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# ADOLESCENTS 360 OUTCOME EVALUATION: SUMMARY REPORT OF THE BASELINE SURVEY IN NIGERIA

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February 2018

Submitted by Itad in association with the London School of Hygiene and Tropical Medicine

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Results in development

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# Adolescents 360 Outcome Evaluation: Summary Report of the Baseline Survey in Nigeria

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## Acronyms

A360	Adolescents 360
ASFR	Age-specific fertility rate
CHW	Community Health Worker
DHS	Demographic and Health Survey
EA	Enumeration Area
FP2020	Family Planning 2020
HCD	Human-centred design
HH	Household
HIV	Human Immunodeficiency Virus
IUD	Intrauterine contraceptive device
LAM	Lactational Amenorrhoea Method
LGA	Local Government Area
LSHTM	London School of Hygiene and Tropical Medicine
mCPR	Modern contraceptive prevalence rate
NDHS	Nigeria Demographic and Health Survey
PSI	Population Services International
SDM	Standard Days Method
SFH	Society for Family Health
SRH	Sexual and reproductive health
TBA	Traditional Birth Attendant

## Executive summary

### Introduction

The innovative, interdisciplinary Adolescents 360 (A360) programme being rolled out across Ethiopia, Nigeria and Tanzania uses human-centred design (HCD) to create context-specific multi-component interventions with the aim of increasing voluntary modern contraceptive use among adolescent girls aged 15–19 years.

There is a lack of evidence on the health impact of projects that employ HCD. The A360 evaluation comprises an outcome evaluation, a process evaluation and a cost effectiveness study. The primary objective of the outcome evaluation is to assess the impact of the A360 programme on the voluntary use of modern contraception (the modern contraceptive prevalence rate, mCPR) among sexually active girls aged 15–19 years. A baseline survey is being conducted prior to the scale-up of the programme's interventions, with an endline survey planned for 2019/2020. This report details the findings from the baseline survey in one of the three A360 countries—Nigeria.

### Methods

In Nigeria, we used a pre- and post-population-based cross-sectional survey design with a comparison group. Baseline surveys took place between 7 August and 23 September 2017, prior to the scale-up of A360 activities, so that it was possible to document baseline conditions in two Nigerian states targeted for A360 rollout. We conducted baseline surveys in two Local Government Areas (LGAs) (Shagamu and Ado-Odo Ota) of Ogun state in southern Nigeria and four LGAs (Doma, Karu, Nasarawa and Toto) of Nasarawa State in northern Nigeria.

The target population for the study was different in southern and northern Nigeria, in line with the main focus of the programme. The target population in Ogun was unmarried girls aged 15–19 years, and in Nasarawa the target population was married girls aged 15–19 years.

A two-stage sampling design was used. A simple random sample of Enumeration Areas

(EAs) was carried out separately for Ogun and Nasarawa. All households were visited in these EAs, from which all eligible girls were invited to take part in the survey.

The survey collected baseline information on key background characteristics and sexual and reproductive health (SRH) indicators. Only girls who reported sexual intercourse within the 12 months preceding the survey were asked questions regarding use of contraception and family planning services.

Therefore, our primary outcome (mCPR) was measured only in sexually active girls aged 15–19 years. In addition, we surveyed a subgroup of co-habiting adults (Ogun) and husbands/male partners (Nasarawa) to obtain information on community acceptance and social support for adolescent girls to adopt healthy SRH behaviours.

In Ogun, 12,053 unmarried girls aged 15–19 years (Ado-Odo Ota 6,043; Shagamu 6,010) and 337 co-habiting adults (Ado-Odo Ota 176; Shagamu 161) were successfully interviewed. Female relatives of unmarried adolescent girls made up the majority of co-habiting adult respondents (mother 46.0%; older sister 26.4%; aunt 18.1%).

In Nasarawa, 4,816 married girls aged 15–19 years (Doma 908; Toto 952; Karu 1,434; Nasarawa 1,522) and 326 husbands/co-habiting male partners (Doma 74; Toto 74; Karu 86; Nasarawa 92) were successfully interviewed. The vast majority of respondents were husbands (94.5%).

### Key findings

#### *Background characteristics of adolescent girl respondents*

- **Ogun:** The median age of unmarried adolescent girl respondents was 17 years (range 15–19 years). About 1% of respondents had no education and for 90% secondary education was the highest educational level attained. Among

unmarried adolescent girls, 56.7% owned a mobile phone.

- **Nasarawa:** The median age of married adolescent girl respondents was 18 years (range 15–19 years). Just over a quarter of respondents had no education, and for 43% secondary education was the highest educational level attained. Among married adolescent girls, 53.7% owned a mobile phone.

#### *Sexuality, fertility and fertility preferences of adolescent girl respondents*

- **Ogun:** Overall, 15.3% of respondents reported being sexually active during the previous 12 months. The median age of first sexual intercourse was 16 years (range 6–19 years). A total of 652 (5.4%) unmarried girls surveyed had ever been pregnant.

Unmet need for modern contraception was 32.5% in unmarried adolescents, made up almost entirely of unmet need for spacing (want to wait for two or more years before having a/another child).

- **Nasarawa:** Overall, 90.7% of respondents had been sexually active during the previous 12 months. The median age of first sexual intercourse was 15 years (range 6–19 years). A total of 3,913 (81.3%) married girls surveyed had ever been pregnant.

Unmet need for modern contraception was 21.9% in married adolescents, made up almost entirely of unmet need for spacing.

#### *Family planning*

- **Ogun:** Overall, 79.2% of unmarried adolescent girls had heard of contraception. mCPR for unmarried girls aged 15–19 years was 47.5%. The male condom was the most common modern method (33.4%), followed by emergency contraception (11.1%). Traditional methods were used by 18.8% of respondents.
- **Nasarawa:** Overall, 47.2% of married adolescent girls had heard of contraception. mCPR for married girls aged 15–19 years was 14.4%. Injectables were the most

common modern method (4.1%), followed by the male condom (3.5%) and contraceptive implants (3.0%). Traditional methods were used by 3.0% of respondents.

#### *Perspectives of co-habiting adults and husbands*

- **Ogun:** Overall, 97.6% of co-habiting adults had heard of contraception. Of the co-habiting adults surveyed, 66.6% say it is acceptable for an adolescent girl to obtain information on contraception services and products if she needs to, and 57.5% say it is acceptable for an adolescent girl to obtain a contraception method if she decides to use one.
- **Nasarawa:** Overall, 71.2% of husbands/co-habiting male partners had heard of contraception. Of the husbands/co-habiting male partners surveyed, 87.5% say it is acceptable for an adolescent girl to obtain information on contraception services and products if she needs to, and 80.2% say it is acceptable for an adolescent girl to obtain a contraception method if she decides to use one.

#### **Identified priority areas for programme activities promoting contraceptive use**

- *Address fears, misconceptions, and myths to build trust and credibility of family planning products:* Myths and misconceptions were widespread among both unmarried and married adolescent girls and their co-habiting adults/husbands/male partners. Approximately half of unmarried adolescent girls in Ogun and half of married girls in Nasarawa believe that some modern contraception can stop a girl from ever being pregnant again even after she stops using it. Two thirds of unmarried adolescent girls in Ogun and half of married girls in Nasarawa believe that, if a modern contraception changes a girl's menstrual bleeding, it is bad for her health and can harm her womb. Effective family planning counselling must prepare girls for the possibility that they will experience side effects and provide them with the

information and tools to overcome them. Counselling is also an important factor in shifting the method mix towards long acting methods for birth spacing. Currently, of those reporting using a method of contraception (modern or traditional), only about 1% of sexually active unmarried girls and 41% of sexually active married girls are using implants, intrauterine contraceptive device and injectables.

- *Increase intentions to use contraception by positioning contraception as relevant and valuable:* The main reason given by married adolescent girls for not using contraception was wanting a/another child. This was in spite of the majority of married girls acknowledging the health benefits of family planning for spacing. These data may highlight the need for a planned focus on addressing social norms around the interrelationship between marriage and early childbearing among adolescent girls, and delivering communication on 1) benefits of delaying the birth of a first child and 2) benefits of a two- to three-year interval.
- *Increase partner communication about family planning to help create a supportive environment for accessing services:* While the majority of unmarried girls felt able to start a conversation with their partners about contraception, and felt able to use a method of contraception even if their partner did not want them to, the proportion of married girls who felt able to carry out these actions was much lower. These data may highlight the need for a planned focus on partner communication for married girls.
- *Foster public approval of family planning by communities to help create a supportive environment for accessing services:* While the majority of respondents (girls and co-habiting adults) approved of married couples using a modern contraceptive method to avoid or delay pregnancy, far fewer respondents approved of unmarried couples using a modern contraceptive method to avoid or delay pregnancy. These data may highlight the need for a planned

focus on tackling prevailing social norms with regard to unmarried couples and the use of modern contraception.



## 1. Introduction to the programme and the evaluation

### Key messages:

- **The Adolescents 360 (A360) initiative being rolled out across Ethiopia, Nigeria and Tanzania aims to increase voluntary modern contraceptive use among adolescent girls aged 15–19 years.**
- **The primary objective of the outcome evaluation is to assess the impact of A360 on the voluntary use of modern contraception among sexually active girls aged 15–19 years.**

Adolescents 360 (A360) is a four-and-a-half year initiative co-funded by the Bill & Melinda Gates Foundation and the Children's Investment Fund Foundation (CIFF). A360 is being implemented by Population Services International (PSI) as part of a consortium with IDEO.org, the University of California at Berkeley Center on the Developing Adolescent, the Society for Family Health Nigeria (SFH) and Triggerise. The project is being delivered in Ethiopia, Nigeria and Tanzania, in partnership with local governments, organisations and technology and marketing firms.

The A360 interventions are being designed using a human-centred design (HCD) process as a core component. The process includes the following steps:

1. **Inspiration**—a period of formative research to understand adolescent girls' sexual and reproductive health (SRH) needs and their socio-cultural environment;
2. **Ideation**—an iterative process of generating ideas, testing these ideas with adolescent girls and their communities, refining these ideas and developing prototypes and testing these prototypes in real-world settings;
3. **Implementation**—rolling out the intervention in the target communities.

The innovative interdisciplinary A360 approach combines HCD with social marketing, developmental neuroscience, sociocultural anthropology, public health and youth engagement to create better solutions for adolescents.

Ethiopia, Nigeria and Tanzania have some of the highest teenage pregnancy rates and lowest rates of modern contraceptive use among adolescents in the world.<sup>1</sup> A360 is being rolled out across these three countries using HCD to create context-specific multi-component interventions with the aim of increasing voluntary modern contraceptive use among adolescent girls aged 15–19 years. HCD is increasingly being used to develop health interventions, yet the evidence base for the effectiveness of this approach is limited.<sup>2 3</sup>

Itad, the London School of Hygiene and Tropical Medicine (LSHTM) and Avenir Health are working together to monitor, evaluate and develop learning from the A360 programme. The external evaluation of the A360 intervention comprises an outcome evaluation, a process evaluation and a cost effectiveness study.

The primary objective of the outcome evaluation, led by LSHTM, is to assess the impact of the A360 programme on the voluntary use of modern contraception (the modern contraceptive prevalence rate, mCPR) among sexually active girls aged 15–19 years. In Nigeria, we will use a pre- and post- population-based cross-sectional survey design with a comparison group. The outcome evaluation started prior to the scale-up of A360 programme activities to make it possible to document baseline conditions in two Nigerian states targeted for A360 rollout.

This report presents the methods and results of the baseline surveys in Nigeria. The baseline data will provide A360 implementation partners in Nigeria with crucial information about family planning and reproductive health issues in their target populations on the eve of programme implementation.

The structure of this report is as follows:

**Section 2** presents details on the methods for the baseline survey.

**Section 3** describes the background characteristics of the adolescent girls surveyed.

**Section 4** describes the sexuality, fertility and fertility preferences of the adolescent girls surveyed.

**Section 5** describes the family planning attitudes and behaviours of the adolescent girls surveyed.

**Section 6** describes the background characteristics and family planning attitudes of the co-habiting adults and husbands of adolescent girls surveyed.

**Section 7** presents our key findings from the baseline survey and identifies priority areas for programme activities promoting contraceptive use for A360 and for future similar projects.

## 2. Methods

### Key messages:

- Baseline surveys took place between 7 August and 23 September 2017. They were conducted in two Local Government Areas (LGAs) (Shagamu and Ado-Odo Ota) of Ogun state in southern Nigeria and four LGAs (Doma, Karu, Nasarawa and Toto) of Nasarawa state in northern Nigeria.
- The target population in Ogun was unmarried girls aged 15–19 years. In Nasarawa, the target population was married girls aged 15–19 years.
- A two-stage sampling design was used. A simple random sample of Enumeration Areas (EAs) was selected separately for Ogun and Nasarawa. All households in these EAs were visited, from which all eligible girls were invited to take part in the survey.
- In Ogun, 13,481 potentially eligible unmarried adolescent girls aged 15–19 years were identified; 89.4% (12,053) were successfully interviewed. In Nasarawa, 4,963 potentially eligible married adolescent girls aged 15–19 years were identified; 97.0% (4,816) were successfully interviewed.

