered} \stackrel{1 \rightarrow}{\text { GO TO }} 12 \end{gathered}$ | 2 | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | $2 \rightarrow$ <br> NEXT LINE |  |  |
| 13 | YES | NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{gathered} 1 \rightarrow \\ \text { GO TO } 12 \end{gathered}$ | 2 | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | $2 \rightarrow$ <br> NEXT LINE |  |  |
| 14 | YES | NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{gathered} \stackrel{1 \rightarrow}{\text { GO TO } 12} \end{gathered}$ | 2 | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | $2 \rightarrow$ <br> NEXT LINE |  |  |
| 15 | YES | NO | YES | NO | LEVEL | CLASS/YEAR | YES | NO | LEVEL | CLASS/YEAR |
|  | $\begin{gathered} 1 \rightarrow \\ \text { GO TO } 12 \end{gathered}$ |  | 1 | $\begin{gathered} 2 \rightarrow \\ \text { GO TO } 13 \end{gathered}$ |  |  | 1 | 2 |  |  |
| **CODES FOR Qs. 12 AND 14 |  |  |  |  |  |  |  |  |  |  |
| EDUCATION LEVEL: |  |  |  | EDUCATION CLASS: |  |  |  |  |  |  |
| 0=PRE-PRIMARY |  |  |  | 00=LESS THAN 1 YEAR COMPLETED |  |  |  |  |  |  |
| 1= PRIMARY |  |  |  | 98= DON'T KNOW |  |  |  |  |  |  |
| 2=SECONDARY |  |  |  |  |  |  |  |  |  |  |
| 8=DON'T KNOW |  |  |  |  |  |  |  |  |  |  |

TABLE OF RANDOM NUMBERS

## SELECTION CRITERIA

## SELECTION GIRD

## ELIGIBLE RESPONDENTS SEX



## SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

## READ INFORMED CONSENT FORM

May I begin the interview now?
Signature of interviewer: $\qquad$ Date: $\qquad$

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 $\qquad$ <br> MINUTES $\qquad$ $\square$ |  |
| 102 | How long have you been living continuously in (NAME OF PRESENT PLACE OF RESIDENCE)? <br> IF LESS THAN ONE YEAR, RECORD ‘ 00 ' YEARS. | YEARS $\qquad$ $\square$ <br> ALWAYS $\qquad$ 95 VISITOR. $\qquad$ 96 |  |
| 103 | In what month and year were you born? | MONTH $\qquad$ $\square$ <br> DON'T KNOW MONTH $\qquad$ YEAR. $\qquad$ $\square$ <br> DON'T KNOW YEAR. $\qquad$ 9998 |  |
| 104 | How old were you at your last birthday? <br> COMPARE AND CORRECT 103 ANDIOR 104 IF INCONSISTENT. | AGE IN COMPLETED YEARS DON'T KNOW. $\qquad$ 98 $\square$ |  |
| 105 | Have you ever attended school? | YES.............................................................................................................. NO...... | $\rightarrow 114$ |
| 106 | CHECK RESPONDENTS AGE IN 104 | $\begin{aligned} & \text { 25-49............................................................................................................... } \\ & \text { 15-24...... } \end{aligned}$ | $\rightarrow 112$ |
| 107 | Are you presently attending school? | YES............................................................................................................. | $\rightarrow 109$ |
| 108 | During the current school year, did you attend school at any time? | YES...................................................................................................................... | $\rightarrow 110$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 109 | During the current school year, what level of school and class are you attending? <br> PROBE TO FIND OUT THE LEVEL. IF THE RESPONDENT SAYS THEY ARE ATTENDING A CONTINUING EDUCATION CENTRE, FIND OUT WHAT LEVEL THEY ARE ATTENDING AND CIRCLE THE APPROPRIATE CODE. IF THEY ARE ATTENDING AN ADULT LITERACY PROGRAM, CIRCLE THE APPROPRIATE PRIMARY CODE. | LEVEL: |  |
| 110 | During the previous school year, did you attend school at any time? | YES......................................................................................................... NO...... | $\rightarrow 112$ |
| 111 | During that school year, what level and class were you attending? <br> FOLLOW THE SAME PROBING DIRECTIONS AS IN Q109. |  |  |
| 112 | What is the highest level of school you attended: primary, secondary, or higher? |  |  |
| 113 | What is the highest class/form that you attended at that level? | CLASS/FORM............... $\quad \square$ |  |
| 114 | In the last 12 months have done any paid job? | $\begin{aligned} & \text { YES............................................................................................................... } 1 \\ & \text { NO....... } \end{aligned}$ |  |
| 115 | Are you presently working? | YES................................................................................................................... | $\rightarrow>117$ |
| 116 | Are you paid or do you earn in cash or in-kind for this work or are you not paid at all? |  |  |
| 117 | Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or never at all? |  |  |
| 118 | Do you listen to the radio almost every day, at least once a week, less than once a week or not at all? |  |  |
| 119 | Do you watch television almost every day, at least once a week, less than once a week or not at all? |  |  |
| 120 | Do you have any daughters whose age is for primary school? | YES................................................................................................. 2 | $\rightarrow$ 125 |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 121 | Are these girls presently attending primary school? | NO, NONE.......................................................................................................................................................... | $\rightarrow 125$ |
| 122 | Do they attend the same primary school? | YES.............................................................................................................. |  |
| 123 | What is(are) the name(s) of the school(s) the girls are attending? | School name(s) (specify): <br> School 1: $\qquad$ <br> School 2 $\qquad$ <br> School 3 $\qquad$ <br> School 4 $\qquad$ |  |
| 124 | How satisfied are you with the school(s) they are attending during the past week? Not satisfied, somewhat satisfied, very satisfied? <br> IF MORE THAN ONE SCHOOL, ASK ABOUT THEIR SATISFACTION WITH EACH SCHOOL. | SCHOOL 1: <br> NOT SATISFIED........................................ 1 <br> SOMEWHAT SATISFIED.......................... 2 <br> VERY SATISFIED........................................ 3 <br> DON'TKNOW.............................................. 8 <br> SCHOOL 2: <br>  <br> SCHOOL 3: <br>  <br> SCHOOL 4: <br>  |  |
| 124a | In your opinion, how happy was your child (GIRLS) to go to school(s) during the past week? Very happy, somewhat happy, not happy? <br> IF MORE THAN ONE FEMALE CHILD, ASK ABOUT HAPPINESS FOR EACH CHILD. |  |  |
| 125 | In your own opinion, how important is it that girls complete primary school? Not important, somewhat important, very important? | NOT IMPORTANT................................... 1 SOMEWHAT <br> IMPORTANT........................ 2 <br> VERY IMPORTANT................................. 3 <br> DON'T KNOW........................................ 8 |  |
| 126 | Do you have any sons whose age fit primary school? | YES............................................................................................................................ | $\rightarrow 131$ |
| 127 | Are these boys presently attending primary school? |  | $\rightarrow 131$ |
| 128 | Do they attend the same primary school? | YES................................................................................................................ |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 129 | What is(are) the name(s) of the school(s) the boys are attending? | School name(s) (specify): <br> School 1: $\qquad$ <br> School 2 $\qquad$ <br> School 3 $\qquad$ <br> School 4 $\qquad$ |  |
| 130 | How satisfied are you with the school(s) they are attending during the past week? Not satisfied, somewhat satisfied, very satisfied? <br> IF MORE THAN ONE SCHOOL, ASK ABOUT THEIR SATISFACTION WITH EACH SCHOOL. | SCHOOL 1: <br> NOT SATISFIED...................................... 1 <br> SOMEWHAT SATISFIED.......................... 2 <br> VERY SATISFIED.................................... 3 <br> DON'TKNOW $\qquad$ <br> SCHOOL 2: <br> NOT SATISFIED..................................... 1 <br> SOMEWHAT SATISFIED.......................... 2 <br> VERY SATISFIED.................................... 3 <br> DON'TKNOW.......................................... 8 <br> SCHOOL 3: <br> NOT SATISFIED..................................... 1 <br> SOMEWHAT SATISFIED......................... 2 <br> VERY SATISFIED.................................... 3 <br> DON'TKNOW.......................................... 8 <br> SCHOOL 4: <br> NOT SATISFIED..................................... 1 <br> SOMEWHAT SATISFIED.......................... 2 <br> VERY SATISFIED..................................... 3 <br> DON'TKNOW. |  |
| 130a | In your opinion, how happy was your child (BOYS) to go to school(s) during the past week? Very happy, somewhat happy, not happy? <br> IF MORE THAN ONE MALE CHILD, ASK ABOUT HAPPINESS FOR EACH CHILD. |  |  |
| 131 | In your own opinion, how important is it that boys complete primary school? Not important, somewhat important, very important? |  |  |
| 132 | Have you or your partner attended a community meeting to discuss health or primary school education In the last 6 months? |  |  |
| 133 | Is there a local organization working on health or education in your community? | YES............................................................................................................................................................................ | $\begin{aligned} & \rightarrow 135 \\ & \rightarrow 135 \end{aligned}$ |
| 134 | Do you or your partner belong to that organization? | YES, BOTH BELONG............................... 1 YES, RESPONDENT BELONGS............ 2 YES, PARTNER BELONGS.................. 3 NO, NEITHER BELONG.......................... 4 |  |
| 135 | Do you or your partner belong to a local parent-teacher association (PTA)? | YES............................................................................................................................................................................. |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 136 | What is your religion? |  |  |
| 137 | What is your ethnic group? <br> RECORD THE ETHNIC GROUP MENTIONED. |  |  |
| $\begin{aligned} & 138 \mathrm{a} \\ & -\mathrm{e} \end{aligned}$ | In your household do you have: <br> a) A refrigerator? <br> b) Electricity <br> c) Piped water <br> d) Well water (in residence/yard/plot) <br> e) A flush toilet | a) YES <br> a) REFRIGERATOR......... 1 2 <br> b) ELECTRICITY........... 1 2 <br> c) PIPED WATER........... 1 2 <br> d) WELL WATER ........... 1 2 <br> e) FLUSH TOILET......... 1 2 |  |
| 139a | Do you or any member of your household own: <br> a) A bicycle? <br> b) A motorcycle? <br> c) A car? <br> d) A television? <br> e) A radio? <br> f) A telephone/cellular phone? |  YES <br> a)  <br> a)  <br> b) MOTORE..................... 1 2 <br> c) CAR ............................ 1 2 <br> d) 2 <br> dELEVISION ........... 1 2 <br> e) RADIO....................... 1 2 <br> f) TEL/CELL ................ 1 2 |  |