### 2.1. Study objectives

The objectives of the baseline surveys were to describe, in the A360 target populations, the pre-intervention prevalence of key background characteristics and SRH indicators. The outcome evaluation will be analysing the impact of A360 on these SRH indicators (Table 2.1).

**Table 2.1. Primary and secondary outcomes**

Outcome domain	Indicators
Primary outcome	Prevalence of modern contraceptive use among sexually active girls aged 15–19 years
Secondary outcomes	<ul style="list-style-type: none"> <li>• Age-specific fertility rates</li> <li>• Age at first birth</li> <li>• Unmet need for modern contraception among sexually active girls aged 15–19 years</li> <li>• Adolescent girls' knowledge on the use of modern contraceptives to prevent unintended pregnancies</li> <li>• Adolescent girls' agency (self-efficacy) to use modern contraceptives to prevent unintended pregnancies</li> <li>• Adolescent girls' attitudes towards the use of modern contraceptives to prevent unintended pregnancies</li> <li>• Adolescent girls' access to contraceptive services and products</li> <li>• Adolescent girls' misconceptions about modern contraceptives</li> <li>• Community acceptance and social support for adolescent girls to adopt healthy SRH behaviours, including use of modern contraceptives</li> </ul>

Our primary outcome, mCPR among 15–19-year-old girls, was defined as follows:

Number of fecund sexually active 15–19-year-old girls reporting use of modern contraceptives at the time of the survey

Number of fecund sexually active 15–19-year-old girls

Modern contraception: male and female sterilisation, contraceptive implants, intrauterine contraceptive devices (IUDs), injectables, oral contraceptive pill, emergency contraceptive pill, male condom, female condom, Standard Days Method (SDM), Lactational Amenorrhoea Method (LAM), diaphragm, spermicides, foams and jelly.

Sexually active girls: those who report having sexual intercourse in the past 12 months.

Fecund girls: those who have started menstruating, are not pregnant and do not report that they are infertile.

Our study definition of mCPR differs from the standard DHS definition. Our denominator reflects the population at risk (of pregnancy), i.e., sexually active women who are not infecund or pregnant. Therefore, we consider our definition to be more informative for programming and for understanding whether A360 increases voluntary use of contraception in adolescents. However, we acknowledge that the DHS definition is more widely used and therefore present the results using DHS mCPR in Appendix C to allow for direct comparisons with DHS data and studies which use the DHS definition for mCPR.

## 2.2. Study design

Table 2.2 presents a summary of the methods used in the outcome evaluation study in Nigeria.

**Table 2.2. Summary of methods**

A360 country	A360 regions	Study design	Outcome evaluation study setting	Study population (sample size)	Sampling strategy
Nigeria (south)	Lagos, Osun, <b>Ogun</b> , Oyo, Edo, Delta, Akwa Ibom	Cross-sectional before-and-after study with comparison group	Ogun state: <ul style="list-style-type: none"> <li>Ado-Odo Ota LGA (intervention)</li> <li>Shagamu LGA (comparison)</li> </ul>	Unmarried girls aged 15-19 years (12,000) Co-habiting adults (250)	Two-stage design Primary sampling unit: EA Simple random sample of EAs (approximately 710 in Ogun). All HHs visited in selected EAs. All eligible girls invited to be interviewed.
Nigeria (north)	Federal Capital Territory, Kaduna, <b>Nasarawa</b>	Cross-sectional before-and-after study with comparison group	Nasarawa state: <ul style="list-style-type: none"> <li>Doma LGA (intervention)</li> <li>Toto LGA (comparison)</li> <li>Karu LGA (intervention)</li> <li>Nasarawa LGA (comparison)</li> </ul>	Married girls aged 15-19 years (4,600) Husbands/male partners (250)	Two-stage design Primary sampling unit: EA Simple random sample of EAs (approximately 1,150 in Nasarawa). All HHs visited in selected EAs. All eligible girls invited to be interviewed.

HH: Household; LGA: Local Government Area; EA: Enumeration Area.

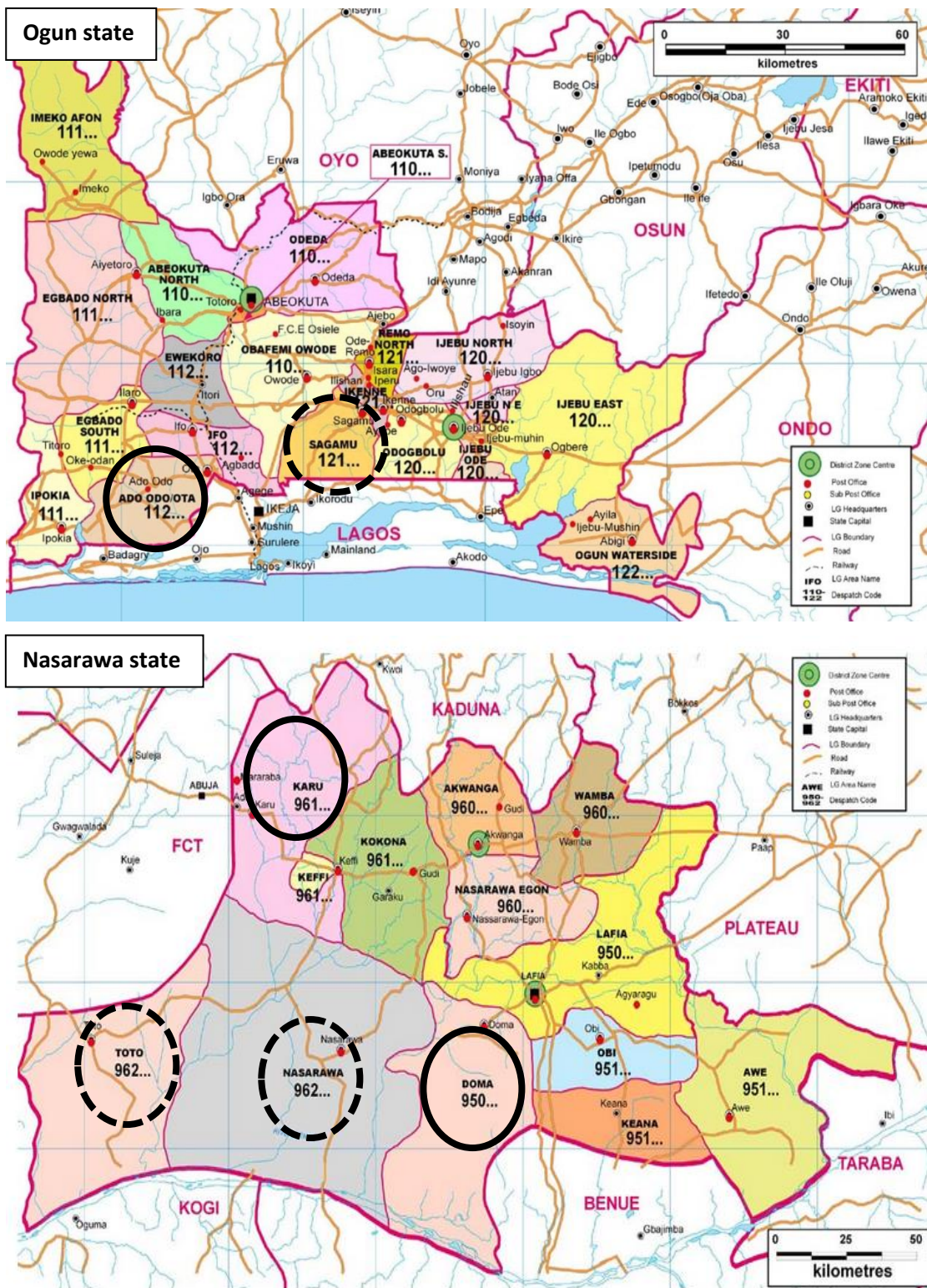
## 2.3. Study settings

In Nigeria, A360 is being implemented by SFH in three states in the north of the country (Federal Capital Territory, Nasarawa and Kaduna) and in seven states in the south of the country (Lagos, Osun, Ogun, Oyo, Edo, Delta and Akwa Ibom). Each state is subdivided into Local Government Areas (LGAs). Within each of the selected states, A360 will be implemented in approximately 60% of the LGAs.

We conducted baseline surveys in two LGAs (Shagamu and Ado-Odo Ota) of Ogun state in southern Nigeria and four LGAs (Doma, Karu, Nasarawa and Toto) of Nasarawa state in northern Nigeria. Figure 2.1 shows the LGAs selected for our outcome evaluation on separate maps for each state.



**Figure 2.1. Maps of Ogun and Nasarawa states showing LGAs by their boundaries**



Intervention LGAs in solid outlined circles and comparison LGAs in dashed outlined circles.

SFH selected study LGAs in collaboration with the state Ministry of Health and local government officials. Pairs of LGAs were identified that were similar on some or all of the following criteria:

- Population density
- Estimated mCPR among 15-49 year olds (estimates generated from local surveys conducted by PSI)

- Number of health facilities
- Presence of World Bank support for maternal and child health activities (so as not to compare areas with very different levels of additional adolescent sexual and reproductive health activities)

Within a pair, allocation of an LGA to the intervention or comparison arm was purposively carried out by SFH in collaboration with the state Ministry of Health and local government officials.

## 2.4. Study population

### 2.4.1 Inclusion criteria for the baseline surveys

Adolescent girls aged 15–19 years:

- Unmarried (Ogun only)
- Married or living as married (Nasarawa only)
- Living, at the time of the survey, in the study sites
- Those who voluntarily provide informed consent

### 2.4.2 Exclusion criteria for the baseline surveys

Adolescent girls aged 15–19 years:

- Unmarried (Nasarawa only)
- Married or living as married (Ogun only)
- Not living, at the time of the survey, in the study sites
- Those who do not voluntarily provide informed consent

Only girls who reported sexual intercourse within the 12 months preceding the survey were asked questions regarding use of contraception and family planning services.

To measure community acceptance and social support for adolescent girls to adopt SRH behaviours, our second target study population were adults in the household who might be most influential to a girl's decision making. Therefore, in Nasarawa, for households where the girl interviewed was married or living as married, we invited the husband/male partner to participate following the girl's permission. In Ogun, in households where the girl interviewed was unmarried, we asked her to nominate a co-habiting adult (age 20+ years) whose views were most likely to influence her decision making with regard to sexual health and family planning. Those households where the adolescent girl surveyed did not give permission to interview her co-habiting adult/husband, and where adults did not voluntarily provide informed consent, were excluded.

## 2.5. Sampling strategy

A two-stage sampling design was used. Our primary sampling unit was the 2006 census Enumeration Area (EA). An EA is the smallest administrative unit of Nigeria, a small, compact area with well-defined and identifiable boundaries.

A simple random sample of EAs was performed separately for Ogun and Nasarawa. We sampled clusters of approximately 100 households. If a selected EA contained fewer than 100 households, we continued the data collection in an adjoining EA until 100 households had been selected.

In Ogun, we estimated that approximately 710 EAs would be required to reach the sample size (discussed in Section 2.6). In Nasarawa, we estimated that approximately 1,150 EAs would be required. Within the selected EAs, we visited each household and administered the questionnaire to all eligible unmarried girls aged 15–19 years (Ogun) and all eligible married girls aged 15–19 years (Nasarawa). We interviewed a co-habiting adult of 20% of the sexually active unmarried girls in Ogun and the husband/male partner of 10% of the sexually active

married girls in Nasarawa to reach our target sample size for co-habiting adults and husbands (discussed in Section 2.6).

If potentially eligible participants were not available at the first visit, a further two visits were made to attempt to interview such participants.

In Nasarawa state, the northern and eastern borders of Nasarawa LGA (comparison LGA) lie along the border of Karu and Doma (intervention LGAs), respectively. In order to reduce the potential for contamination as a result of girls travelling to work or school across LGA boundaries, a 'buffer zone' was created in Nasarawa LGA on the border between Karu and Doma LGAs, such that EAs within localities (larger geographic areas containing many EAs) that border either Karu or Doma were excluded from the sampling frame.

## 2.6. Sample size

The mCPR estimates used in our sample size calculations were obtained from local surveys conducted by PSI. Effect estimates are based on an analysis conducted by one of our evaluation collaborators, Ms Michelle Weinberger (Avenir Health).

In Ogun state, among sexually active unmarried girls aged 15–19 years, we assumed that between 2017 and 2019 mCPR would increase from 64.4% to 65.6% in the absence of A360, and from 64.4% to 72.6% in the presence of A360. We estimated that 12,000 unmarried girls aged 15–19 years (corresponding to 1,413 sexually active unmarried girls) must be surveyed to achieve 90% power.