## SECTION 2: REPRODUCTION

| 201 IF <br>  N <br>  If <br>  IF <br> D  <br> 202 IF <br> H <br> (I <br>  <br>  <br>  <br>  <br>  <br> IF <br> IF | IF FEMALE RESPONDENT, ASK: <br> Now I would like to ask you about all the births you have had during your life. Have you ever given birth? <br> IF MALE RESPONDENT ASK: <br> Do you have any children? |  |  |  |  |  |  |  | $\rightarrow 214$ $\rightarrow 216$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | IF FEMALE RESPONDENT, ASK: <br> How many sons have you given birth to? <br> (INCLUDES LIVE BIRTHS AND STILL BORNS) <br> IF MALE RESPONDENT, ASK: <br> How many sons do you have? |  |  |  |  |  | NUMBER |  |  |
| 203 IF F | IF FEMALE RESPONDENT, ASK: How many daughters have you given birth to? (INCLUDES LIVE BIRTHS AND STILL BORNS) <br> IF MALE RESPONDENT, ASK: <br> How many daughters do you have? |  |  |  |  |  | NUMBER |  |  |
|  | FOR MALE RESPONDENTS, SKIP TO Q213. |  |  |  |  |  |  |  | $\begin{aligned} & \hline \text { MALES } \\ & \rightarrow 213 \end{aligned}$ |
|  | 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. These are the births that you have had since July 2000. IF THE RESPONDENT DOES NOT HAVE ANY CHILDREN THAT WERE BORN IN THE LAST FIVE YEARS, SKIP TO 213. RECORD NAMES OF ALL THE BIRTHS IN 204. RECORD TWINS AND TRIPLETS ON SEPARATE LINES. |  |  |  |  |  |  |  |  |
| $204$ |  |  | $207$ |  | $\begin{aligned} & 209 \\ & \text { IF ALIVE: } \end{aligned}$ | $\begin{aligned} & 210 \\ & \text { IF ALIVE } \end{aligned}$ | $\begin{aligned} & 211 \\ & \text { IF DEAD: } \end{aligned}$ | $212$ |  |
| What name was given to your baby? <br> (NAME) | Were any of these births twins? <br> CIRCLE CORRE CT ANSWE R | Is <br> (NAME) <br> a boy <br> or a <br> girl? | In what month and year was (NAME) born? <br> PROBE: <br> What is his/her birthday? | Is <br> (NAME) <br> still <br> alive? <br> CIRCLE <br> CORRE <br> CT <br> ANSWE <br> R | How old was (NAME) at his/her last birthday? <br> RECORD AGE IN COMPLETED YEARS. | Is (NAME) living with you? | How old was (NAME) whe he/she died? <br> IF '1 YR', PR How many m old was (NAN RECORD DA LESS THAN MONTH; MO IF LESS THA TWO YEARS YEARS. | Were there any live births betwe (NAME OF PRE BIRTH) and (NA |  |
| 01-LAST BORN | SING ... 1 <br> MULT .. 2 | BOY .. 1 <br> GIRL. 2 | MONTH $\square$ YEAR $\square$ |  | AGE IN YEARS | $\begin{aligned} & \text { YES....... } 1 \\ & \text { NO ........ } 2 \\ &>204(02) \end{aligned}$ | DAYS....... 1 <br> MONTHS. 2 <br> YEARS .... 3 |  |  |
| 02 - <br> SECOND TO LAST BORN | SING ... 1 <br> MULT .. 2 | BOY .. 1 <br> GIRL. 2 | MONTH $\square$ YEAR $\square$ |  | AGE IN YEARS | $\begin{aligned} & \text { YES....... } 1 \\ & \text { NO ........ } 2 \\ & >212 \end{aligned}$ | DAYS....... 1 <br> MONTHS. 2 <br> YEARS .... 3 | $\begin{aligned} & \text { YES......... } 1 \\ & \text { NO............ } 2 \end{aligned}$ |  |
| 03- THIRD TO LAST BORN | SING ... 1 <br> MULT .. 2 | BOY .. 1 <br> GIRL. 2 | MONTH $\square$ YEAR $\square$ |  | AGE IN YEARS | $\begin{array}{r} \left.\begin{array}{r} \text { YES....... } 1 \\ \text { NO ........ } 2 \\ >212 \end{array}\right] \end{array}$ | DAYS....... 1 <br> MONTHS. 2 <br> YEARS .... 3 | $\begin{aligned} & \text { YES......... } 1 \\ & \text { NO........... } 2 \end{aligned}$ |  |


| 04 - <br> FOURTH TO <br> LAST BORN | SING ... 1 <br> MULT .. 2 | BOY .. 1 <br> GIRL. 2 | MONTH $\square$ YEAR |  | AGE IN YEARS | $\begin{aligned} & \text { YES....... } 1 \\ & \text { NO ........ } 2 \\ & >212 \end{aligned}$ | DAYS....... 1 <br> MONTHS. 2 <br> YEARS .... 3 | $\begin{aligned} & \text { YES......... } 1 \\ & \text { NO............ } 2 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 05- FIFTH TO LAST BORN | SING ... 1 <br> MULT .. 2 | BOY .. 1 <br> GIRL. 2 | MONTH $\square$ YEAR |  | AGE IN YEARS | $\begin{aligned} & \text { YES....... } 1 \\ & \text { NO ........ 2- } \\ & >212 \end{aligned}$ | DAYS....... 1 <br> MONTHS. 2 <br> YEARS .... 3 | $\begin{aligned} & \text { YES......... } 1 \\ & \text { NO............ } 2 \end{aligned}$ |
| 06-SIXTH TO LAST BORN | SING ... 1 <br> MULT .. 2 | BOY .. 1 <br> GIRL. 2 | MONTH $\square$ YEAR |  | AGE IN YEARS | $\left.\begin{array}{c} \text { YES....... } 1 \\ \text { NO ........ } 2 \\ \\ > \end{array}\right]$ | DAYS....... 1 <br> MONTHS. 2 <br> YEARS .... 3 | $\begin{aligned} & \text { YES......... } 1 \\ & \text { NO............ } 2 \end{aligned}$ |
| 07 - <br> SEVENTH <br> TO LAST BORN | SING ... 1 <br> MULT .. 2 | BOY .. 1 <br> GIRL. 2 | MONTH $\square$ YEAR |  | AGE IN YEARS | $\begin{array}{r} \text { YES....... } 1 \\ \text { NO ........ } 2 \\ > \\ >212 \end{array}$ | DAYS....... 1 <br> MONTHS. 2 <br> YEARS .... 3 | $\begin{aligned} & \text { YES......... } 1 \\ & \text { NO............ } 2 \end{aligned}$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 213 | How old were you when your (first) child was born? | AGE IN YEARS |  |
|  | FOR MALE RESPONDENTS, SKIP TO 216 |  | $\begin{aligned} & \text { MALE } \\ & \rightarrow 216 \end{aligned}$ |
| 214 | Are you pregnant now? | YES............................................................................................................................................................................ | ${\overrightarrow{I_{>}}}_{>217}$ |
| 215 | How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. | MONTHS $\square$ |  |
| 216 | IF FEMALE RESPONDENT, ASK: <br> At the time you became pregnant, 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? <br> IF MALE RESPONDENT, ASK: <br> Do you want any(more) children now/soon, do you want children later, or do you want to have any (more) children at all? | THEN/NOW/SOON.................................................................................................................................................................. |  |
|  | FOR MALE RESPONDENTS, SKIP TO 218 |  | $\begin{aligned} & \text { MALE } \\ & \rightarrow 218 \end{aligned}$ |
| 217 | 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 ........................................................................................................................... |  |
| 218 | 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? |  | ${\overrightarrow{I_{>}}}_{>301}$ |


| 219 | 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 <br> DURING HER PERIOD ............................ 2 <br> RIGHT AFTER HER <br> PERIOD HAS ENDED ...................... 3 <br> HALFWAY BETWEEN TWO PERIODS.... 4 <br> OTHER $\qquad$ 6 <br> DON'T KNOW <br> (SPECIFY) $\qquad$ |
| :---: | :---: | :---: |

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 did you have you hear about? <br> RECORD ALL METHODS MENTIONED SPONTANEOUSLY. <br> Any other one? <br> 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. | $\begin{aligned} & \text { YES....................................................................... } \end{aligned}$ | Have oper child YES NO. | ur partner ever had an avoid having any more $\qquad$ $\qquad$ |
| 02 | MALE STERILIZATION Men can have an operation to avoid having any more children. | YES..................................................................... | Have oper child YES NO. | ur partner had an avoid having any more $\qquad$ |
| 03 | PILL Women can take a pill every day to avoid becoming pregnant. | YES................................................................................ |  | ................................................................ 2 |
| 04 | IUD Women can have a loop or coil placed inside them by a doctor or a nurse to avoid pregnancy. | $\begin{aligned} & \text { YES........................................................................ } \\ & \text { NO ........ } \end{aligned}$ |  | $\begin{aligned} & . .1 \\ & . .2 \end{aligned}$ |
| 05 | INJECTABLES Women can have an injection by a health provider which stops them from becoming pregnant for one or more months. | YES........................................................................... NO |  | ............................................................... 12 |
| 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......................................................................... |  | ............................................................... 12 |
| 07 | MALE CONDOM Men can put a rubber sheath on their penis before sexual intercourse to avoid pregnancy. | $\begin{aligned} & \text { YES........................................................................ } \\ & \text { NO ....... } \end{aligned}$ |  | $\text { ............................................................................ } 1$ |
| 08 | FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse. | YES........................................................................ |  | ................................................................ 12 |
| 09 | DIAPHRAGM Women can place a thin flexible disk in their vagina before intercourse to avoid pregnancy. | YES........................................................................... |  | ............................................................... 12 |
| 10 | FOAM OR JELLY Women can place a suppository, jelly, or cream in their vagina before intercourse. | $\begin{aligned} & \text { YES........................................................................ } \\ & \text { NO ....... } \end{aligned}$ |  | $\begin{aligned} & . .1 \\ & . . \\ & \hline \end{aligned}$ |
| 11 | LACTATIONAL AMENORRHEA METHOD (LAM) Up to 6 months after childbirth, a woman can use a method that requires that she breastfeeds exclusively, day and night, and that her menstrual period has not returned. | YES...................................................................... |  | $\text { ............................................................................. } 1$ |
| 12 | RHYTHM OR PERIODIC ABSTINENCE Every month that a woman is sexually active she can try to avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant. | YES......................................................................... |  | ................................................................. 1 |
| 13 | WITHDRAWAL Men can be careful and pull out before climax to avoid pregnancy. | $\begin{aligned} & \text { YES....................................................................... } \\ & \text { NO ....... } \end{aligned}$ |  | $\begin{gathered} \ldots 1 \\ \ldots \end{gathered}$ |
| 14 | EMERGENCY CONTRACEPTION Women can take pills up to three days after sexual intercourse to avoid becoming pregnant. | $\begin{aligned} & \text { YES........................................................................ } \\ & \text { NO ....... } \end{aligned}$ |  | ............................................................................. |
| 15 | Have you heard of any other ways or methods that women or men can use to avoid pregnancy? | YES.................................. 1 (SPECIFY) NO ................................... 2 | $\begin{aligned} & \text { YES } \\ & \text { NO.. } \\ & \text { YES } \\ & \text { NO.. } \end{aligned}$ |  |
| 303 |  |  |  | $\longrightarrow 304$ |