In Nasarawa state, among sexually active married aged 15–19 year olds, we assumed that between 2017 and 2019 mCPR would increase from 3.0% to 3.1% in the absence of A360, and from 3.0% to 5.1% in the presence of A360. Thus, 4,600 married girls aged 15–19 years (corresponding to 3,586 sexually active married girls) must be surveyed to achieve 90% power.

In addition, we wanted to achieve a target sample of 250 co-habiting adults (Ogun) and 250 husbands/male partners (Nasarawa).

## 2.7. Data collection tools

The questionnaires were adapted from various research instruments that have been used and validated in the study countries, including Demographic and Health Surveys (DHS)<sup>4-6</sup> and Family Planning 2020 (FP2020) surveys.<sup>1</sup> They were developed in English and then translated into the local languages of the study communities. Final modifications were made to the questionnaires following an extensive pretesting exercise and after pilot surveys were conducted in communities outside of the selected study sites.

Questionnaires were administered face-to-face by female interviewers aged between 18 and 26 years. The interviewers were provided with one week of extensive training prior to fieldwork. Data were collected and recorded electronically in the field. This allows for improved data quality through real-time data delivery, built-in logical checks and skip patterns.

The adolescent girl questionnaire obtained information on the following topics:

- Background characteristics of the respondent
- Migration and movement history
- Housing and assets
- Marital and co-habitation status
- Reproductive history
- Reproductive health knowledge
- Fertility preferences
- Sexual history
- Knowledge of contraceptive methods
- Media exposure to family planning messages



- Use of contraceptive methods (girls who reported sexual intercourse in the previous 12 months only)

The co-habiting adult/husband questionnaire obtained information on the following topics:

- Background characteristics of the respondent and relationship to adolescent girls surveyed
- Migration and movement history
- Housing and assets
- Knowledge of contraceptive methods
- Attitudes towards use of contraceptive methods among adolescent girls

## 2.8. Data analysis

All analyses were conducted in Stata 15 using robust standard errors to account for the two-stage cluster sampling design.

We produced descriptive statistics on the socio-demographic and reproductive health characteristics of adolescent girls by LGA. Continuous variables were described as median and interquartile range. Categorical variables were described as the number and proportion.

Our primary outcome, mCPR, was defined as the percentage of fecund sexually active adolescent girls aged 15–19 years who are currently using a modern method of contraception. Girls were defined as being sexually active if they reported sexual intercourse in the 12 months prior to the survey.

Modern contraception is as defined in DHSs<sup>4</sup> and includes male and female sterilisation, contraceptive implants, IUDs, injectables, oral contraceptive pill, emergency contraceptive pill, male condom, female condom, SDM, LAM, diaphragm, spermicides, foams and jelly.

Girls are defined as fecund if they have started menstruating, are not pregnant and do not report that they are infertile.

## 2.9. Ethics

Ethical approval was obtained from the LSHTM Ethics Committee and the National Health Research Ethics Committee of Nigeria.

## 2.10. Response rates

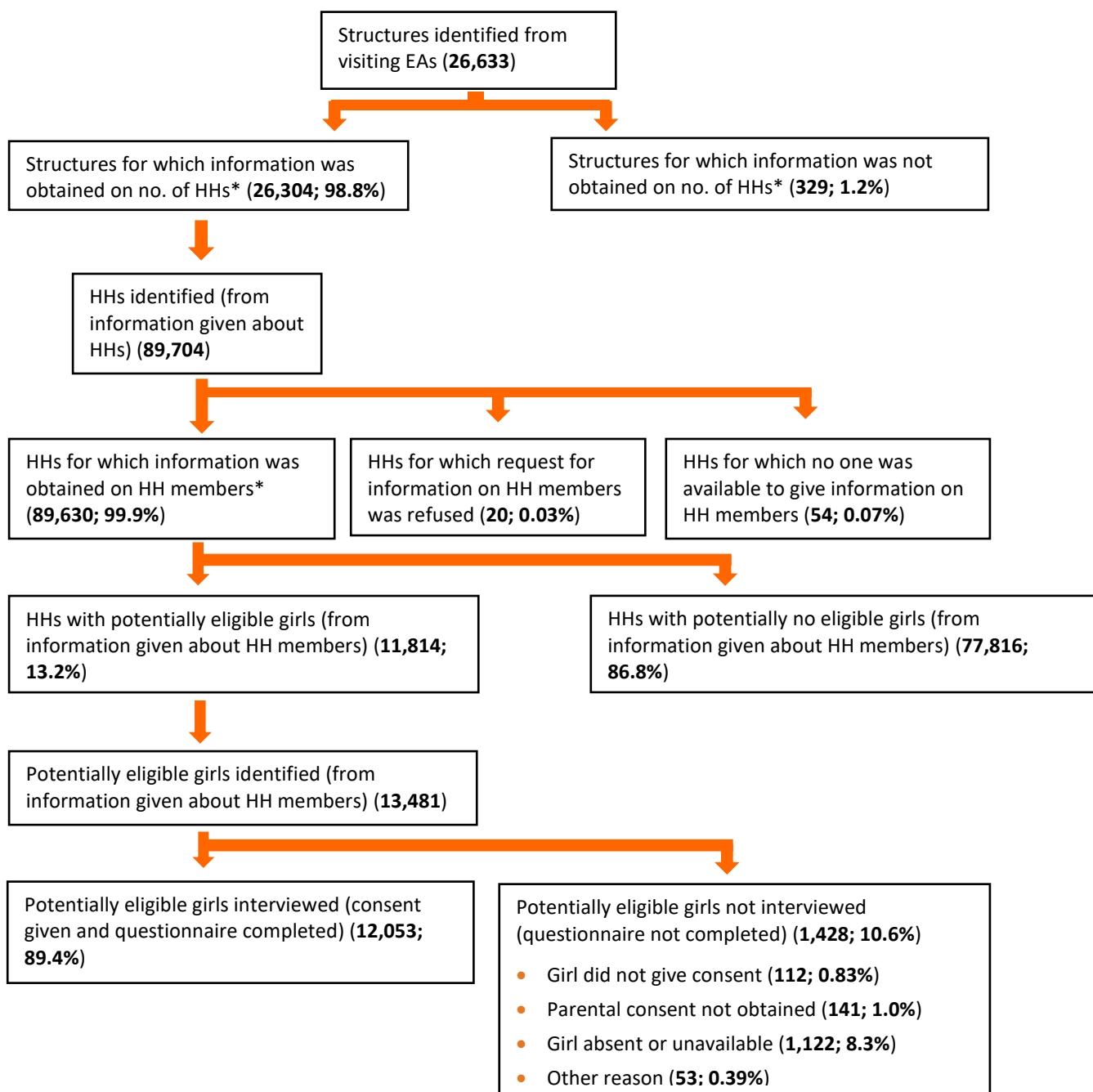
Data collection took place between 7 August and 23 September 2017. Appendix A outlines some of the challenges with fieldwork implementation and what approaches were used to overcome these. Figure 2.2 presents the response rates for the different survey components.

In Ogun, 716 EAs were visited in total, including 335 EAs in Ado-Odo Ota and 381 EAs in Shagamu. A total of 89,704 households were identified and 99.9% were successfully interviewed to obtain information regarding who lived in the household. A total of 13,481 potentially eligible unmarried adolescent girls aged 15–19 years were identified from 11,814 households (13.2% of successfully interviewed households); 89.4% (12,053) of potentially eligible girls were successfully interviewed (Figure 2.2).

In Nasarawa, 621 EAs were visited in total, including 179 EAs in Doma, 184 EAs in Toto, 194 EAs in Karu and 136 EAs in Nasarawa. A total of 78,814 households were identified and 99.9% were successfully interviewed to obtain information regarding who lived in the household. A total of 4,963 potentially eligible married adolescent girls aged 15–19 years were identified from 4,818 households (6.1% of successfully interviewed households); 97.0% (4,816) of potentially eligible girls were successfully interviewed.

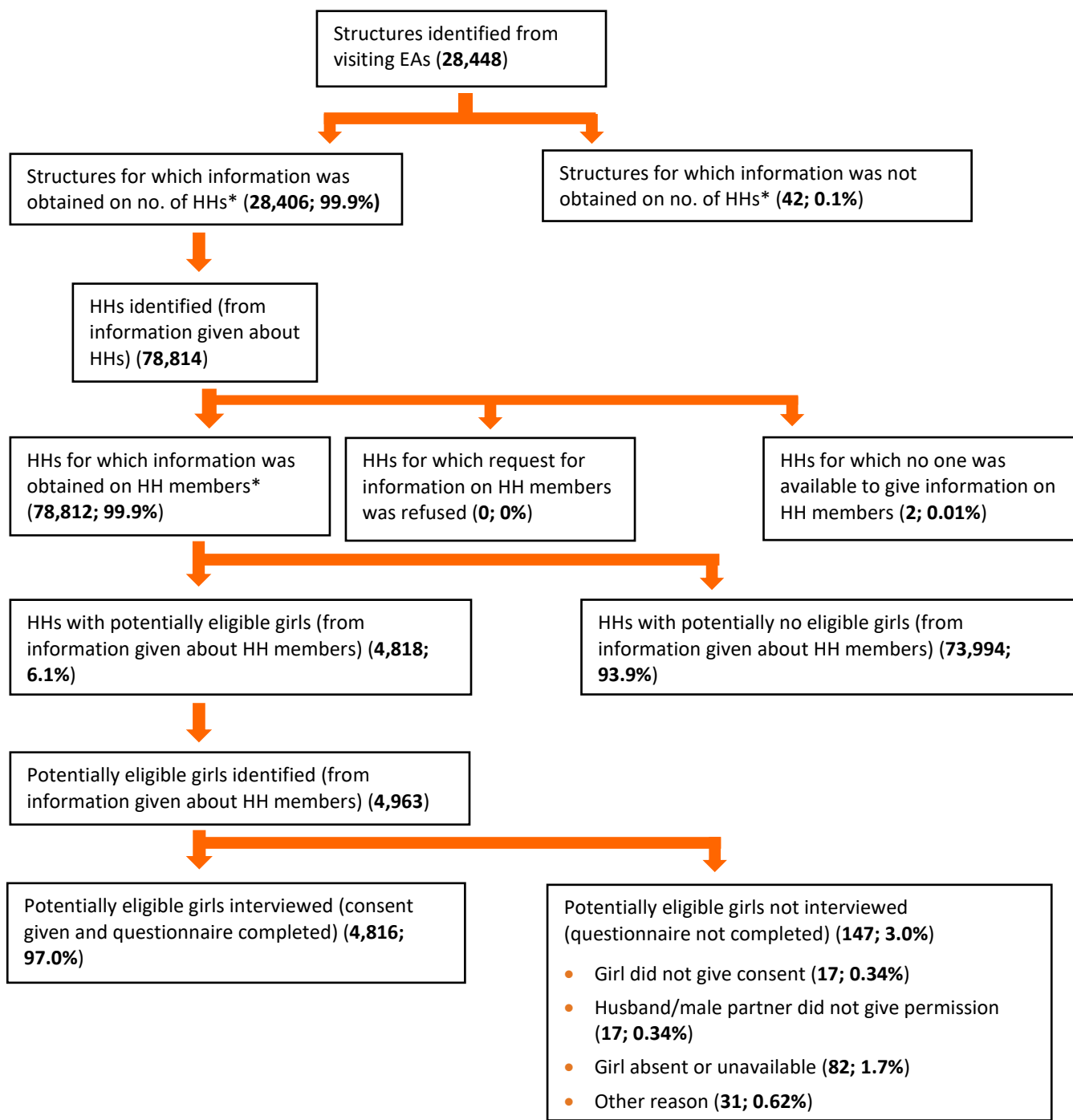
The most common reason for not successfully interviewing an eligible girl was that the girl was absent or unavailable after a maximum of three visits.



**Figure 2.2. Response rate for households and adolescent girls****Ogun**

\* Information obtained from individual living the structure/household or from a neighbour.

## Nasarawa



\*Information obtained from individual living the structure/household or from a neighbour

### 3. Background characteristics of adolescent girl respondents

#### Key messages:

- In Ogun, the median age of unmarried adolescent girl respondents was 17 years (range 15–19 years). About 1% of respondents had no education and for 90% secondary education was the highest educational level attained. Among unmarried adolescent girls, 56.7% owned a mobile phone. Christianity (Protestant or other Christian 61.4%) was the main religion among respondents, followed by Islam (35.9%).
- In Nasarawa, the median age of married adolescent girl respondents was 18 years (range 15–19 years). Just over a quarter of respondents had no education, and for 43% secondary education was the highest educational level attained. Among married adolescent girls, 53.7% owned a mobile phone. Islam (48.0%) was the main religion among respondents, followed by Christianity (Protestant or other Christian 40.3%).

#### 3.1. Age

##### 3.1.1 Ogun

The median age of unmarried adolescent girl respondents in Ado-Odo Ota and Shagamu is 17 years (range 15–19 years).