\begin{tabular}{|c|c|c|c|}
\hline NO. \& QUESTIONS AND FILTERS \& CODING CATEGORIES \& SKIP \\
\hline 304 \& \begin{tabular}{l}
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 ’.
\end{tabular} \& NUMBER OF CHILDREN...... \(\square\) \& \\
\hline 305 \& \begin{tabular}{l}
CHECK 302 (01/02): \\
CHECK 214:
\end{tabular} \& \[
\longrightarrow 307
\] \& \\
\hline 306 \& CHECK 214: \& \[
\longrightarrow 315
\] \& —>315 \\
\hline 307 \& Are you currently doing something or using any method to delay or avoid getting pregnant? \& \[
\begin{array}{|l}
\text { YES ............................................................................................................ } \\
\text { NO...... }
\end{array}
\] \& —>315 \\
\hline 307a \& Were you given the opportunity to choose your first method of contraception? \& YES ............................................................................................................................. \& \\
\hline 308A

$308 B$ \& | 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. | \&  \& \[

$$
\begin{aligned}
& l_{>310 \mathrm{a}} \\
& \rightarrow 309 \mathrm{a} \\
& \rightarrow 310 \mathrm{~b} \\
& \rightarrow 309 \mathrm{~b} \\
& \rightarrow 310 \mathrm{~b} \\
& \rightarrow 309 \mathrm{c} \\
& \\
& \\
& \\
& \\
& \\
& \rightarrow 310 \mathrm{~b}
\end{aligned}
$$
\] <br>

\hline 309A \& | What brand of pills are you using? |
| :--- |
| ASK TO SEE THE PACKAGE IF RESPONDENT DOES NOT REMEMBER NAME OF BRAND. | \&  \&  <br>


\hline 309B \& What brand of injectables are you using? \& | DEPO-PROVERA (EVERY 3 MONTHS)..... 01 NORISTERAT (EVERY 2 MONTHS)......... 02 |
| :--- |
| OTHER............................................... 04 |
| DON'T KNOW....................................... 98 | \& $]]^{-310 b}$ <br>


\hline 309C \& | What brand of condoms are you using? |
| :--- |
| ASK TO SEE THE PACKAGE IF RESPONDENT DOES NOT REMEMBER NAME OF BRAND. | \&  \& \[

\left|\left.\right|_{>310 \mathrm{~b}}\right.
\] <br>

\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline NO. \& QUESTIONS AND FILTERS \& \multicolumn{4}{|l|}{CODING CATEGORIES} \& SKIP \\
\hline \(310 a\)
\(310 b\) \& \begin{tabular}{l}
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?
\end{tabular} \& \begin{tabular}{l}
MONTH \\
YEAR
\end{tabular} \& \[
T
\] \& \& \& \\
\hline 311 \& Where did you obtain (CURRENT METHOD) when you started using it? \& \begin{tabular}{l}
PUBLIC SECTOR \\
GOVT. HOSPITAL... \\
GOVT. HEALTH CEN \\
FAMILY PLANNING \\
MOBILE CLINIC \(\qquad\) \\
COMMUNITY HEAL \\
OTHER PUBLIC \(\qquad\) \\
PRIVATE MEDICAL SE PRIVATE HOSPITAL PHARMACY. \(\qquad\) PRIVATE DOCTOR. MOBILE CLINIC COMMUNITY HEAL OTHER PRIVATE MEDICAL \(\qquad\) \\
OTHER SOURCE PMV. \(\qquad\) SHOP \(\qquad\) CHURCH. \(\qquad\) FRIEND/RELATIVE. NGO \(\qquad\) \\
OTHER \(\qquad\)
\end{tabular} \& \begin{tabular}{l}
TER. LINIC \\
H WO \\
CTOR CLINI
\(\qquad\) \\
WO \\
SPEC \\
....... \\
............
\(\qquad\) \\
SPEC
\end{tabular} \& \begin{tabular}{l}
KER \\
KER \\
Y)
\(\qquad\)
\(\qquad\)
\(\qquad\)
\(\qquad\) \\
Y)
\end{tabular} \& \[
\begin{array}{r}
\ldots . .1 \\
\ldots . .2 \\
\ldots .3 \\
\ldots .4 \\
\ldots .5 \\
\ldots \\
\hline
\end{array}
\] \& \\
\hline 312 \& \begin{tabular}{l}
You first obtained (CURRENT METHOD FROM 308A) from (SOURCE OF METHOD FROM 311). \\
During that visit, who did you see? That is, who did you spend the most time with when you first obtained your current method? \\
CIRCLE THE TYPE OF PROVIDER THE RESPONDENT SPENT THE MOST TIME WITH
\end{tabular} \& \begin{tabular}{l}
DOCTOR \\
NURSE. \\
MIDWIFE. \\
CHO \\
CHEW. \\
PMV. \\
OTHER \\
SPECIFY \\
DON'T KNOW/DON'T
\end{tabular} \& EMEM \&  \&  \& \\
\hline 313a-f \& \begin{tabular}{l}
During that visit, did the provider you saw (PERSON SEEN Q312) : \\
a) Greet you? \\
b) Respond to your questions/health concerns? \\
c) Explain possible side effect or problems you might have with the method? \\
d) Explain what to do about side effects? \\
e) Tell you when to return for the next visit? \\
f) Treat you with respect?
\end{tabular} \& \begin{tabular}{l}
REET \\
ESP TO CONCERN.... \\
XPLAIN SIDE EFF... \\
XPLAIN WHAT TO DO \\
SIDE EFF. \(\qquad\) \\
HEN RETURN VISIT \\
REAT WITH RESPECT
\end{tabular} \& \[
\begin{array}{|c}
\text { YES } \\
1 \\
1 \\
1 \\
1 \\
1 \\
1
\end{array}
\] \& NO
2
2
2

2
2
2 \& DKIDR
8
8
8
8
8
8 \& <br>
\hline 314 \& How satisfied were you with the services during that visit? Not satisfied, somewhat satisfied, or very satisfied? \& \multicolumn{4}{|l|}{} \& <br>
\hline 315 \& In the last 12 months, have you visited a health facility for family planning information or services? \& \multicolumn{4}{|l|}{YES ........................................................................................................... 12} \& $\rightarrow 320$ <br>
\hline
\end{tabular}

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 316 | What type of facility (facilities) did you visit? CIRCLE ALL MENTIONED. |  |  |  |  |  |
| 317 | The last time you visited a facility for family planning information or services, who did you see? That is, who did you spend the most time with the last time you visited this facility for family planning information or services? |  |  |  |  |  |
| 318a-f | During that visit, did the provider (PERSON SEEN IN 317): <br> a) Greet you? <br> b) Respond to your questions/health concerns? <br> c) If medication was provided, did the provider explain common side effects? <br> d) Explain what to do about side effects? <br> e) Tell you when to return for the next visit? <br> f) Treat you with respect? | REET YOU ESP TO CONCERN. XPLAIN SIDE EFF... XPLAIN WHAT TO DO R SIDE EFF $\qquad$ HEN RETURN VISIT... EEAT WITH PECT..... | YES <br> 1 <br> 1 <br> 1 <br>  <br> 1 <br> 1 <br> 1 | NO 2 2 2 2 2 2 2 2 | DKIDR 8 8 8 8 8 8 8 8 |  |
| 319 | How satisfied were you with the services? Not satisfied, somewhat satisfied, or very satisfied? |  |  |  |  |  |
| 320 | Do you know of a place where you can obtain a method of family planning? | $\begin{aligned} & \text { YES ................................................................................................................. } \end{aligned}$ |  |  |  | ->322 |
| 321 | Where is that? <br> Any other place? <br> RECORD ALL PLACES MENTIONED | PUBLIC SECTOR GOVT. HOSPITAL.. GOVT. HEALTH CEN FAMILY PLANNING MOBILE CLINIC $\qquad$ COMMUNITY HEAL <br> OTHER PUBLIC $\qquad$ <br> PRIVATE MEDICAL SEC PRIVATE HOSPITAL PHARMACY $\qquad$ PRIVATE DOCTOR. MOBILE CLINIC $\qquad$ COMMUNITY HEAL OTHER PRIVATE MEDICAL $\qquad$ <br> OTHER SOURCE PMV.. $\qquad$ SHOP. $\qquad$ CHURCH $\qquad$ <br> FRIEND/RELATIVE. <br> NGO. $\qquad$ <br> OTHER $\qquad$ | ER. INIC WOR <br> SPECI <br> TOR LINIC $\qquad$ <br> WOR <br> SPECI $\qquad$ $\qquad$ $\qquad$ <br> SPECI | KER. <br> Y) <br> ER. <br> Y) $\qquad$ $\qquad$ $\qquad$ $\qquad$ <br> Y) |  |  |
| 322 | Were you visited by a fieldworker, a family planning provider, a traditional birth attendant (TBA) or volunteer health worker who talked to you about family planning in the last 12 months? |  |  |  |  |  |

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline NO. \& QUESTIONS AND FILTERS \& \multicolumn{4}{|l|}{CODING CATEGORIES} \& SKIP \\
\hline 323 \& Have you visited a health facility for any other health care for yourself in the last 12 months? \& \multicolumn{4}{|l|}{YES .................................................................................................................
NO......} \& \(\rightarrow 328\) \\
\hline 324 \& What type of facility (facilitie
CIRCLE ALL MENTIONED \& \multicolumn{4}{|l|}{} \& \\
\hline 325 \& The last time you visited a facility, who did you see? \& \multicolumn{4}{|l|}{} \& \\
\hline 326a-f \& \begin{tabular}{l}
During that visit, did the provider (PERSON SEEN IN 325): \\
a) Greet you? \\
b) Respond to your questions/health concerns? \\
c) If medication was provided, did the provider explain common side effects? \\
d) Explain what to do about side effects? \\
e) Tell you when to return for the next visit? \\
f) Treat you with respect?
\end{tabular} \& \begin{tabular}{l}
REET YOU. \\
ESP TO CONCERN. \\
XPLAIN SIDE EFF... \\
XPLAIN WHAT TO DO \\
SIDE EFF. \\
HEN RETURN VISIT. \\
REAT WITH RESPECT
\end{tabular} \& YES \& NO \& DKIDR
8
8
8