##### 3.1.2 Nasarawa

The median age of married adolescent girl respondents in Doma is 17 years (range 15–19 years). In Toto, Karu and Nasarawa, the median age is 18 years (range 15–19 years).

#### 3.2. Education

##### 3.2.1 Ogun

The proportion of respondents with no education in Ado-Odo Ota and Shagamu is approximately 1%. Secondary education is the highest educational level attained by unmarried adolescent girls (89.8% in Ado-Odo Ota; 90.6% in Shagamu).

##### 3.2.2 Nasarawa

The proportion of married adolescent girl respondents with no education in Doma is 45.7% (Toto 25.6%; Karu 15.8%; Nasarawa 28.6%).

In Toto, Karu and Nasarawa, secondary education is the highest educational level attained by married adolescent girls, 41.8%, 56.9% and 42.4%, respectively. The proportion of married adolescent girl respondents with secondary education in Doma is 24.6%.

#### 3.3. Religion

##### 3.3.1 Ogun

Christianity is the main religion among unmarried adolescent girls in the surveyed LGAs, followed by Islam. Adolescent girl respondents in Ado-Odo Ota and Shagamu are predominantly Protestant or other Christian (59.7% and 63.0%, respectively).

### 3.3.2 Nasarawa

Christianity is the main religion among married adolescent girls in Doma, Toto and Karu, followed by Islam. Adolescent girl respondents in Doma, Toto and Karu are predominantly Protestant or other Christian (43.8%, 52.4% and 42.1%, respectively). In Nasarawa LGA, 28.9% are Protestant or other Christian.

In Nasarawa LGA, Islam is the main religion (64.3%). The proportion of married adolescent girl respondents who are Muslim in Doma, Toto and Karu is 34.8%, 43.4% and 42.0%, respectively.

## 3.4. Language

### 3.4.1 Ogun

For about two thirds of respondents, Yoruba is the language they speak most outside the home. About a third speak English most outside the home.

### 3.4.2 Nasarawa

Hausa is the language most spoken outside the home by respondents. About a fifth and a tenth speak English most outside the home in Karu and Toto, respectively. Few married adolescent girls speak English most outside the home in Doma and Nasarawa.

## 3.5. Employment

### 3.5.1 Ogun

The majority of adolescent girls surveyed are not currently engaged in any activity to earn money. In Ado-Odo Ota and Shagamu, approximately a quarter and a fifth of respondents are currently engaged in an activity to earn money, respectively.

### 3.5.2 Nasarawa

About two fifths of married adolescent girls surveyed are currently engaged in any activity to earn money.

## 3.6. Access to media

### 3.6.1 Ogun

Mobile telephones and television are the most widely accessed media. Just over half of adolescent girls own a mobile phone (59.2% in Ado-Odo Ota; 54.2% in Shagamu), and approximately a quarter of respondents have no access to a mobile phone.

For the internet, 39.7% of girls in Ado-Odo Ota and 45.6% of girls in Shagamu have access at least once a week.

Adolescent girls' access to newspapers and magazines is extremely limited.

### 3.6.2 Nasarawa

Mobile telephones are the most widely accessed media. In Doma, Toto, Karu and Nasarawa, the proportion of married adolescent girls who own a mobile phone is 29.4%, 49.1%, 69.6% and 56.0%, respectively. The proportion of respondents with no access to a mobile phone is 64.0% in Doma, 43.2% in Toto, 25.4% in Karu and 38.7% in Nasarawa.

About a third of married adolescent girls in Doma own a mobile phone, with about 5% either owning or having access at least once a week to a smartphone.

Access to the internet at least once a week is 14.2% in Karu but is limited in the other surveyed LGAs. Married adolescent girls' access to newspapers and magazines is extremely limited.

Table B1 in Appendix B presents the background characteristics of the respondents.

## 4. Sexuality, fertility and fertility preferences of adolescent girl respondents

### Key messages:

- In Ogun, 15.3% of unmarried girls aged 15–19 years had been sexually active during the previous 12 months. The median age of first sexual intercourse was 16 years (range 6–19 years). A total of 652 (5.4%) unmarried girls surveyed had ever been pregnant. Less than 1% of all unmarried girls were currently pregnant at the time of the survey.
- In Ogun, unmet need for modern contraception was 32.5% in unmarried adolescents, made up almost entirely of unmet need for spacing.
- In Nasarawa, 90.7% of married girls aged 15–19 years had been sexually active during the previous 12 months. The median age of first sexual intercourse was 15 years (range 6–19 years). A total of 3,913 (81.3%) married girls surveyed had ever been pregnant. About a third of all married girls were currently pregnant at the time of the survey.
- In Nasarawa, unmet need for modern contraception was 21.9% in married adolescents, made up almost entirely of unmet need for spacing.

### 4.1. Age at first sexual intercourse

#### 4.1.1 Ogun

Overall, about a quarter of unmarried girls aged 15–19 years have had sex (23.0% in Ado-Odo Ota; 27.5% in Shagamu). The median age at first sexual intercourse is 16 years (range 6–19 years) for unmarried adolescent girls aged 15–19 years in Ado-Odo Ota and Shagamu.

#### 4.1.2 Nasarawa

The median age at the time of marriage was 15 years (range 7–19 years) in Doma and Toto. The median age at the time of marriage was 16 years (range 5–19 years) in Karu and 16 years (range 7–19 years) in Nasarawa.

Overall, almost all married girls aged 15–19 years have had sex (Doma 98.5%; Toto 99.0%; Karu 98.1%; Nasarawa 96.9%).

The median age at first sexual intercourse is 14 years (range 7–19 years) in Doma and 15 years (range 6–19 years) in Toto. The median age is 16 years (range 8–19 years) in Karu and 15 years (range 8–19 years) in Nasarawa.

### 4.2. Timing of last sexual intercourse

Figure 4.1 below presents the sexual activity behaviour of unmarried adolescent girls in Ogun and married adolescent girls in Nasarawa who participated in the survey.

#### 4.2.1 Ogun

In Ado-Odo Ota, 13.6% (822 of 6,043) of unmarried girls were sexually active during the 12 months preceding the survey, of whom approximately half (6.5%) were sexually active during the four weeks preceding the interview.

In Shagamu, 17.0% (1,022 of 6,010) of unmarried girls were sexually active during the 12 months preceding the survey, of whom approximately half (8.2%) were sexually active during the four weeks preceding the interview.

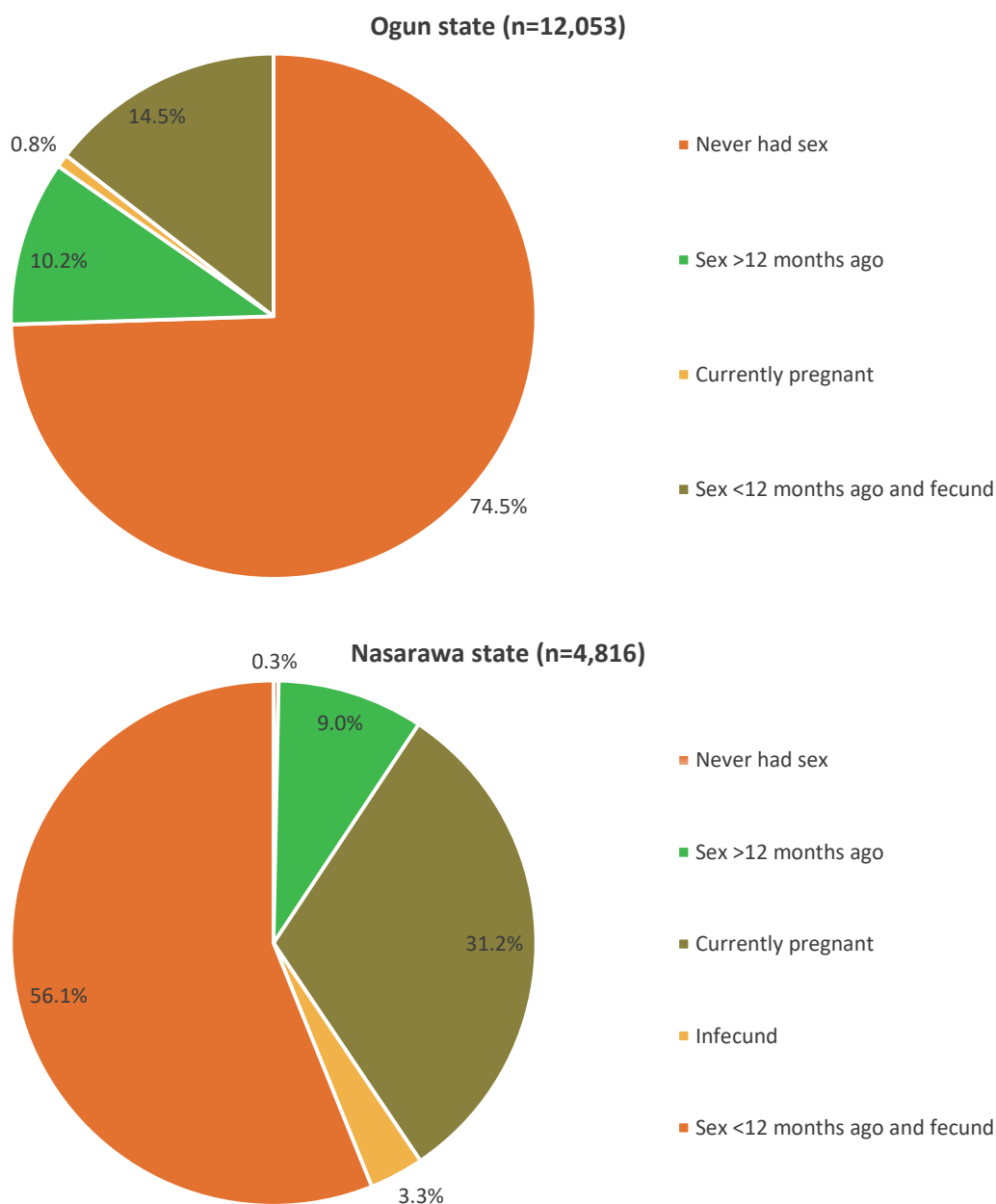
In Ogun, overall 14.5% (1,748 of 12,053) of unmarried girls were fecund and sexually active during the 12 months preceding the survey.

### 4.2.2 Nasarawa

The majority of married girls in Nasarawa were sexually active during the 12 months preceding the survey (Doma 94.0% (853 of 908); Toto 89.2% (849 of 952); Karu 90.9% (1,304 of 1,434); Nasarawa 89.4% (1,361 of 1,522)). Approximately half of all married girls in the surveyed LGAs were sexually active during the four weeks preceding the interview.

In Nasarawa, overall 56.1% (2,702 of 4,816) of married girls were fecund and sexually active during the 12 months preceding the survey.

**Figure 4.1. Sexual activity behaviour among unmarried adolescent girls in Ogun and married adolescent girls in Nasarawa**



### 4.3. Teenage pregnancy

#### 4.3.1 Ogun

Overall, 5.4% (652 of 12,053) of unmarried girls surveyed have ever been pregnant. Less than 1% of all unmarried girls in Ado-Odo Ota and Shagamu were currently pregnant at the time of the survey.

#### 4.3.2 Nasarawa

Overall, 81.3% (3,913 of 4,816) of married girls surveyed have ever been pregnant. Approximately a third of all married adolescent girls in Doma, Toto, Karu and Nasarawa were currently pregnant at the time of the survey.

### 4.4. Age-specific fertility

**Definition:** The age-specific fertility rate (ASFR) is based on the number of live births to girls aged 15–19 years of age during the 12 months preceding the survey.

#### 4.4.1 Ogun

The ASFR for unmarried adolescent girls aged 15–19 years in Ado-Odo Ota and Shagamu is 6.0 and 9.0 live births per 1,000 adolescent girls, respectively.

#### 4.4.2 Nasarawa

The ASFR for married adolescent girls aged 15–19 years in Doma, Toto, Karu and Nasarawa is 250.0, 255.3, 212.0 and 221.4 live births per 1,000 adolescent girls, respectively.

### 4.5. Age at first birth and planning status of most recent birth

**Definition:** The survey asked respondents who had had a child whether their last birth was wanted then, wanted later or not wanted at all.

#### 4.5.1 Ogun

Overall, 2.3% (278 of 12,053) of unmarried girls surveyed have given birth. The median age at first birth is 18 years (range 13–19 years) in Ado-Odo Ota and 17 years (range 11–19 years) in Shagamu.

The vast majority of births in unmarried adolescent girl respondents are reported as mistimed (wanted later than at the time they gave birth). Only 9.2% and 11.3% of births were wanted at the time in Ado-Odo Ota and Shagamu, respectively.

#### 4.5.2 Nasarawa

Overall, 55.0% (2,650 of 4,816) of married girls surveyed have given birth. The median age at first birth is 16 years (range 8–19 years) in Doma and 16 years (range 9–19 years) in Toto. The median age is 17 years (range 8–19 years) in Karu and 16 years (range 8–19 years) in Nasarawa.

The vast majority of births in married adolescent girl respondents are reported as wanted at the time they gave birth (Doma 87.9%; Toto 80.2%; Karu 81.5%; Nasarawa 91.0%).

### 4.6. Unmet need for modern contraception

**Definition:** Family planning methods can be used to space or limit childbearing. In this survey, sexually active and fecund adolescent girls aged 15–19 years who indicated that they either wanted no more children (limiters) or wanted to wait for two or more years before having a/another child (spacers), but were not using modern contraception, are identified as having an unmet need for modern contraception. Pregnant women are



considered to have unmet need for spacing or limiting if their pregnancy was mistimed or unwanted, respectively. Postpartum amenorrheic women who are not using modern contraception are considered to have unmet need for modern contraception if at the time they became pregnant they had wanted to delay or did not want more children.

#### **4.6.1 Ogun**

About a third of sexually active (had sex in the last year) and fecund unmarried adolescent girls have an unmet need for modern contraception in Ado-Odo Ota (33.5%) and Shagamu (31.7%). As expected in this young age group, overall unmet need for modern contraception is almost entirely made up of unmet need for spacing.

#### **4.6.2 Nasarawa**

About a quarter to a fifth of sexually active (had sex in the last year) and fecund married adolescent girls have an unmet need for modern contraception in Doma (19.1%), Toto (27.5%), Karu (22.2%) and Nasarawa (20.0%). As expected in this young age group, overall unmet need for modern contraception is almost entirely made up of unmet need for spacing.

Table B2 in Appendix B presents the sexuality, fertility and fertility preferences of the respondents.

## 5. Family planning

### Key messages:

- In Ogun, mCPR for unmarried girls aged 15–19 years was 47.5%. Male condom was the most common modern method (33.4%), followed by emergency contraception (11.1%). Traditional methods were used by 18.8% of respondents.
- In Ogun, 79.2% of unmarried adolescent girls had heard of contraception. The majority of unmarried adolescent girls aged 15–19 years knew the benefits of modern contraception. However, many respondents also had misconceptions about modern contraception.
- In Ogun, 75.3% of unmarried girls say they feel able to start a conversation with their partner about contraception, and 68.5% say they feel able to obtain a contraception method if they decide to use one.
- In Nasarawa, mCPR for married girls aged 15–19 years was 14.4%. Injectables were the most common modern method (4.1%), followed by the male condom (3.5%) and contraceptive implants (3.0%). Traditional methods were used by 3.0% of respondents.
- In Nasarawa, 47.2% of married adolescent girls had heard of contraception. The majority of married adolescent girls aged 15–19 years knew the benefits of modern contraception. However, many respondents also had misconceptions about modern contraception.
- In Nasarawa, 39.9% of married girls say they feel able to start a conversation with their husband about contraception, and 38.8% say they feel able to obtain a contraception method if they decide to use one.

### 5.1. Current use of modern contraception

#### 5.1.1 Ogun

About a third of sexually active unmarried adolescent girls are currently not using a family planning method. The main reasons for not using included it not occurring to them to use contraception (Ado-Odo Ota 43.9%; Shagamu 40.5%), opposition by their partner to using contraception (Ado-Odo Ota 14.4%; Shagamu 6.6%) and fear of side effects (Ado-Odo Ota 7.5%; Shagamu 8.3%).

In Ado-Odo Ota and Shagamu, 44.7% and 49.8% currently use a modern method of contraception (mCPR), respectively. Male condoms are the most widely used modern method, currently used by approximately a third of sexually active unmarried adolescent girls interviewed. The next most widely used modern method is the emergency contraceptive pill (10.5% in Ado-Odo Ota; 11.6% in Shagamu). Very few girls report currently using any other modern method of contraception.

#### 5.1.2 Nasarawa

The majority of sexually active married adolescent girls are not currently using a family planning method. The main reasons for not using included wanting a/another child (Doma 41.7%; Toto 25.4%; Karu 38.2%; Nasarawa 32.4%), breastfeeding (Doma 29.7%; Toto 19.9%; Karu 17.9%; Nasarawa 18.9%) and it not occurring to them to use contraception (Doma 18.8%; Toto 13.9%; Karu 17.9%; Nasarawa 19.6%).

In Doma and Toto, 7.6% and 12.8% currently use a modern method of contraception (mCPR), respectively. Injectables are the most widely used modern method in Doma and Toto, currently used by 3.6% and 5.1% of sexually active married adolescent girls, respectively.

In Karu and Nasarawa, 21.3% and 13.0% currently use a modern method of contraception (mCPR), respectively. Male condoms are the most widely used modern method in Karu, currently used by 6.6% of sexually active

married adolescent girls interviewed. Injectables are the most widely used modern methods in Nasarawa, currently used by 3.8% of sexually active married adolescent girls.

Table 5.1 shows the distribution of respondents who are currently using specific family planning methods.

Figure 5.1 presents the current use of modern contraception among sexually active and fecund unmarried adolescent girls in Ogun and sexually active and fecund married adolescent girls in Nasarawa who participated in the survey.

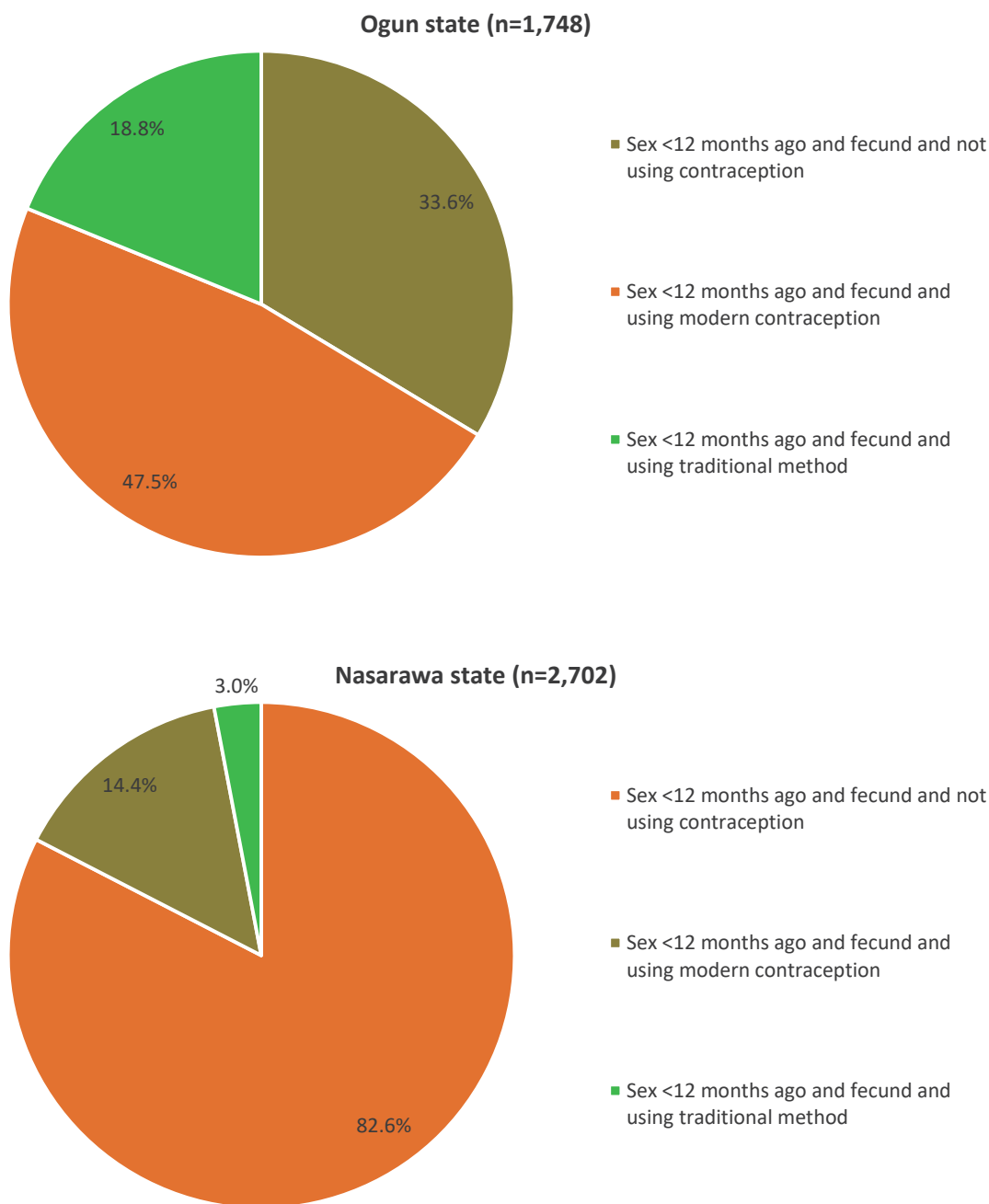
**Table 5.1. Percentage distribution of sexually active and fecund adolescent girls aged 15–19 years who currently use contraception, by method used (% , 95% Confidence Interval)**

Characteristic	Ogun		Nasarawa			
	Ado-Odo Ota (Ix)	Shagamu (Cx)	Doma (Ix)	Toto (Cx)	Karu (Ix)	Nasarawa (Cx)
<b>No. of sexually active girls<sup>1</sup></b>	774	974	503	514	806	879
<b>Any method</b>	69.1 (65.6-72.4)	64.2 (60.6-67.6)	10.5 (8.1-13.6)	14.8 (11.3-19.1)	25.2 (22.1-28.5)	15.8 (13.1-18.9)
<b>Any modern method<sup>2</sup></b>	44.7 (41.1-48.3)	49.8 (46.5-53.1)	7.6 (5.5-10.3)	12.8 (9.5-17.2)	21.3 (18.5-24.5)	13.0 (10.6-15.8)
<b>Modern method</b>						
Implant	0.13 (0.02-0.92)	0.62 (0.28-1.3)	1.2 (.5526,2.556)	0.78 (0.24-2.5)	5.8 (4.4-7.7)	2.6 (1.6-4.3)
IUD	0	0.10 (0.01-0.73)	0	0.58 (0.14-2.5)	0.25 (0.06-0.99)	0
Injectables	0.26 (0.06-1.0)	0.31 (0.10-0.95)	3.6 (2.2-5.7)	5.1 (3.2-7.9)	4.1 (2.9-5.7)	3.8 (2.5-5.6)
Daily pills	1.8 (1.0-3.1)	1.2 (0.67-2.3)	0.20 (0.03-1.4)	1.4 (0.61-3.0)	1.9 (1.1-3.1)	3.3 (2.3-4.7)
Emergency pills	10.5 (8.5-12.8)	11.6 (9.6-13.9)	0	0.19 (0.03-1.3)	1.6 (0.92-2.8)	0.68 (0.31-1.5)
Male condom	31.3 (28.1-34.6)	35.0 (32.1-38.1)	2.4 (1.4-4.0)	2.9 (1.7-5.1)	6.6 (5.0-8.7)	1.7 (1.0-2.8)
Other modern method	0.78 (0.36-1.7)	0.92 (0.48-1.8)	0.20 (0.03-1.4)	1.9 (1.0-3.7)	1.1 (0.59-2.1)	0.91 (0.47-1.8)
<b>Any traditional method</b>	24.4 (21.1-28.1)	14.4 (12.1-17.0)	3.0 (1.8-4.9)	1.9 (1.0-3.6)	3.8 (2.6-5.7)	2.8 (1.7-4.7)
<b>Not currently using</b>	29.5 (26.2-33.0)	34.3 (30.9-37.9)	87.1 (83.8-89.8)	81.7 (77.0-85.6)	72.7 (69.3-75.9)	79.8 (76.3-82.8)
<b>Don't know</b>	0.39 (0.12-1.2)	0.41 (0.12-1.4)	0.40 (0.10-1.6)	0.19 (0.03-1.4)	0	0.11 (0.02-0.81)
<b>No response</b>	1.0 (0.53-2.0)	1.1 (0.63-2.0)	2.0 (1.0-3.8)	3.3 (1.8-6.0)	2.1 (1.2-3.6)	4.3 (2.7-6.9)
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0

1 Excludes girls who are infecund and currently pregnant.

2 Modern methods include female sterilisation, male sterilisation, contraceptive pill (oral contraceptives), IUD, injectables (Depo-Provera), implants (Norplant), female condom, male condom, diaphragm, contraceptive foam and contraceptive jelly, LAM, SDM, cycle beads.