8
8
8 \& <br>
\hline 327 \& How satisfied were you with the services? Not satisfied, somewhat satisfied, or very satisfied? \& \multicolumn{4}{|l|}{NOT SATISFIED..................................................................................................................................................................} \& <br>
\hline 328 \& Have you visited a health facility for health care for your children in the last 12 months? \& \multicolumn{4}{|l|}{YES ............................................................................................................} \& $\rightarrow 333$ <br>
\hline 329 \& What type of facility (facilities) did you visit?
CIRCLE ALL MENTIONED \& \multicolumn{4}{|l|}{} \& <br>
\hline 330 \& The last time you visited a facility for your children, who did you see? That is, who did you spend the most time with the last time you visited this facility for your children? \& \multicolumn{4}{|l|}{} \& <br>
\hline
\end{tabular}

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 331a-f | During that visit, did the provider: <br> a) Greet you? <br> b) Respond to your questions/health concerns? <br> c) If medication was provided, did the provider explain common side effects? <br> d) Explain what to do about side effects? <br> e) Tell you when to return for the next visit? <br> f) Treat you and your child with respect? | a) GREET YOU $\qquad$ <br> b) RESP TO CONCERN.. <br> c) EXPLAIN SIDE EFF... <br> d) EXPLAIN WHAT TO DO <br> FOR SIDE EFF. $\qquad$ <br> e) WHEN RETURN VISIT. <br> f) TREAT WITH <br> RESPECT..... | $\begin{gathered} \text { YES } \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{gathered}$ | $\begin{gathered} \text { NO } \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \end{gathered}$ | $\begin{array}{\|c} \hline \text { DKIDR } \\ 8 \\ 8 \\ 8 \\ \\ 8 \\ 8 \\ 8 \end{array}$ |  |
| 332 | How satisfied were you with the services? Not satisfied, somewhat satisfied, or very satisfied? | NOT SATISFIED........ SOMEWHAT SATISFIED. VERY SATISFIED. DON'TKNOW |  |  |  <br> $\ldots . . . . .$. <br> $\ldots . . . .$. <br> $\ldots$ <br> $\ldots . . . . . . . ~$ |  |
| 333 | IF FEMALE RESPONDENT: CHECK Q201 \& Q208. IF NO BIRTHSIDEAD, GO TO Q701. IF BIRTHS AND ALIVE, GO TO Q401. <br> IF MALE RESPONDENT, SKIP TO 701 |  |  |  |  |  |

SECTION 4. PREGNANCY, ANTENATAL CARE AND BREASTFEEDING

| 401 | Now I am going to ask you some questions about the last child you had. <br> At the time you became pregnant with (NAME), did you want to become <br> pregnant then, did you want to wait until later, or did you not want to have any <br> (more) children at all? | THEN ......................................... 1 <br> LATER ........................................... 2 |
| :--- | :--- | :--- | :--- |
| NOT AT ALL................................. 3 |  |  |


| 407a-I | During this pregnancy, were any of the following done at least once? <br> a) Were you weighed? <br> b) Was you height measured? <br> c) Was your stomach(belly) measured? <br> d) Was your blood pressure measured? <br> e) Did you give a urine sample? <br> f) Did you give a blood sample? <br> g) Were tested for HIV? <br> h) Were you counseled on Voluntary Counseling Testing for HIV? <br> i) Were you counseled on infant feeding options in case of HIV? <br> j) Were counseled to only give your baby breastmilk only? <br> k) Were you counseled on intermittent preventive therapy for malaria (IPT)? <br> I) Were you counseled on how long to wait before bathing a newborn? | a) WEIGHED <br> b) HEIGHT MEASURED <br> c) STOMACH MEASURE <br> d) BLOOD PRESSURE <br> e) URINE SAMPLE <br> f) BLOOD SAMPLE <br> g) TESTED FOR HIV <br> h) COUNS ON VCT <br> i) COUNS INF FEED <br> j) COUNS BREASTMILK <br> k) COUNS IPT <br> l) COUNS BATH NEWB | YES 1 1 1 1 1 1 1 1 1 1 1 1 | NO 2 2 2 2 2 2 2 2 2 2 2 2 |
| :---: | :---: | :---: | :---: | :---: |
| 408 | Were you told about the warning signs of pregnancy complications? | ```YES NO DON'T KNOW``` | $\begin{aligned} & \ldots \ldots 1 \\ & \rightarrow 411 \\ & \rightarrow 411 \end{aligned}$ |  |
| 409 | What are the warning signs of pregnancy complications? <br> PROBE: Anything else? <br> CIRCLE ALL MENTIONED | BLEEDING <br> FEVER. <br> HEADACHE <br> ANAEMIA. <br> SWOLLEN FEET/HANDS <br> FLUID LEAKAGE. <br> OTHER $\qquad$ |  |  |
| 410 | Were you told where to go if you had these complications? | YES. <br> NO <br> DON'T KNOW | $\begin{array}{r} \ldots . .1 \\ \ldots . . .2 \\ \ldots . . .8 \end{array}$ |  |
| 411 | During this pregnancy, were you given a tetanus toxoid injection to prevent the baby from getting tetanus, that is, convulsions after birth? | $\begin{aligned} & \text { YES................. } \\ & \text { NO .............. } \\ & \text { DON'T KNOW } \end{aligned}$ | $\begin{aligned} & \rightarrow 413 \\ & \ldots \ldots .2 \\ & \rightarrow 414 \end{aligned}$ |  |
| 412 | Why not? | NOT NEEDED <br> NOT OFFERED <br> REFUSED <br> OTHER <br> (SPECIFY) <br> DK/DR | $\begin{array}{r} \hline \ldots \ldots .1 \\ \cdots \ldots . .2 \\ \cdots \ldots \ldots .3 \\ 4 \end{array}$ |  |
| 413 | During this pregnancy, how many times did you get this injection? | TIMES <br> DON'T KNOW |  |  |
| 414 | During this pregnancy, were you given or did you buy any iron tablets or iron syrup? | YES <br> NO <br> DON'T KNOW | $\begin{aligned} & \ldots \ldots . . .1 \\ & 2 \rightarrow 416 \\ & 8 \rightarrow 416 \end{aligned}$ |  |
| 415 | During the whole pregnancy, for how many days did you take the tablets or syrup? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS. | NUMBER OF DAYS. $\qquad$ $\square$ DON'T KNOW $\qquad$ | $\begin{array}{\|l\|} \hline \ldots 998 \\ \hline \end{array}$ |  |
| 416 | During this pregnancy, were you given intermittent preventive therapy (IPT) for malaria? | YES <br> NO <br> DON'T KNOW | $\begin{aligned} & \ldots \ldots . .1 \\ & 2 \rightarrow 418 \\ & 8 \rightarrow 418 \end{aligned}$ |  |
| 416a | During this pregnancy, how many times were you given intermittent preventive therapy (IPT) for malaria? | TIMES $\qquad$ <br> DON'T KNOW $\qquad$ | $\underset{ـ}{ }$ |  |
| 417 | What drugs did you take? <br> RECORD ALL MENTIONED. | DARAPRIM PALUDRINE. FANSIDAR CHLOROQUINE OTHER DRUG $\qquad$ (SPECIFY) <br> OTHER TRADITIONAL. DON'T KNOW $\qquad$ |  |  |


| 418 | Who assisted with the delivery of (NAME)? <br> Anyone else? <br> PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING. <br> IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY. | HEALTH PROFESSIONAL <br> OTHER PERSON <br> TRAINED TRADITIONAL BIRTH ATTENDANT. $\qquad$ TRADITIONAL BIRTH ATTENDANT <br> RELATIVE/FRIEND $\qquad$ <br> OTHER $\qquad$ X (SPECIFY) <br> NO ONE. $\qquad$ Y |
| :---: | :---: | :---: |
| 419 | Where did you give birth to (NAME)? <br> 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. <br> (NAME OF PLACE) |  |
| 420 | How long after giving birth was (NAME) put to the breast? | LESS THAN 1 HOUR ....................... 1 WITHIN 24 HOURS...................... 2 MORE THAN 24 HOURS ............. 3 DID NOT PUT BABY TO BREAST... 4 DON'T KNOW/DR ........................ 8 |
| 421 | How long after giving birth was (NAME) given a bath? | LESS THAN 1 HOUR ........................ 1 WITHIN 24 HOURS..................... 2 MORE THAN 24 HOURS .............. 3 DON'T KNOW/DR ...................... 8 |
| 422 | Within the first three days after delivery, was (NAME) given anything to eat or drink [including water] other than breast milk? | YES............................................................................................................................. 8 |
| 423 | After (NAME) was born, did a health professional check on your health? | YES........................................................................................ 428 NO ......... |
| 424 | How many days or weeks after the delivery did the first check take place? RECORD '00’ DAYS IF SAME DAY. | DAYS AFTER DEL...... 1 WEEKS AFTER DEL... 2 $\square$ DON'T KNOW $\qquad$ |


| 425 | Who checked on your health at that time? <br> CIRCLE MOST QUALIFIED PERSON SEEN. | HEALTH PROFESSIONAL <br> OTHER PERSON <br> TRAINED TRADITIONAL BIRTH ATTENDANT.. .8 $\qquad$ <br> TRADITIONAL BIRTH ATTENDANT $\qquad$ <br> OTHER $\qquad$ 7 <br> (SPECIFY) |
| :---: | :---: | :---: |
| 426 | Where did this first check take place? <br> 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. $\qquad$ <br> (NAME OF PLACE) | HOME $\qquad$ <br> OTHER HOME $\qquad$ <br> PUBLIC SECTOR <br> GOVT. HOSPITAL. $\qquad$ 3 <br> GOVT. HEALTH CENTER........... 4 <br> GOVT. HEALTH POST................ 5 <br> OTHER PUBLIC $\qquad$ 6 <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC...... 7 OTHER PRIVATE MEDICAL $\qquad$ 8 (SPECIFY) <br> OTHER $\qquad$ 96 (SPECIFY) |
| 427 | When your health was checked, were you counseled on how to feed your baby? |  |
| 428 | In the first two months after delivery, did you receive a vitamin A dose? | YES.................................................................................................................... 8 NO |
| 429 | Are you still breastfeeding (NAME)? | YES........................................................ 2 NO ................................ $1 \rightarrow 430 \mathrm{~b}$ NEVER BREASTFED....... |
| 430a | For how many months did you breastfeed (NAME)? | MONTHS $\qquad$ $\square$ <br> DON'T KNOW/DR $\qquad$ 98 |
| 430b | CHECK Q207. IF BABY IS 6 MONTHS OR LESS, ASK Q431-435 |  |
| 431a | Did (NAME) drink anything besides breastmilk from a bottle with a nipple, cup, or spoon yesterday or last night? | YES............................................................................................................................................................... |
| 431b | Did (NAME) eat semi-solid, solid foods other than liquids yesterday or last night? |  |
| 432 | Was sugar added to any of the foods or liquids (NAME) ate yesterday or last night? | YES............................................................................................................................................................ |
| 433 | Have you ever heard of the expression "exclusive breastfeeding?" | YES................................................... 1 NO ........................... $2 \rightarrow 435$ DON'T KNOW................ $8 \rightarrow 435$ |
| 434 | What does exclusive breastfeeding mean? CIRCLE ALL MENTIONED | GIVE BREASTMILK ONLY(NO WATER).A GIVE BREASTMILK ONLY. $\qquad$ BREASTMILK ONLY FOR FIRST 6 MONTHS. <br> BREASTFEED REGULARLY..........D <br> GIVE BREASTMILK .......................E <br> OTHER $\qquad$ W <br> DK/DR. $\qquad$ Z |