**Figure 5.1. Current use of modern contraception among sexually active and fecund unmarried adolescent girls in Ogun and sexually active and fecund married adolescent girls in Nasarawa**



## 5.2. Knowledge of contraceptive methods

### 5.2.1 Ogun

The majority of unmarried adolescent girls surveyed had heard of contraception (76.4% in Ado-Odo Ota; 82.0% in Shagamu), of whom approximately three quarters had seen or heard about contraception during the 12 months preceding the interview. Friends, peers and neighbours were the most common source of information on contraception reported by unmarried adolescent girls in Ado-Odo Ota (friends/peers 36.1%; neighbours 32.3%) and Shagamu (friends/peers 27.8%; neighbours 27.1%). Radio, television and teachers were also common sources of information.

## 5.2.2 Nasarawa

About half of married adolescent girls surveyed had heard of contraception (Doma 40.1%; Toto 47.3%; Karu 57.3%; Nasarawa 41.9%), of whom 53.9%, 62.2%, 70.3%, 64.5% had seen or heard about contraception during the 12 months preceding the interview in Doma, Toto, Karu and Nasarawa, respectively. Health facilities, including hospitals and health centres, were the most common source of information on contraception reported by married adolescent girls in Doma (51.5%), Toto (50.0%), Karu (46.3%) and Nasarawa (37.5%). Radio, friends, peers and neighbours were also common sources of information.

## 5.3. Myths about contraceptive methods

**Definition:** Respondents were read a number of statements representing common myths about contraception in Nigeria. They were asked whether or not they agreed with the statement.

### 5.3.1 Ogun

Two thirds of respondents believe that, if a modern contraceptive changes a girl's menstrual bleeding, it is bad for her health and can harm her womb. Just over half of unmarried adolescent girls surveyed believe that some modern contraception can stop a girl from ever being pregnant again even after she stops using it. Around two fifths of respondents also believe that modern contraceptives may make a girl permanently fat, and lead to promiscuity.

### 5.3.2 Nasarawa

Around three fifths of married girls surveyed believe that modern contraceptives may make a girl permanently fat. About half of respondents believe that, if a modern contraceptive changes a girl's menstrual bleeding, it is bad for her health and can harm her womb, and also believe that some modern contraception can stop a girl from ever being pregnant again even after she stops using it.

## 5.4. Benefits of contraceptive methods

### 5.4.1 Ogun

In Ado-Odo Ota and Shagamu, the majority of unmarried adolescent girls aged 15–19 years believe in each of the benefits of modern contraception listed in the questionnaire, including that modern contraception can help a girl delay the birth of her first child, if she wants to, and, after she begins to have children, can allow a girl to decide when to have another child.

### 5.4.2 Nasarawa

The majority of married adolescent girls aged 15–19 years believe in each of the benefits of modern contraception listed in the questionnaire, including that modern contraception can help a girl delay the birth of her first child, if she wants to, and, after she begins to have children, can allow a girl to decide when to have another child.

## 5.5. Attitudes towards using contraceptive methods

### 5.5.1 Ogun

Two thirds of respondents approve of married couples using a modern contraceptive method to avoid or delay pregnancy. About half of unmarried adolescent girls surveyed approve of couples that are not married using a modern contraceptive method to avoid or delay pregnancy.

## 5.5.2 Nasarawa

The majority of respondents approve of married couples using a modern contraceptive method to avoid or delay pregnancy (Doma 79.4%; Toto 66.2%; Karu 83.0%; Nasarawa 80.1%). In Doma, Toto, Karu and Nasarawa, 34.6%, 37.8%, 50.3% and 35.2% of married adolescent girls surveyed approve of couples who are not married using a modern contraceptive method to avoid or delay pregnancy, respectively.

## 5.6. Source of modern contraceptive methods

**Definition:** Adolescent girls who reported using a modern contraceptive method at the time of the survey were asked where they last obtained their current family planning method.

### 5.6.1 Ogun

The most commonly reported sources of modern contraception across the two LGAs are pharmacy stores and chemists (58.4% in Ado-Odo Ota; 51.8% in Shagamu). Very few unmarried adolescent girls obtained their modern contraception from a health facility.

### 5.6.2 Nasarawa

Health facilities, including hospitals and health centres, were the most commonly reported sources of modern contraception by married girls in Doma (52.6%), Toto (43.9%), Karu (44.8%) and Nasarawa (41.2%).

## 5.7. Treatment by family planning providers

**Definition:** Respondents were asked whether the last time they obtained a modern contraceptive method from their source did they feel like they were treated respectfully.

### 5.7.1 Ogun

In Ado-Odo Ota, 51.7% of respondents reported being treated respectfully the last time they obtained a modern contraceptive method from their source (40.6% in Shagamu).

### 5.7.2 Nasarawa

The majority of respondents reported being treated respectfully the last time they obtained a modern contraceptive method from their source (Doma 89.5%; Toto 71.2%; Karu 82.6%; Nasarawa 84.2%).

## 5.8. Intention to use modern contraception in the future

**Definition:** Sexually active adolescent girls who were not using any modern contraceptive method at the time of the survey were asked about their future intention to use a modern contraceptive method.

### 5.8.1 Ogun

Among sexually active unmarried adolescent girls who are not currently using a modern contraceptive method, 64.3% in Ado-Odo Ota and 55.1% in Shagamu say they intend to use a modern method in the future.

### 5.8.2 Nasarawa

Among sexually active married adolescent girls who are not currently using a modern contraceptive method, 58.2%, 54.1%, 50.5% and 57.7% say they intend to use a modern method in the future in Doma, Toto, Karu and Nasarawa, respectively.

## 5.9. Self-efficacy to access and use contraceptive methods

**Definition:** The survey assessed adolescent girls' level of confidence in their ability to access and use family planning methods.

### 5.9.1 Ogun

About three quarters of respondents say they feel able to start a conversation with their partner about contraception. Fewer adolescent girls, just over half of respondents, say they feel able to use a method of contraception even if their partner doesn't want her to. Just over two thirds of adolescent girls say they feel able to obtain information on contraception services and products if they need to, and feel able to obtain a contraception method if they decided to use one.

### 5.9.2 Nasarawa

About half of respondents in Karu, two fifths of respondents in Toto and Nasarawa, and a third of respondents in Doma say they feel able to start a conversation with their partner about contraception, feel able to obtain information on contraception services and products if they need to, and feel able to obtain a contraception method if they decided to use one.

Fewer married adolescent girls say they feel able to use a method of contraception even if their partner doesn't want her to (Doma 8.5%; Toto 12.7%; Karu 22.0%; Nasarawa 16.5%).

Table 5.2 and Table 5.3 present additional family planning characteristics of respondents.



**Table 5.2. Family planning characteristics of adolescent girl respondents (% , 95% Confidence Interval)**

Characteristic	Ogun		Nasarawa			
	Ado-Odo Ota (Ix)	Shagamu (Cx)	Doma (Ix)	Toto (Cx)	Karu (Ix)	Nasarawa (Cx)
<b>Ever heard of contraception (%)</b>	n=6,043	n=6,010	n=908	n=952	n=1,434	n=1,522
Yes	76.4 (73.9-78.8)	82.0 (80.3-83.6)	40.1 (36.2-44.1)	47.3 (42.5-52.1)	57.3 (53.2-61.2)	41.9 (37.6-46.3)
No	23.1 (20.7-25.7)	17.5 (15.9-19.2)	59.8 (55.8-63.7)	52.5 (47.7-57.3)	42.6 (38.7-46.6)	57.2 (52.9-61.5)
Don't know	0.22 (0.11-0.41)	0.38 (0.23-0.63)	0	0.21 (0.05-0.84)	0	0.59 (0.22-1.6)
No response	0.26 (0.16-0.45)	0.13 (0.07-0.26)	0.11 (0.02-0.78)	0	0.14 (0.04-0.55)	0.33 (0.07-1.6)
<b>In the past 12 months, have you seen or heard about contraception (%)</b>	n=4,618	n=4,929	n=364	n=450	n=821	n=637
Yes	74.6 (72.1-77.0)	73.9 (71.9-75.8)	53.9 (48.0-59.6)	62.2 (56.2-67.9)	70.3 (66.0-74.3)	64.5 (58.4-70.2)
No	25.4 (23.0-27.9)	26.1 (24.2-28.1)	46.1 (40.4-52.0)	37.8 (32.1-43.8)	29.7 (25.7-34.1)	35.5 (29.8-41.6)
Don't know	0	0	0	0	0	0
No response	0	0	0	0	0	0
<b>Contraception information source in past 12 months (%)</b>	n=3,446	n=3,642	n=196	n=280	n=577	n=411
Radio	22.8 (20.9-24.9)	22.5 (20.7-24.4)	9.2 (5.2-15.7)	13.9 (10.2-18.8)	31.0 (26.2-36.3)	27.7 (22.8-33.3)
Television	21.8 (19.7-24.1)	17.3 (15.5-19.2)	3.1 (1.2-7.4)	5.7 (3.6-9.0)	19.1 (15.3-23.4)	10.0 (6.9-14.1)
Hospital/health centre/clinic	7.1 (6.3-8.1)	9.2 (8.2-10.3)	51.5 (43.6-59.4)	50.0 (43.9-56.2)	46.3 (41.9-50.7)	37.5 (31.7-43.6)
CHW/TBA/community midwife	0.90 (0.62-1.3)	1.6 (1.2-2.0)	3.1 (1.4-6.5)	1.1 (0.36-3.1)	2.6 (1.6-4.2)	0.73 (0.24-2.2)
Pharmacy/chemist	11.1 (9.6-12.8)	14.1 (12.5-16.0)	9.2 (5.8-14.4)	3.9 (1.7-8.9)	9.5 (6.8-13.2)	7.5 (5.1-11.1)
Kiosk/shop/market	3.7 (2.9-4.6)	3.6 (2.9-4.4)	1.0 (0.25-4.1)	1.4 (0.54-3.7)	1.2 (0.59-2.5)	2.4 (1.2-4.7)
Teachers	19.5 (17.9-21.2)	16.4 (14.9-18.0)	0	0.71 (0.18-2.8)	0.35 (0.09-1.4)	0.24 (0.03-1.7)
Friends/peers	36.1 (33.5-38.9)	27.8 (25.7-29.9)	29.1 (22.8-36.3)	34.3 (29.0-40.1)	26.7 (22.8-31.0)	24.6 (20.2-29.6)
Neighbours	32.3 (30.2-34.4)	27.1 (25.0-29.4)	21.9 (15.4-30.3)	15.7 (11.8-20.7)	21.1 (16.8-26.2)	22.6 (18.2-27.8)
Spouse/partner	1.7 (1.3-2.2)	2.7 (2.1-3.5)	3.1 (1.4-6.6)	7.1 (4.6-11.0)	6.2 (4.4-8.8)	2.7 (1.5-4.7)
Parent/guardian	8.7 (7.7-9.8)	8.0 (7.0-9.1)	2.6 (1.0-6.1)	3.9 (2.3-6.7)	2.9 (1.8-4.9)	2.4 (1.2-5.1)

Characteristic	Ogun		Nasarawa			
	Ado-Odo Ota (Ix)	Shagamu (Cx)	Doma (Ix)	Toto (Cx)	Karu (Ix)	Nasarawa (Cx)
<b>Source of method for girls who use modern contraception</b>	n=346	n=485	n=38	n=66	n=172	n=114
Hospital/health centre/clinic	0.29 (0.04-2.0)	2.1 (1.1-3.7)	52.6 (35.5-69.2)	43.9 (32.1-56.5)	44.8 (36.7-53.2)	41.2 (32.3-50.8)
Pharmacy/chemist	58.4 (52.8-63.8)	51.8 (46.7-56.7)	26.3 (13.4-45.2)	25.8 (16.8-37.4)	36.1 (28.9-43.9)	31.6 (23.5-41.0)
Kiosk/shop/market	3.5 (1.9-6.2)	1.4 (0.70-2.9)	2.6 (0.35-17.2)	6.1 (2.3-15.1)	2.3 (0.71-7.4)	7.9 (3.7-16.0)
Spouse/partner	12.7 (9.4-17.0)	15.7 (12.1-20.0)	2.6 (0.39-15.7)	6.1 (2.2-15.6)	3.5 (1.4-8.5)	3.5 (0.87-13.0)
Other	1.4 (0.60-3.4)	3.1 (1.9-5.0)	5.3 (1.4-18.3)	1.5 (0.21-10.2)	0	3.5 (1.3-8.9)
Don't know	19.9 (15.7-25.0)	21.0 (17.2-25.4)	7.9 (2.5-22.1)	1.5 (0.20-10.4)	4.1 (2.0-8.2)	0
No response	3.8 (2.2-6.3)	4.9 (3.3-7.3)	2.6 (0.35-17.2)	15.2 (7.8-27.4)	9.3 (5.4-15.5)	12.3 (7.3-20.1)
<b>Treated respectfully by provider on last visit</b>	n=346	n=485	n=38	n=66	n=172	n=114
Yes	51.7 (46.1-57.3)	40.6 (36.1-45.4)	89.5 (74.7-96.1)	71.2 (54.5-83.6)	82.6 (75.8-87.7)	84.2 (76.1-89.9)
No	5.8 (3.7-8.9)	4.3 (2.8-6.7)	0	3.0 (0.76-11.4)	0	1.8 (0.44-6.8)
Don't know	38.2 (32.7-43.9)	45.6 (40.7-50.5)	7.9 (2.5-22.1)	10.6 (4.7-22.3)	7.0 (4.0-11.8)	1.8 (0.43-6.9)
No response	4.3 (2.7-7.0)	9.5 (6.9-12.9)	2.6 (0.35-17.2)	15.2 (7.4-28.6)	10.5 (6.4-16.7)	12.3 (7.3-20.1)
<b>Future intention to use modern contraception in girls not currently using a modern method</b>	n=375	n=428	n=177	n=185	n=313	n=286
Yes	64.3 (59.0-69.2)	55.1 (50.2-60.0)	58.2 (50.1-65.8)	54.1 (46.6-61.3)	50.5 (44.3-56.6)	57.7 (50.2-64.8)
No	25.3 (20.8-30.5)	32.9 (28.6-37.6)	23.2 (17.2-30.5)	32.4 (26.0-39.7)	26.2 (21.7-31.2)	29.4 9 23.3-36.3)
Don't know	10.4 (7.7-13.9)	11.7 (9.0-15.1)	17.5 (13.1-23.1)	13.5 (9.2-19.4)	22.4 (17.8-27.7)	12.9 (9.5-17.4)
No response	0	0.23 (0.03-1.7)	1.1 (0.28-4.5)	0	0.96 (0.31-2.9)	0

CHW: Community health worker; TBA: traditional birth attendant.