| 435 | How long should an infant be given only breastmilk and nothing else, not even water? <br> <4 WEEKS $=0$ MONTHS | MONTHS $\qquad$ DON'T KNOW $\qquad$ 98 |
| :---: | :---: | :---: |
| 436 | During the last 6 months, did you hear or see any messages on breastfeeding: <br> a) On the radio? <br> b) On the television? <br> c) In a newspaper or magazine? <br> d) From a home visit by a Community Health Worker? <br> e) At the clinic? <br> f) From a PMV? <br> w) From Anywhere or from anyone else? |  |
| 437 | What do you think is the best way a mother can increase the quantity or flow of her breastmilk? <br> CIRCLE ALL MENTIONED | BREASTFEED MORE <br> OFTEN. <br> BREASTFEED LONGER......................B <br> BREASTFEED MORE OFTEN \&LONGER.C <br> GIVE BREASTMILK ONLY $\qquad$ <br> MOTHER DRINKS MORE. . D $\qquad$ <br> MOTHER EATS SPECIFIC FOODS..........F <br> MASSAGE BREASTS. $\qquad$ w <br> SPECIFY <br> DON'T KNOW/DR. |

## SECTION 5. VACCINATION, VITAMIN A, MOSQUITO NETS

|  | CHECK 204, 207 AND 209. IF NO CHILDREN UNDER 5 YEARS (0-59 MONTHS) ALIVE AT TIME OF SURVEY, GO TO 701. <br> IF RESPONDENT HAS CHILDREN ALIVE 0-59 MONTHS, CONTINUE WITH 501. |  |  |
| :---: | :---: | :---: | :---: |
| 501 | ENTER IN THE NAME OF THE LAST TWO CHILDREN BORN WHO ARE UNDER 5 YEARS AND ALIVE AT THE TIME OF THE SURVEY. <br> BEGIN WITH THIS STATEMENT: <br> I would now like to ask you questions about the vaccination history of your last two children less than 5 years old, starting with the youngest. |  |  |
| 502 | LINE NUMBER FROM 204 | LAST BIRTH <br> LINE NUMBER $\qquad$ | NEXT-TO-LAST BIRTH <br> LINE NUMBER $\square$ $\square$ |
| 503 | FROM 204 AND 208 | NAME | NAME |
|  |  | FILL IN THIS COLUMN FIRST (504519), THEN PROCEED TO THE NEXT COLUMN FOR THE NEXT-TO-LAST CHILD. | IF ONLY ONE CHILD UNDER 5 YEARS, LEAVE THIS COLUMN BLANK AND GO TO 601 |
| 504 | Is it important for children 6-59 months to receive vitamin A? |  |  |
| 505 | Did (NAME) ever receive a vitamin A dose? | YES..................................................................................................... 508 NO........ | YES............................................................................................. $8 \rightarrow 508$ NO ................. |
| 506 | How long ago did (NAME) receive his/her last dose of vitamin A? | LESS THAN 4 WEEKS AGO ............. 12 1-6 MONTHS AGO...................... 3 MORE THAN 6 MONTHS AGO........................... 8 DON'T KNOW ............ | LESS THAN 4 WEEKS AGO............ 1 1-6 MONTHS AGO.................... 2 MORE THAN 6 MONTHS AGO............................ 8 DON'T KNOW ............. |
| 507 | Where did (NAME) receive his/her last dose of vitamin A? <br> READ OPTIONS OUT LOUD | GOVT PHC/HC/HOSP............................................................... 4 OUTREACH HOMEISCHOOL DURING NID................................................................................................ 8 PRIVATE HEALTH |  |
| 508 | Do you have a card where (NAME'S) vaccinations are written down? ${ }^{2}$ <br> IF YES: May I see it please? | YES, SEEN ................................ $1 \rightarrow 510$ YES, NOT SEEN.............................................................. | YES, SEEN .................................. $2 \rightarrow 510$ YES, NOT SEEN........................................................... |
| 509 | Did you ever have a vaccination card for (NAME)? | YES................................................................ $2 \rightarrow 512$ NO......... | YES................................................................................ ${ }^{2}$ 512 |
| 510 | (1) ENTER THE NAME, OF EACH BIRTH UNDER AGE 5, AT THE TOP OF EACH COLUMN <br> (2) COPY VACCINATION DATE FOR EACH VACCINE FROM THE CARD AND RECORD IT IN THE APPROPRIATE COLUMN. <br> (3) RECORD EACH YEAR IN 4 DIGITS <br> (4) WRITE ‘44’ IN ‘DAY’ COLUMN IF CARD SHOWS THAT A VACCINATION WAS GIVEN, BUT NO DATE IS RECORDED. <br> (5) WRITE IN ‘98' IN ‘DAY’ COLUMN IF ONLY MONTH \& YEAR ARE RECORDED |  |  |


|  | (E.G., JAN 2000 WOULD BE RECORDED <br> AS '98' $\prime^{\prime} \mathbf{N}^{\prime} \mid 2000$ |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |



| 513G | An injection to prevent measles? | YES............................................................................................................................................ | YES .............................................................................................................................................. |
| :---: | :---: | :---: | :---: |
| 514 | Were any of the vaccinations (NAME) received during the last two years given as a part of a national immunization day campaign? |  | YES .................................................................................................... 3 NO ...................................................... NO VACCINATION IN THE LAST 2 YEARS DON'T KNOW........... |
| 515 | Did (NAME) sleep under a mosquito net last night? | YES.............................................. 1 NO....................................2-5 519 DON'T KNOW........................ 519 |  |
| 516 | What is the brand name of the mosquito net (NAME) slept under last night? |  |  |
| 517 | Was the mosquito net that (NAME) slept under last night ever treated with insecticide to repel mosquitoes or bugs? |  |  |
| 518 | How long ago was the mosquito net that (NAME) slept under last night treated with insecticide? | MONTHS AGO $\qquad$ <br> DON'T KNOW $\qquad$ 98 | MONTHS AGO $\qquad$ <br> DON'T KNOW $\qquad$ 98 |
| 519 |  | GO BACK TO Q503 IN NEXT COLUMN, IF NO MORE CHILDREN UNDER 5 YEARS, GO TO 601 | GO TO 601 |

## SECTION 6. CHILDHOOD ILLNESS

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | CODING CATEGORIES |
| :---: | :---: | :---: | :---: |
|  | CHECK 204, 207, 209. IF NO CHILDREN 0-23 MONTHS ARE ALIVE, SKIP TO 701. IF RESPONDENT HAS ONLY 1 CHILD, FILL OUT THE COLUMN 'LAST CHILD' AND LEAVE THE SECOND COLUMN BLANK. IF THE RESPONDENT HAS 2 CHILDREN 0-23 MONTHS, FILL OUT BOTH COLUMNS. <br> READ THE FOLLOWING: |  |  |
|  | I would like to ask you some questions about the health of your children less than two years old (0-23 months) during the past 2 weeks, starting with the youngest. |  |  |
|  |  | NAME LAST CHILD | NAME ${ }^{\text {NEXT-TO-LAST-CHILD }}$ |
| 601 | Has (NAME) been ill with a fever at any time in the last 2 weeks? | YES.................................................................................................................................................... (SKIP | YES................................................................................................................................................... (SKIP |
| 602 | Does (NAME) have a fever now? | YES......................................................................................................................................... | YES....................................................................................................................................... NO ...... |
| 603 | Has (NAME) been ill with convulsions at any time during the last 2 weeks? | YES...................................................................................................................................... NO....... | YES.......................................................................................................................................... NO |
| 604 | CHECK 601 AND 603: <br> HAD FEVER OR CONVULSIONS? |  |  |
| 605 | Did you seek advice or treatment for the fever/convulsions? | $\begin{aligned} & \text { YES.......................................................................................... } 1 \\ & \text { NO12 } \end{aligned}$ | YES........................................................................................... 12 |
| 606 | Where did you seek advice or treatment? <br> Anywhere else? <br> RECORD ALL SOURCES MENTIONED | ```PUBLIC SECTOR GOVT. HOSPITAL.....................A GOVT. HEALTH CENTER...........B GOVT. HEALTH POST...............C MOBILE CLINIC .......................D COMM. HEALTH WORKER ........E OTHER PUBLIC``` $\qquad$ <br> ```(SPECIFY) \\ PRIVATE MEDICAL SECTOR \\ PVT. HOSPITAL/CLINIC.``` $\qquad$ <br> ```PHARMACY.``` $\qquad$ <br> ```PRIVATE DOCTOR``` $\qquad$ <br> ```MOBILE CLINIC``` $\qquad$ <br> ```COMM. HEALTH WORKER ........K \\ OTHER PVT. \\ MEDICAL``` $\qquad$ <br> ```L (SPECIFY) \\ OTHER SOURCE \\ PMV``` $\qquad$ <br> ```M \\ TRAD. PRACTITIONER``` $\qquad$ <br> ```SPIRITUAL HEALER``` $\qquad$ <br> ```OTHER``` $\qquad$ <br> ```XNone``` | ```PUBLIC SECTOR GOVT. HOSPITAL ....................A GOVT. HEALTH CENTER.......... B GOVT. HEALTH POST ..............C MOBILE CLINIC.......................D COMM. HEALTH WORKER ........E OTHER PUBLIC``` $\qquad$ ```NoneNone ``` $\qquad$ ```None \\ OTHER SOURCE \\ PMV. ``` $\qquad$ <br> ```M \\ TRAD. PRACTITIONER``` $\qquad$ <br> ```. \\ SPIRITUAL HEALER.``` $\qquad$ <br> ```OTHER``` $\qquad$ <br> ```XNone``` |
| 607 | How long after you noticed the fever/convulsions was (NAME) taken for care? | SAME DAY (WITHIN 24 HOURS) ... 1 NEXT DAY (25-48 HOURS) ........... 2 MORE THAN 2 DAYS/48 HOURS... 3 | SAME DAY (WITHIN 24 HOURS) ... 1 NEXT DAY ( $25-48$ HOURS) ........... 2 MORE THAN 2 DAYS/48 HOURS... 3 |