**Table 5.3. Additional family planning characteristics of adolescent girl respondents (% , 95% Confidence Interval)**

Characteristic	Ogun		Nasarawa			
	Ado-Odo Ota (Ix)	Shagamu (Cx)	Doma (Ix)	Toto (Cx)	Karu (Ix)	Nasarawa (Cx)
<b>Agreed with misconception about contraception</b>	n=4,618	n=4,929	n=364	n=450	n=821	n=637
Some modern contraception can stop a girl from ever being pregnant again even after she stops using it	54.7 (52.7-57.1)	52.2 (50.4-54.1)	45.6 (40.6-50.8)	46.0 (40.6-51.5)	48.8 (44.5-53.2)	50.6 (45.2-55.9)
If a modern contraception changes a girl's menstrual bleeding, it's bad for her health and can harm her womb	65.1 (62.6-67.4)	64.1 (62.2-65.8)	48.4 (43.0-53.8)	51.8 (45.5-58.0)	57.3 (52.7-61.7)	51.5 (46.7-56.2)
Some modern contraceptives can make adolescent girls permanently fat	43.6 (41.7-45.5)	44.3 (42.7-46.0)	54.4 (49.1-59.6)	62.0 (57.2-66.6)	60.2 (55.8-64.4)	65.3 (60.0-70.3)
Adolescent girls who use modern contraception sleep with too many men	45.8 (43.8-47.9)	44.3 (42.3-46.2)	37.4 (31.4-43.8)	45.1 (39.3-51.1)	39.0 (35.3-42.8)	46.0 (40.2-51.9)
<b>Agreed with benefits about contraception</b>	n=4,618	n=4,929	n=364	n=450	n=821	n=637
Preventing unwanted pregnancies is a benefit of contraception	82.9 (81.5-84.2)	77.6 (76.0-79.0)	86.5 (81.5-90.4)	82.4 (77.6-86.4)	94.5 (92.5-96.0)	93.5 (91.2-95.3)
Some contraception methods reduce sexually transmitted infections	65.1 (63.2-66.9)	63.1 (61.4-64.8)	68.4 (62.4-73.9)	69.3 (63.5-74.6)	76.3 (72.5-79.7)	79.9 (75.7-83.5)
Modern contraception can help a girl delay the birth of her first child, if she wants to	80.8 (79.4-82.1)	78.4 (77.0-79.7)	78.9 (73.6-83.3)	81.1 (76.4-85.1)	89.8 (87.2-91.9)	90.1 (86.4-92.9)
After she begins to have children, modern contraception can allow a girl to decide when to have another child	84.7 (83.5-85.8)	83.4 (82.2-84.5)	85.4 (80.3-89.4)	81.1 (76.6-84.9)	93.5 (91.6-95.0)	91.7 (88.3-94.2)
Using modern contraception can allow a girl to complete her education, find a better job and have a better life	74.7 (73.0-76.3)	74.8 (73.3-76.2)	86.5 (82.1-90.0)	90.2 (86.5-93.0)	92.0 (89.0-94.2)	92.5 (89.7-94.5)

Characteristic	Ogun		Nasarawa			
	Ado-Odo Ota (Ix)	Shagamu (Cx)	Doma (Ix)	Toto (Cx)	Karu (Ix)	Nasarawa (Cx)
<b>Approved of using contraception</b>	n=4,618	n=4,929	n=364	n=450	n=821	n=637
Married couples using a modern contraceptive method to avoid or delay pregnancy	67.8 (66.1-69.5)	63.1 (61.3-64.8)	79.4 (74.2-83.8)	66.2 (61.2-70.9)	83.0 (79.8-85.7)	80.1 (76.5-83.2)
Couples who are not married using a modern contraceptive method to avoid or delay pregnancy	50.2 (48.3-52.1)	49.7 (47.8-51.6)	34.6 (29.5-40.1)	37.8 (32.8-43.1)	50.3 (45.2-55.4)	35.2 (30.1-40.5)
<b>Agreed with statements on accessing and using contraception</b>	n=774	n=974	n=503	n=514	n=806	n=879
I feel able to start a conversation with my boyfriend/husband about contraception	76.6 (73.0-79.9)	74.2 (71.1-77.1)	29.0 (24.9-33.6)	37.9 (33.1-43.0)	49.5 (45.1-53.9)	38.5 (33.8-43.3)
I feel able to obtain information on contraception services and products if I need to	70.0 (66.6-73.3)	72.1 (68.9-75.1)	30.8 (26.5-35.5)	39.5 (34.5-44.7)	49.9 (45.7-54.0)	38.9 (34.3-43.8)
I feel able to obtain a contraception method if I decided to use one	67.2 (63.5-70.7)	69.6 (66.3-72.7)	27.4 (23.1-32.3)	38.9 (34.2-43.8)	46.3 (42.2-50.4)	38.5 (33.8-43.3)
I feel able to use a method of contraception even if my boyfriend/husband doesn't want me to	55.4 (51.4-59.4)	57.2 (53.5-60.8)	8.5 (6.3-11.5)	12.7 (9.8-16.1)	22.0 (18.7-25.6)	16.5 (13.5-20.0)

## 6. Perspectives of co-habiting adults and husbands

### Key messages:

- To measure community acceptance and social support for adolescent girls to adopt SRH behaviours, a sample of co-habiting adults of sexually active unmarried girls (Ogun) and husbands of married girls (Nasarawa) were surveyed.
- In Ogun, 337 co-habiting adults of sexually active unmarried girls aged 15–19 years were interviewed. Female relatives made up the majority of respondents (mother 46.0%; older sister 26.4%; aunt 18.1%).
- In Ogun, 97.6% of co-habiting adults had heard of contraception. Of the co-habiting adults surveyed, 56.5% say it is acceptable for an adolescent girl to start a conversation with her partner/husband about contraception, and 57.5% say it is acceptable for an adolescent girl to obtain a contraception method if she decides to use one.
- In Nasarawa, 326 husbands/co-habiting male partners of married girls aged 15–19 years were interviewed. The vast majority of respondents were husbands (94.5%).
- In Nasarawa, 71.2% of husbands/co-habiting male partners had heard of contraception. Of the husbands/co-habiting male partners surveyed, 87.5% say it is acceptable for an adolescent girl to start a conversation with her partner/husband about contraception, and 80.2% say it is acceptable for an adolescent girl to obtain a contraception method if she decides to use one.

In households where a sexually active girl interviewed was unmarried, we asked a systematic sample of girls to nominate a co-habiting adult (age 20+ years) to be interviewed. In households where the sexually active girl interviewed was married or living as married, a systematic sample of girls were asked permission to interview her husband/co-habiting male partner.

### 6.1. Relationships to adolescent girls in the household

#### 6.1.1 Ogun

The majority of co-habiting adults surveyed are female relatives of the sexually active unmarried adolescent girls interviewed. Mothers were most commonly interviewed (54.0% in Ado-Odo Ota; 37.3% in Shagamu), followed by a respondent's older sister (24.4% in Ado-Odo Ota; 28.6% in Shagamu).

#### 6.1.2 Nasarawa

The majority of co-habiting male partners surveyed were the husbands of the sexually active married adolescent girls interviewed.

### 6.2. Age

#### 6.2.1 Ogun

The median age of co-habiting adults surveyed in Ado-Odo Ota and Shagamu is 40 years (range 20–71) and 35 years (range 20–82), respectively.

#### 6.2.2 Nasarawa

The median age of co-habiting husbands/male partners surveyed in Doma and Toto is 32 years (range 22–45) and 29.5 years (range 20–41), respectively.

The median age of husbands/ co-habiting male partners surveyed in Karu and Nasarawa is 30 years (range 20–54) and 32 years (range 20–65), respectively.

## 6.3. Education

### 6.3.1 Ogun

The proportion of co-habiting adults with no education is 17.1% and 5.6% in Ado-Odo Ota and Shagamu, respectively.

The majority of co-habiting adult respondents in each LGA surveyed have some schooling. Secondary education is the highest educational level attained by co-habiting adults (39.8% in Ado-Odo Ota; 49.1% in Shagamu).

### 6.3.2 Nasarawa

The proportion of husbands/co-habiting male partners with no education in Doma, Toto, Karu and Nasarawa is 31.1%, 21.6%, 5.8% and 18.5%, respectively.

The majority of husbands/co-habiting male partners in each LGA surveyed have some schooling. Secondary education is the highest educational level attained (Doma 46.0%; Toto 58.1%; Karu 59.3%; Nasarawa 50.0%).

## 6.4. Religion

### 6.4.1 Ogun

Christianity is the main religion among co-habiting adults in surveyed LGAs, followed by Islam. Co-habiting adults in Ado-Odo Ota and Shagamu are predominantly Protestant or other Christian (70.5% and 66.5%, respectively).

### 6.4.2 Nasarawa

Christianity is the main religion among husbands/co-habiting male partners in Doma and Karu, followed by Islam. Respondents in Doma and Karu are predominantly Protestant or other Christian (47.3% and 45.4%, respectively).

In Toto and Nasarawa, Islam is the main religion (52.7% and 70.7%, respectively).

## 6.5. Language

### 6.5.1 Ogun

For the majority of co-habiting adult respondents, Yoruba is the language they speak most outside the home. English is the main language spoken outside the home for 11.9% and 18.0% of co-habiting adults in Ado-Odo Ota and Shagamu, respectively.

### 6.5.2 Nasarawa

Hausa is the language most spoken outside the home by husbands/co-habiting male partners. Just over a quarter and a tenth speak English most outside the home in Karu and Toto, respectively. Few husbands/co-habiting male partners speak English most outside the home in Doma and Nasarawa.

## 6.6. Knowledge of contraceptive methods

### 6.6.1 Ogun

Almost all co-habiting adults surveyed had heard of contraception (96.0% in Ado-Odo Ota; 99.4% in Shagamu).

## 6.6.2 Nasarawa

The majority of husbands/co-habiting male partners surveyed had heard of contraception (Doma 66.2%; Toto 64.9%; Karu 79.1%; Nasarawa 72.8%).

## 6.7. Myths about contraceptive methods

### 6.7.1 Ogun

About two thirds of co-habiting adult respondents believe that some modern contraception can stop a girl from ever being pregnant again even after she stops using it. A slightly higher proportion believe that, if a modern contraceptive changes a girl's menstrual bleeding, it is bad for her health and can harm her womb, and also believe that modern contraceptives may make a girl permanently fat. About two thirds of co-habiting adults in Ado-Odo Ota and about half of co-habiting adults in Shagamu believe that, if adolescent girls use modern contraception, it can lead to promiscuity.

### 6.7.2 Nasarawa

In Doma, Toto, Karu and Nasarawa, 42.9%, 62.5%, 60.3% and 56.7% of husbands/co-habiting male partners surveyed, respectively, believe that some modern contraception can stop a girl from ever being pregnant again even after she stops using it. Around two thirds of husbands/co-habiting male partners believe that, if a modern contraceptive changes a girl's menstrual bleeding, it is bad for her health and can harm her womb.

About half of respondents in Doma, Toto and Karu, and about two thirds of respondents in Nasarawa, believe that modern contraceptives may make a girl permanently fat. In Doma, Toto, Karu and Nasarawa, 49.0%, 66.7%, 42.7% and 55.2% of husbands/co-habiting male partners surveyed believe that, if adolescent girls use modern contraception, it can lead to promiscuity.