| 608 | Did the provider recommend any drugs for the fever/ convulsions? | YES................................................................................................................ | YES............................................................................................................... |
| :---: | :---: | :---: | :---: |


|  |  | NAME LAST CHILD | NAME NEXT-TO-LAST-CHILD |
| :---: | :---: | :---: | :---: |
| 609 | What drugs did the provider recommend? <br> RECORD ALL MENTIONED. <br> ASK TO SEE DRUG(S) IF TYPE OF DRUG IS NOT KNOWN. | ANTI-MALARIAL <br> NIVAQUINE/CHLOROQUINE.......A <br> AMODIAQUINE/CAMOQUINE .... B <br> QUININE $\qquad$ <br> ARTEMISINE/COTECIN/COARTEM $\qquad$ <br> AMALAR/FANSIDAR/VITADAR....E <br> OTHER DRUGS $\qquad$ <br> PANADOL ...................................G <br> OTHER $\qquad$ x <br> (SPECIFY) <br> DON'T KNOW $\qquad$ . | ANTI-MALARIAL <br> NIVAQUINE/CHLOROQUINE ......A AMODIAQUINE/CAMOQUINE .... B QUININE $\qquad$ C ARTEMISINE/COTECIN/COARTEM $\qquad$ <br> OTHER DRUGS $\qquad$ <br> OTHER $\qquad$ X (SPECIFY) <br> DON'T KNOW $\qquad$ . |
| 610 | Did your child take any of those drugs? | YES......................................... 1 NO................................................. 8612 DK/DR............. | YES........................................ 1 NO................................................ 812 DKIDR............. |
| 611 | Which drugs? <br> RECORD ALL MENTIONED | ANTI-MALARIAL <br> NIVAQUINE/CHLOROQUINE.......A <br> AMODIAQUINE/CAMOQUINE .... B <br> QUININE <br> ARTEMISINE/COTECIN/COARTEM $\qquad$ <br> OTHER DRUGS <br>  <br> OTHER $\qquad$ X <br> DON'T KNOW $\qquad$ Z | ANTI-MALARIAL <br> NIVAQUINE/CHLOROQUINE ......A <br> AMODIAQUINE/CAMOQUINE .... B <br> QUININE $\qquad$ C <br> ARTEMISINE/COTECIN/COARTEM |
| 612 | Was anything [else] done about (NAME)'s fever/convulsions? | YES.................................................................................................................. NO14 DON'T KNOW |  |
| 613 | What was done about (NAME)'s fever/convulsions? | CONSULTED TRADITIONAL <br> HEALER.. $\qquad$ A <br> GAVE TEPID SPONGING...............B <br> GAVE HERBS ................................C <br> OTHER $\qquad$ X <br> (SPECIFY) | CONSULTED TRADITIONAL <br> HEALER. $\qquad$ . A <br> GAVE TEPID SPONGING...............B GAVE HERBS. $\qquad$ C <br> OTHER $\qquad$ X <br> (SPECIFY) |
| 614 | Has (NAME) had an illness with a cough at any time in the last 2 weeks? | YES.................................................................................................................... NO........ DON'T KNOW | YES......................................................................................................... ${ }^{\circ} 625$ NO |
| 615 | When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, fast breaths? | YES............................................................................................................................... NOO DON'T KNOW | YES......................................................................................................................................... NO DON'T KNOW |
| 616 | Did you seek advice or treatment for the cough/fast breathing? | YES......................................................................................... $2 \rightarrow 623$ NO....... | $\begin{aligned} & \text { YES............................................................................................... } \\ & \text { NO ...... } \end{aligned}$ |


|  |  | NAME LAST CHILD | NAME ${ }^{\text {NEXT-TO-LAST-CHILD }}$ |
| :---: | :---: | :---: | :---: |
| 617 | Where did you seek advice or treatment? <br> Anywhere else? <br> RECORD ALL SOURCES MENTIONED. | PUBLIC SECTOR $\qquad$ <br> GOVT. HEALTH CENTER...........B <br> GOVT. HEALTH POST................C <br> MOBILE CLINIC $\qquad$ <br> OTHER PUBLIC $\qquad$ F <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PVT. HOSPITAL/CLINIC $\qquad$ G PHARMACY $\qquad$ <br> PRIVATE DOCTOR $\qquad$ <br> MOBILE CLINIC $\qquad$ <br> COMM. HEALTH WORKER ........K <br> OTHER PVT. <br> MEDICAL $\qquad$ (SPECIFY) <br> OTHER SOURCE <br> PMV $\qquad$ M <br> TRAD. PRACTITIONER $\qquad$ . <br> SPIRITUAL HEALER $\qquad$ <br> OTHER $\qquad$ X | PUBLIC SECTOR <br> GOVT. HOSPITAL $\qquad$ A <br> GOVT. HEALTH CENTER............ B <br> GOVT. HEALTH POST ...............C <br> MOBILE CLINIC. $\qquad$ E <br> OTHER PUBLIC $\qquad$ F <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PVT. HOSPITAL/CLINIC $\qquad$ G PHARMACY $\qquad$ <br> PRIVATE DOCTOR. $\qquad$ <br> MOBILE CLINIC $\qquad$ <br> COMM. HEALTH WORKER........K <br> OTHER PVT. $\qquad$ L <br> (SPECIFY) <br> OTHER SOURCE <br> PMV. $\qquad$ M <br> TRAD. PRACTITIONER $\qquad$ . <br> SPIRITUAL HEALER $\qquad$ . 0 <br> OTHER $\qquad$ X |
| 618 | How long after you noticed the cough/fast breathing was (NAME) taken for care? | SAME DAY (WITHIN 24 HOURS) ... 1 NEXT DAY (25-48 HOURS) ............ 2 MORE THAN 2 DAYS/48 HOURS... 3 | SAME DAY (WITHIN 24 HOURS) ... 1 NEXT DAY (25-48 HOURS) ............ 2 MORE THAN 2 DAYS/48 HOURS... 3 |
| 619 | Did the provider recommend any drugs for the cough/breathing? |  |  |
| 620 | What drugs did the provider recommend? <br> RECORD ALL MENTIONED. <br> ASK TO SEE DRUG(S) IF TYPE OF DRUG IS NOT KNOWN. | ANTIBIOTIC THERAPY: CO-TRIMATAZOLE (SEPTRIN) ...A AMOXYCILLIN . $\qquad$ AMPICILLIN . C <br> AMPICLOX. $\qquad$ . D OTHER $\qquad$ X (SPECIFY) <br> DON'T KNOW <br> DON'T KNOW ...............................Z | ANTIBIOTIC THERAPY: CO-TRIMATAZOLE (SEPTRIN) ... A AMOXYCILLIN. $\qquad$ AMPICILLIN. . C <br> AMPICLOX. $\qquad$ .. D OTHER $\qquad$ x (SPECIFY) DON'T KNOW $\qquad$ Z |
| 621 | Did (NAME) take any of those drugs? | YES.................................................................................................................... NO23 DON'T KNOW |  |
| 622 | Which drug(s) did (NAME) take? | ANTIBIOTIC THERAPY: CO-TRIMATAZOLE (SEPTRIN) .. AMOXYCILLIN . $\qquad$ B <br> AMPICILLIN $\qquad$ C <br> AMPICLOX. OTHER $\qquad$ D X DON'T KNOW <br> (SPECIFY) $\qquad$ | ANTIBIOTIC THERAPY: CO-TRIMATAZOLE (SEPTRIN) ... A AMOXYCILLIN. <br> AMPICILLIN $\qquad$$\qquad$ BCDC <br> . <br> D OTHER $\qquad$ X DON'T KNOW (SPECIFY)$\qquad$ Z |
| 623 | Was anything [else] done about (NAME)'s cough/fast breathing? | YES....................................................................................................... NO25 | YES................................................... 1 NO ............................................... $8 \rightarrow 625$ DON'T KNOW ........... |


| 624 | What was done about (NAME)'s cough/fast breathing? | CONSULTED TRADITIONAL HEALER........................................................................................ GAVE TEPID SP. GAVE HERBS....... OTHER $\quad$ (SPECIFY) | CONSULTED TRADITIONAL <br> HEALER......................................A <br> GAVE TEPID SPONGING...............B <br> GAVE HERBS.................................C <br> OTHER $\qquad$ X <br> (SPECIFY) |
| :---: | :---: | :---: | :---: |
| 625 | Has (NAME) had diarrhea in the last 2 weeks? | YES.................................................... 1 NO.................................... $8 \rightarrow 632$ DON'T KNOW .............. | YES.................................................... 1 <br> NO .................................... $8 \rightarrow 632$ <br> DON'T KNOW .............. <br> 632 |
| 626 | Did you seek advice or treatment for the diarrhea? | YES...................................................................................... NO | YES..................................................................................... NO |
|  |  | NAME LAST CHILD | NAME NEXT-TO-LAST-CHILD |
| 627 | Where did you seek advice or treatment? <br> 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. <br> (NAME OF PLACE) <br> Anywhere else? <br> RECORD ALL PLACES MENTIONED. | PUBLIC SECTOR <br> GOVT. HOSPITAL.......................A <br> GOVT. HEALTH CENTER............B <br> GOVT. HEALTH POST................C <br> MOBILE CLINIC. $\qquad$ <br> OTHER PUBLIC $\qquad$ F <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PVT. HOSPITAL/CLINIC $\qquad$ G PHARMACY $\qquad$ <br> PRIVATE DOCTOR $\qquad$ H <br> MOBILE CLINIC. $\qquad$ <br> COMM. HEALTH WORKER ........K <br> OTHER PVT. <br> MEDICAL $\qquad$ L <br> OTHER SOURCE <br> PMV. $\qquad$ <br> SHOP $\qquad$ <br> TRAD. PRACTITIONER $\qquad$ <br> SPIRITUAL HEALER. $\qquad$ <br> OTHER $\qquad$ X | PUBLIC SECTOR <br> GOVT. HOSPITAL $\qquad$ A <br> GOVT. HEALTH CENTER...........B <br> GOVT. HEALTH POST ...............C <br> MOBILE CLINIC. $\qquad$ <br> COMM. HEALTH WORKER ........E <br> OTHER PUBLIC $\qquad$ F <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PVT. HOSPITAL/CLINIC. $\qquad$ G <br> PHARMACY $\qquad$ <br> PRIVATE DOCTOR. $\qquad$ H <br> MOBILE CLINIC. $\qquad$ <br> COMM. HEALTH WORKER ........ K <br> OTHER PVT. <br> MEDICAL $\qquad$ L <br> OTHER SOURCE $\qquad$ <br> SHOP $\qquad$ <br> TRAD. PRACTITIONER $\qquad$ <br> SPIRITUAL HEALER. $\qquad$ O <br> OTHER $\qquad$ X |
| $\begin{aligned} & 628 a \\ & -b \end{aligned}$ | Did the provider recommend any of the following to drink: | YES NO DK | YES NO DK |
| a | A fluid made from a special packet called [LOCAL NAME]? | FLUID FROM ORS PKT..... 1288 | FLUID FROM ORS PKT..... 128 |
| b | A government-recommended homemade fluid? | HOMEMADE FLUID .......... 1228 | HOMEMADE FLUID.......... 128 |
| 629 | Did your child drink any of the recommended drinks? | YES, ORS PKT............................ 1 YES, HOMEMADE FLUID............... 2 YES, BOTH ORS \& HOMEFLUID.... 3 NO, NEITHER......................... 4 | YES, ORS PKT............................ 1 YES, HOMEMADE FLUID.............. 2 YES, BOTH ORS \& HOMEFLUID.... 3 NO, NEITHER......................... 4 |
| 630 | Was anything [else] given to treat the diarrhea? | YES.................................................................................................................. NO | YES...................................................................................................................... NO |


| 631 | What (else) was given to treat the diarrhea? <br> Anything else? <br> RECORD ALL TREATMENTS MENTIONED. | PILL OR SYRUP $\qquad$ <br> INJECTION $\qquad$ . <br> (I.V.) INTRAVENOUS. $\qquad$ C <br> HOME REMEDIES/ <br> HERBAL MEDICINES .................D <br> OTHER $\qquad$ X <br> (SPECIFY) |  | PILL OR SYRUP INJECTION (I.V.) INTRAVENOUS HOME REMEDIES/ HERBAL MEDICINES . OTHER $\qquad$ SPECIFY) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 632 | When (your child/one of your children) is seriously ill, can you decide by yourself whether or not the child should be taken for medical treatment? <br> IF SAYS NO CHILD EVER SERIOUSLY ILL, ASK: <br> If (your child/one of your children) became seriously ill, could you decide by yourself whether the child should be taken for medical treatment? |  |  |  |  |



|  | SECTION 7. AWARENESS OF MALARIA AND OTHER ILLNESS HOME-BASED MANAGEMENT AND PREVENTION |  |  |
| :---: | :---: | :---: | :---: |
| 701 | When a child under 5 years of age is sick, what signs of illness would tell you that he/she should be taken to a health facility or health worker for immediate care? <br> PROBE: Any other signs? <br> DO NOT READ OUT THE OPTIONS BUT RECORD ALL MENTIONED | REPEATED WATERY STOOLS. <br> BLOODY STOOL. <br> REPEATED VOMITIING <br> FAST BREATHING. <br> DIFFICULTY BREATHING. <br> NOISY BREATHING. <br> COUGH. <br> FEVER/HIGH TEMP <br> CONVULSIONS. <br> NOT EATING,NOT DRINKING/ <br> NOT BREASTFEEDING WELL. <br> GETTING SICKER/VERY SICK. <br> DIFFICULT TO WAKE UP. <br> OTHER $\qquad$ <br> NOT SURE/DON'T KNOW |  |
| 702 | How can a parent prevent malaria in children? DO NOT READ. RECORD ALL MENTIONED. PROBE: Anything else? | ANY MOSQUITO NET........................A <br> TREATED MOSQUITO NET...............B <br> MOSQUITO COILS...........................C <br> INSECT SPRAY...............................D <br> REMOVE WATER AROUND HOUSE...E <br> CLEAR BUSH..................................F <br> CLOSE DOOR/WINDOWS EARLY......G <br> PERSONAL/HOUSEHOLD HYGIEN......H <br> OTHER $\qquad$ ........W <br> (SPECIFY) <br> DON'T KNOW. $\qquad$ |  |
| 703 | [IF TREATED MOSQUITO NETS WAS NOT MENTIONED IN THE QUESTION ABOVE, THEN ASK] <br> Can the use of insecticide treated mosquito nets prevent malaria? | YES ...................................................................................................................................... |  |
|  | CHECK PAGE 3. IF CHILDREN 6-11 LIVE IN THE HOUSEHOLD, ASK THE FOLLOWING FOR EACH CHILD? IF NO CHILDREN BETWEEN 6-11, SKIP TO 705 |  |  |
| 704A | Did (WRITE NAME $\qquad$ ) sleep under an insecticide treated mosquito net last night? |  |  |
| 704B | Did (WRITE NAME $\qquad$ ) sleep under an insecticide treated mosquito net last night? |  |  |
| 704C | Did (WRITE NAME $\qquad$ ) sleep under an insecticide treated mosquito net last night? |  |  |
| 704D | Did (WRITE NAME $\qquad$ ) sleep under an insecticide treated mosquito net last night? | YES................................................................................................................................. |  |
| 705 | During the last six months have you heard or seen any messages about insecticide treated mosquito nets: <br> a) On the radio? <br> b) On the television? <br> c) In a newspaper or magazine? <br> d) From a home visit by a Community Health Worker? <br> e) At the clinic? <br> f) From a PMV? <br> w) Anywhere or from anyone else? |  |  |



SECTION 8. MARRIAGE AND SEXUAL ACTIVITY

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 801 | Are you presently married or living with a partner? | YES, CURRENTLY MARRIED.................. 1 YES, LIVING WITH A PARTNER .......... 2 NO, NOT IN UNION ........................... 3 | $\beth_{>804}$ |
| 802 | Have you ever been married or lived with a partner? | YES, FORMERLY MARRIED.................... 1 YES, LIVED WITH A PARTNER ............................................................................... | $\begin{aligned} & \longrightarrow 805 \\ & \rightarrow 806 \end{aligned}$ |
| 803 | What is your marital status now: are you widowed, divorced, or separated? |  | $\vec{\square}>806$ |
| 804 | Is your spouse/partner living with you now or is he/she staying elsewhere? | LIVING WITH HER/HIM................................ 1 STAYING ELSEWHERE ............... 2 |  |
| 805 | How old were you when you started living with him/her? | AGE. $\qquad$ |  |
| 806 | Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues. <br> How old were you when you first had sexual intercourse (if ever)? | NEVER $\qquad$ 00 <br> AGE IN YEARS $\qquad$ $\square$ <br> FIRST TIME WHEN STARTED LIVING WITH SPOUSE/PARTNER $\qquad$ 95 | $\longrightarrow 822$ |
| 807 | When was the last time you had sexual intercourse? <br> RECORD 'YEARS AGO' ONLY IF LAST INTERCOURSE WAS ONE OR MORE YEARS AGO. <br> RECORD MONTHS ONLY IF 11 MONTHS OR LESS. | DAYS AGO WEEKS AGO MONTHS AGO YEARS AGO $\square$ | ->819 |
| 808 | The last time you had sexual intercourse, was a condom used? | $\begin{aligned} & \text { YES............................................................................................................ } \\ & \text { NO ........ } \end{aligned}$ | $\rightarrow>811$ |
| 809 | What was the main reason you used a condom on that occasion? | RESPONDENT WANTED TO <br> PREVENT STI/HIV.. $\qquad$ 01 <br> RESPONDENT WANTED TO <br> PREVENT PREGNANCY ................. 02 <br> RESPONDENT WANTED TO <br> PREVENT BOTH STI/HIV AND <br> PREGNANCY .................................. 03 <br> DID NOT TRUST PARTNER/FELT <br> PARTNER HAD OTHER <br> PARTNERS.. $\qquad$ 04 <br> PARTNER REQUESTED/INSISTED..... 05 <br> OTHER $\qquad$ 96 (SPECIFY) <br> DON'T KNOW. $\qquad$ |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 810 | How often do you use a condom with this partner? |  |  |
| 811 | What is your relationship to the person with whom you last had sex? <br> FOR FEMALE RESPONDENT: IF MAN IS "BOYFRIEND" OR <br> "FIANCÉ", ASK: Was your boyfriend/fiancé living with you when you last had sex? <br> FOR MALE RESPONDENT: IF WOMAN IS ‘GIRLFRIEND’ OR <br> 'FIANCEE', ASK: Was your girlfriend/fiancée living with you when you last had sex? <br> IF YES, CIRCLE '01'. <br> IF NO, CIRCLE '02'. | SPOUSE/COHABITING PARTNER ...... 01 BOYFRIEND/GIRLFRIEND/FIANCÉ .... 02 <br> OTHER FRIEND ................................... 03 <br> CASUAL ACQUAINTANCE................... 04 <br> RELATIVE............................................ 05 <br> COMMERCIAL SEX WORKER ............. 06 <br> OTHER $\qquad$ 96 | ->813 |
| 812 | About how old would you say he/she was? |  |  |
| 813 | Have you had sex with any other partner in the last 12 months? | YES............................................................................................................... | $\longrightarrow 819$ |
| 814 | The last time you had sexual intercourse with another partner, was a condom used? | YES................................................................................................ 2 | ->817 |
| 815 | 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``` $\qquad$ <br> ```96 (SPECIFY) \\ DON'T KNOW``` $\qquad$ <br> ```98``` |  |
| 816 | How often do you use a condom with this partner? | EVERY TIME............................................................................................................................................................................ |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 817 | What is your relationship to this partner? <br> FOR FEMALE RESPONDENT: IFMAN IS "BOYFRIEND" OR <br> "FIANCÉ", ASK: Was your boyfriend/fiancé living with you when you last had sex? <br> FOR MALE RESPONDENT: IF WOMAN IS ‘GIRLFRIEND’ OR <br> 'FIANCEE', ASK: Was your girlfriend/fiancée living with you when you last had sex? <br> IF YES, CIRCLE '01'. <br> IF NO, CIRCLE '02'. | SPOUSE/COHABITING PARTNER ...... 01 BOYFRIEND/GIRLFRIEND/FIANCÉ ..... 02 OTHER FRIEND ................................... 03 CASUAL ACQUAINTANCE................... 04 RELATIVE. $\qquad$ COMMERCIAL SEX WORKER ............. 06 <br> OTHER $\qquad$ 96 (SPECIFY) | -> 819 |
| 818 | About how old would you say he/she was? |  |  |
| 819 | In the last 12 months, in total, how many different partners have you had sex with? | NUMBER OF PARTNERS $\Gamma$ |  |
| 820 | Have you ever exchanged/or-received money or gifts for sex? | YES.................................................................................................................. NO....... 2 | $\rightarrow 822$ |
| 821 | The last time that you exchanged/received money or gifts for sex, was a condom used on that occasion? | YES......................................................................................................................... NO ....... |  |
| 822 | Do you know of a place where a person can get condoms? | YES....................................................................................................... | $\rightarrow 824$ |
| 823 | Where is that? <br> 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. <br> (NAME OF PLACE) <br> Any other place? <br> RECORD ALL SOURCES MENTIONED. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 824 | Have you heard of female condoms? | YES....................................................................................................................... 3 NO DON'T KNOW/UNSURE.......... | —>901 |
| 825 | Do you know of a place where a person can get female condoms? | YES................................................................................................................... NO ....... | —>901 |
| 826 | Where is that? <br> 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. <br> (NAME OF PLACE) <br> Any other place? <br> RECORD ALL SOURCES MENTIONED. |  |  |

SECTION 9. FERTILITY PREFERENCES

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 901 | CHECK 308A/308B: <br> STERILIZED |  | ->910 |
| 902 | FOR FEMALE RESPONDENTS, CHECK 214: <br> FOR MALE, CHECK 201: <br> PREGNANT <br> -NOT PREGNANT OR UNSURE <br> Now I have some questions about the future. <br> Would you like to have (a/another) child, or would you prefer not to have any (more) children? <br> Now I have some questions about the future. <br> 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 <br> NO MORE/NONE ...................................... 2 <br> SAYS SHE CAN'T GET PREGNANT........ 3 <br> SAYS HE OR HIS PARTNER IS <br> INFERTILE. <br> UNDECIDED/DON'T KNOW: AND <br> PREGNANT. $\qquad$ <br> UNDECIDED/DK AND NOT PREGNANT <br> OR UNSURE. $\qquad$ | $\begin{array}{\|l} \longrightarrow 904 \\ \longrightarrow 910 \\ \longrightarrow 910 \\ \rightarrow 907 \\ \longrightarrow 904 \end{array}$ |
| 903 | FOR FEMALE RESPONDENTS, CHECK 214: <br> $\begin{array}{lr}\text {-NOT PREGNANT } \\ \text { OR UNSURE } & \square \\ \text {-MALE } & \vee\end{array}$ <br> RESPONDENTS <br> How long would you like to wait from now before the birth of (a/another) child? <br> PREGNANT <br> After the birth of the child you are expecting now, how long would you like to wait before the birth of another child? |  | $\mapsto_{-}-906$ |
| 904 | CHECK 307 \&308A/B: USING A CONTRACEPTIVE METHOD? |  | $\begin{aligned} & \longrightarrow 907 \\ & \longrightarrow 910 \end{aligned}$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 905 | You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy. <br> Can you tell me why? <br> Any other reason? <br> RECORD ALL REASONS MENTIONED. |  |  |
| 906 | 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.................................................................................................................................. 4 SMALL PROBLEM NO PROBLEM.......................................... SAYS CAN'T GET PRE HAVING SEX ........ |  |
| 907 | Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future? | YES .................................................................................................................................................................. NO...... DON' KNOW | $I_{>909}$ |
| 908 | Which contraceptive method would you prefer to use? |  | ->910 |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 909 | What is the main reason that you think you will not use a contraceptive method at any time in the future? |  |  |
| 910 | Would you say that you approve or disapprove of couples using a method to avoid getting pregnant? | APPROVE ................................................................................................... 3 |  |
| 911 | Do you think that a few, some, most or almost all the women/men in this community are in favor of the use of modern family planning? |  |  |
| 912A | Have you ever encouraged someone to use a modern family planning method? | YES ............................................................................................................................................................................. |  |
| 912B | Have you ever been encouraged by someone to use a modern family planning method? | YES ................................................................................................................................................................ |  |
| 912c | By whom? <br> Anyone else? <br> RECORD ALL PERSONS MENTIONED. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & 913 a \\ & -g \end{aligned}$ | In the last 6 months have you heard or seen anything about family planning: <br> a) On the radio? <br> b) On the television? <br> c) In a newspaper or magazine? <br> d) From a home visit by a Community Health Worker? <br> e) At the clinic? <br> f) From a PMV? <br> w) Anywhere or from anyone else? |  YES NO <br> a) RADIO................................. 11 2  <br> b) TELEVISION ..................... 11 2  <br> c) NEWSPAPER OR MAGAZINE . 1 2  <br> d) COMMUNITY HLTH WKR ........ 1 2  <br> e) CLINIC................................ 1 2  <br> f) PMV...................................................... 2  <br> w) OTHER 2  <br> (SPECIFY)   |  |
| 914 | CHECK 801: | NO, IN NION | $\rightarrow 1001$ |
| 915 | CHECK 308A/308B: <br> ANY CODE CIRCLED <br> NO CODE | RCLED | $\rightarrow 917$ |
| 916 | 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 <br> OTHER $\qquad$ 6 (SPECIFY) |  |
| 917 | Now I want to ask you about your spouse's/partner's views on family planning. <br> Do you think that your spouse/partner approves or disapproves of couples using a contraceptive method to avoid pregnancy? | APPROVES.............................................................................................................................. |  |
| 918 | How often have you talked to your spouse/partner about family planning in the past year? | NEVER ............................................................................................................................................. |  |
| 919 | CHECK 308A/B: | RILIZED $\square$ | $\rightarrow 1001$ |
| 920 | Do you think your spouse/partner wants the same number of children that you want, or does he want more or fewer than you want? | SAME NUMBER ....................................................................................................................................................................... |  |

SECTION 10. PARTNER'S BACKGROUND


SECTION 11. AIDS AND OTHER SEXUALLY TRANSMITTED INFECTIONS

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1101 | Now I would like to talk about something else. Have you ever heard of an illness called AIDS? | YES .......................................................................................................... NO...... | ->1119 |
| $\begin{aligned} & 1102 \\ & \text { A-W } \end{aligned}$ | In the last 6 months have you heard or seen anything about AIDS or the virus that causes AIDS (HIV) or any other sexually transmitted infections: <br> A) On the radio? <br> B) On the television? <br> C) In a newspaper or magazine? <br> D) From a home visit by a Community Health Worker? <br> E) At the clinic? <br> F) From a PMV? <br> W) From anywhere or anyone else? |  |  |
| 1103 | Is there anything a person can do to avoid getting AIDS or the virus that causes AIDS? | YES............................................................................................................................................ NO......... DONOW | $L_{>1105}$ |
| 1104 | What can a person do? <br> DO NOT READ RESPONSES. RECORD ALL WAYS MENTIONED. <br> Anything else? |  <br> OTHER $\qquad$ w <br> DON'T KNOW <br> (SPECIFY) |  |
| 1105 | Is it possible for a healthy-looking person to have the AIDS virus? |  |  |
| 1106 | Do you know someone personally who has the virus that causes AIDS? |  |  |
| 1107 | Do you know someone personally who has died of AIDS? | YES ............................................................................................................................................................................... NOO DON'T |  |
| 1108 | Can the virus that causes AIDS be transmitted from a mother to a child? | YES .......................................................................................................................................................... NOO DON'T KNOW |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1109 \\ & \text { A-C } \end{aligned}$ | Can the virus that causes AIDS be transmitted from a mother to a child: <br> A) During pregnancy? <br> B) During delivery? <br> C) By breastfeeding? |  YES NO <br>  DK  <br> A) DURING PREG...... 2 8 <br> B) DURING DELIVERY1 2 8 <br> C) BREASTFEEDING.1 2 8 |  |
| 1110 | 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 ............................................................................................................................................................... NOO DON'T KNOW |  |
| 1111 | Have you ever talked with your partner about ways to prevent getting the virus that causes AIDS? | YES .............................................................................................................. NO...... |  |
| 1112 | Have you ever encouraged someone to use a condom to avoid getting HIV or other sexually transmitted infections? |  |  |
| 1113 | Have you ever been encouraged by someone to use a condom to avoid getting HIV or other sexually transmitted infections? | YES...................................................................................................................................................... NO....... DON'T |  |
| $\begin{aligned} & 1114 \\ & \mathrm{a}-\mathrm{e} \end{aligned}$ | In your opinion, is it acceptable or unacceptable for AIDS to be discussed: <br> a) On the radio? <br> b) On the TV? <br> c) In newspapers? <br> d) At home? <br> e) In primary schools? |  |  |
| 1115 | If a member of your family got infected with the virus that causes AIDS, would you want it to remain a secret or not? |  |  |
| 1116 | Should children age 12-14 be taught about using a condom to avoid AIDS? | YES ......................................................................................................................................... NO....... DKINOT SURE/DEPENDS |  |
| 1117 | Do you know a place where you could go to get an AIDS test? | YES................................................................................................................... NO...... | ->1119 |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1118 | Where can you go for the test? <br> RECORD ALL PLACES MENTIONED <br> Anywhere else? |  |  |
| 1119 | Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? | YES .................................................................................................................. NO....... |  |
| 1120 | RECORD THE TIME. | HOUR <br> 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 COMPASS Project and health services for your community. If you have any questions about anything I asked you about I will try and explain, otherwise please contact Prof. Adewuyi at 0803-719-3284 at the Center for Research, Evaluation and Resource Development.

INTERVIEWER'S OBSERVATIONS
TO BE FILLED IN AFTER COMPLETING INTERVIEW
COMMENTS ABOUT RESPONDENT:
$\qquad$

COMMENTS ON SPECIFIC QUESTIONS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$

ANY OTHER COMMENTS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

SUPERVISOR'S OBSERVATIONS

NAME OF THE SUPERVISOR: $\qquad$ DATE:
$\underline{ }$

EDITOR'S OBSERVATIONS


[^0]:    Notes: $\quad \dagger$ KLN refers to Kano, Lagos, and Nasawara.
    N/A = not applicable.

[^1]:    Notes: $\quad \dagger$ KLN refers to Kano, Lagos, and Nasawara.
    N/A = not applicable.

[^2]:    Notes: $\quad$ * Totals weighted by state. The number of male students enrolled in current school year was as follows: primary $1=$ 209, primary $2=244$, primary $3=164$, primary $4=110$, primary $5=80$, primary $6=42$ The number of female students enrolled in current school year was as follows: primary $1=201$; primary $2=232$; primary $3=143$; primary 4 = 126; primary $5=74$; primary $6=57$.
    $\dagger$ KLN refers to Kano, Lagos, and Nasawara.