## 6.8. Benefits of contraceptive methods

### 6.8.1 Ogun

In Ado-Odo Ota and Shagamu, the majority of co-habiting adult respondents believe in each of the benefits of modern contraception listed in the questionnaire.

### 6.8.2 Nasarawa

The majority of husbands/co-habiting male partners in the surveyed LGAs believe in each of the benefits of modern contraception listed in the questionnaire.

## 6.9. Attitudes towards family planning

### 6.9.1 Ogun

Just over three quarters of co-habiting adult respondents approve of married adolescent girls aged 15–19 years using a modern contraception method to avoid or delay pregnancy. About half of co-habiting adults surveyed approve of unmarried sexually active adolescent girls aged 15–19 years using a modern contraception method to avoid or delay pregnancy.

### 6.9.2 Nasarawa

About three quarters of husbands/co-habiting male partners in Doma, Karu and Nasarawa, and two fifths of husbands/co-habiting male partners in Toto, approve of married adolescent girls aged 15–19 years using a modern contraception method to avoid or delay pregnancy. About two fifths of husbands/co-habiting male

partners surveyed approve of unmarried sexually active adolescent girls aged 15–19 years using a modern contraception method to avoid or delay pregnancy.

## 6.10. Attitudes towards self-efficacy of adolescent girls to access and use contraceptive methods

### 6.10.1 Ogun

In Ado-Odo Ota, 55.0% and 48.5% of co-habiting adults surveyed say it is acceptable for an adolescent girl to start a conversation with her partner about contraception, and say it is acceptable for an adolescent girl to use a method of contraception even if her partner doesn't want her to, respectively.

In Shagamu, 58.1% of co-habiting adults surveyed say it is acceptable for an adolescent girl to start a conversation with her partner about contraception, and say it is acceptable for an adolescent girl to use a method of contraception even if her partner doesn't want her to.

About two thirds of co-habiting adults say it is acceptable for an adolescent girl to obtain information on contraception services and products if she needs to. In Ado-Odo Ota and Shagamu, 53.3% and 61.9% of co-habiting adults say it is acceptable for an adolescent girl to obtain a contraception method if she decides to use one, respectively.

Figure 6.1 compares the attitudes of unmarried girls aged 15–19 years and their co-habiting adults towards self-efficacy of adolescent girls to access and use contraceptive methods. In general, a higher proportion of unmarried girls felt able to access family planning information and contraceptive products, and felt able to start a conversation with their partner about contraception and use a method of contraception even if their partner doesn't want her to, compared with the proportion of co-habiting adults who thought it was acceptable for an adolescent girl to take these actions.

### 6.10.2 Nasarawa

The majority of husbands/co-habiting male partners surveyed say it is acceptable for an adolescent girl to start a conversation with her partner about contraception (Doma 81.6%; Toto 89.6%; Karu 89.7%; Nasarawa 88.1%). Fewer husbands/co-habiting male partners say it is acceptable for an adolescent girl to use a method of contraception even if her partner doesn't want her to (Doma 14.3%; Toto 18.8%; Karu 19.1%; Nasarawa 35.8%).

The majority of husbands/co-habiting male partners surveyed say it is acceptable for an adolescent girl to obtain information on contraception services and products if she needs to, and also say it is acceptable for an adolescent girl to obtain a contraception method if she decides to use one.

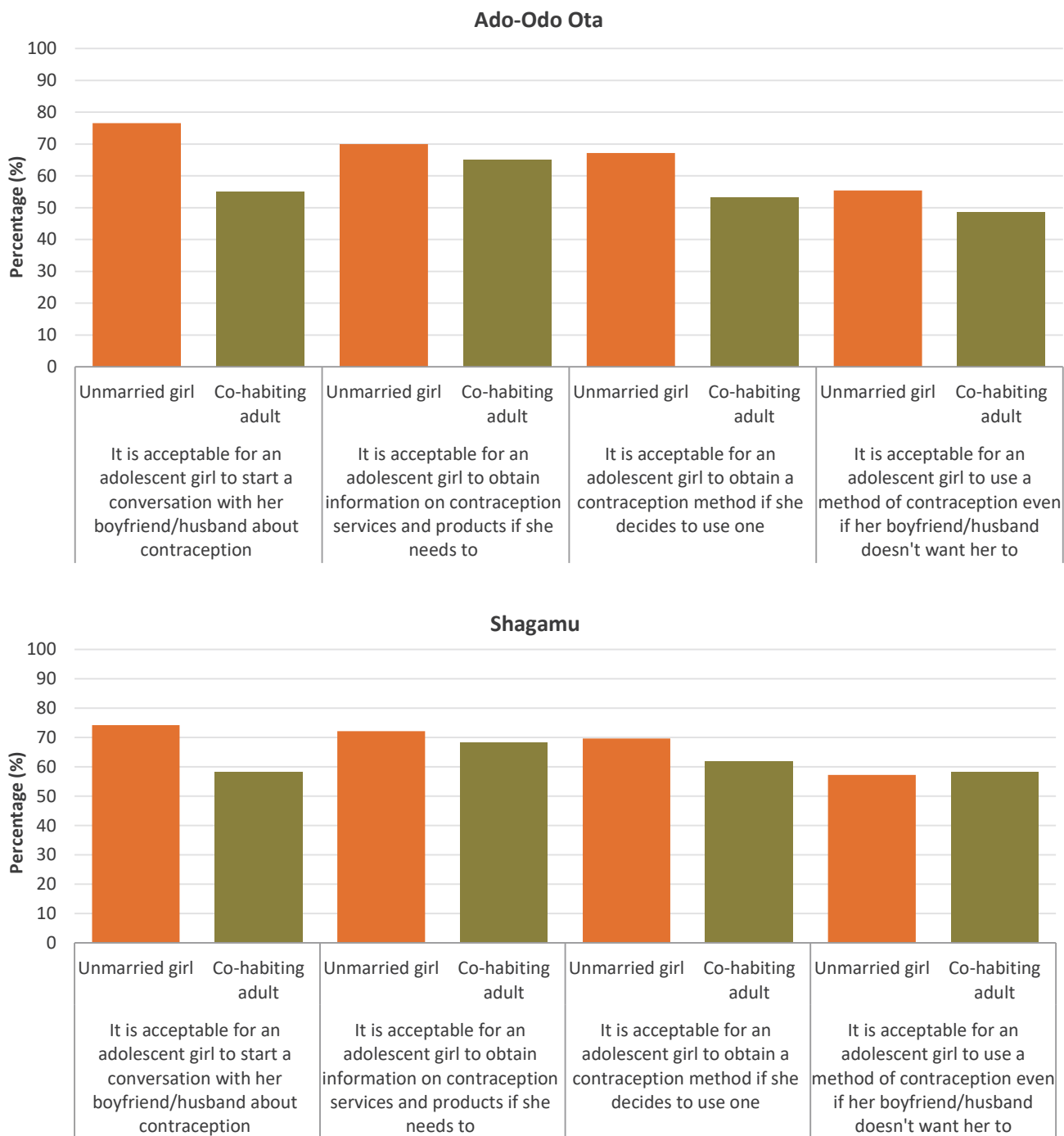
In general, a much higher proportion of husbands/co-habiting male partners think it is acceptable for an adolescent girl to access family planning information and contraceptive products, and start a conversation with her partner about contraception, compared with the proportion of married girls who felt able to take these actions. Attitudes towards adolescent girls using a method of contraception even if her partner doesn't want her to were more similar between married girls and their husbands/co-habiting male partners (Figure 6.1).

Table B3 in Appendix B presents the background characteristics of the husbands and co-habiting adult respondents of a subgroup of sexually active adolescent girls interviewed.

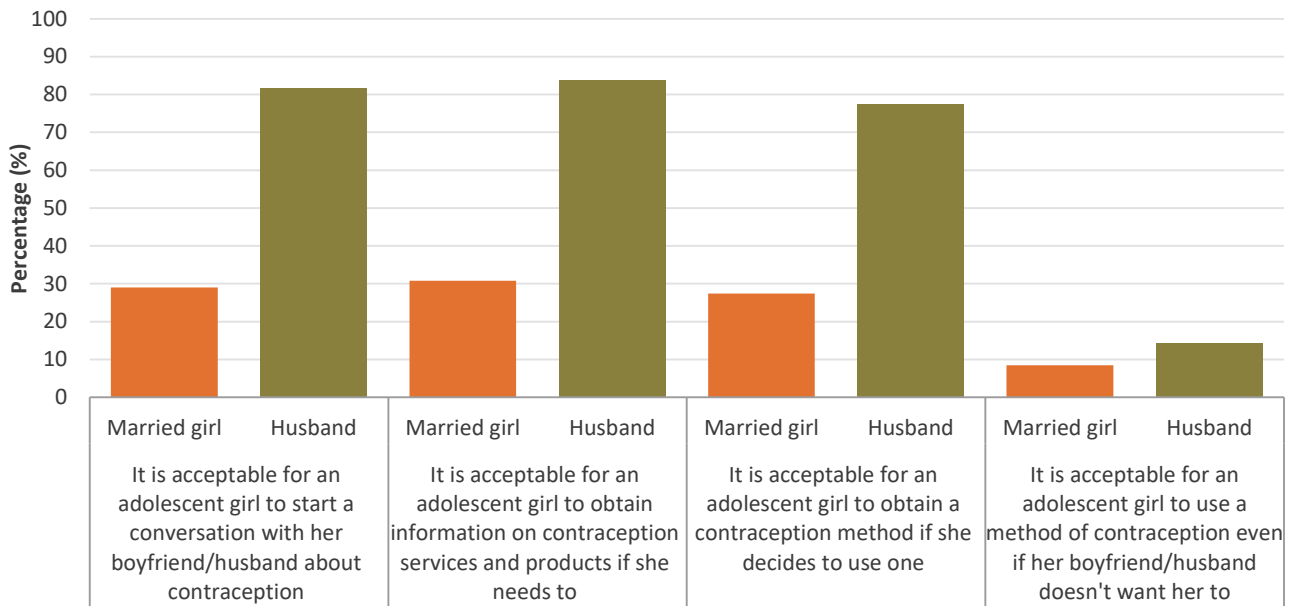
Table B4 in Appendix B presents the family planning knowledge, attitudes and beliefs of the husbands and co-habiting adult respondents of a subgroup of sexually active adolescent girls interviewed.



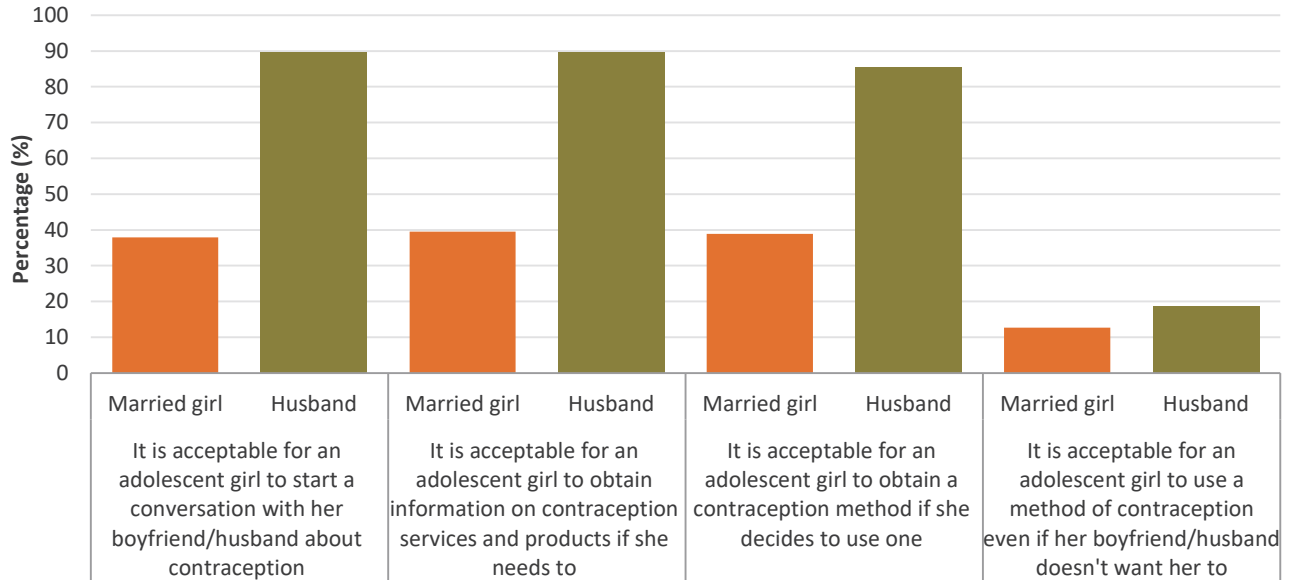
**Figure 6.1. Attitudes of adolescent girls aged 15–19 years and their co-habiting adults towards self-efficacy of adolescent girls to access and use contraceptive methods**



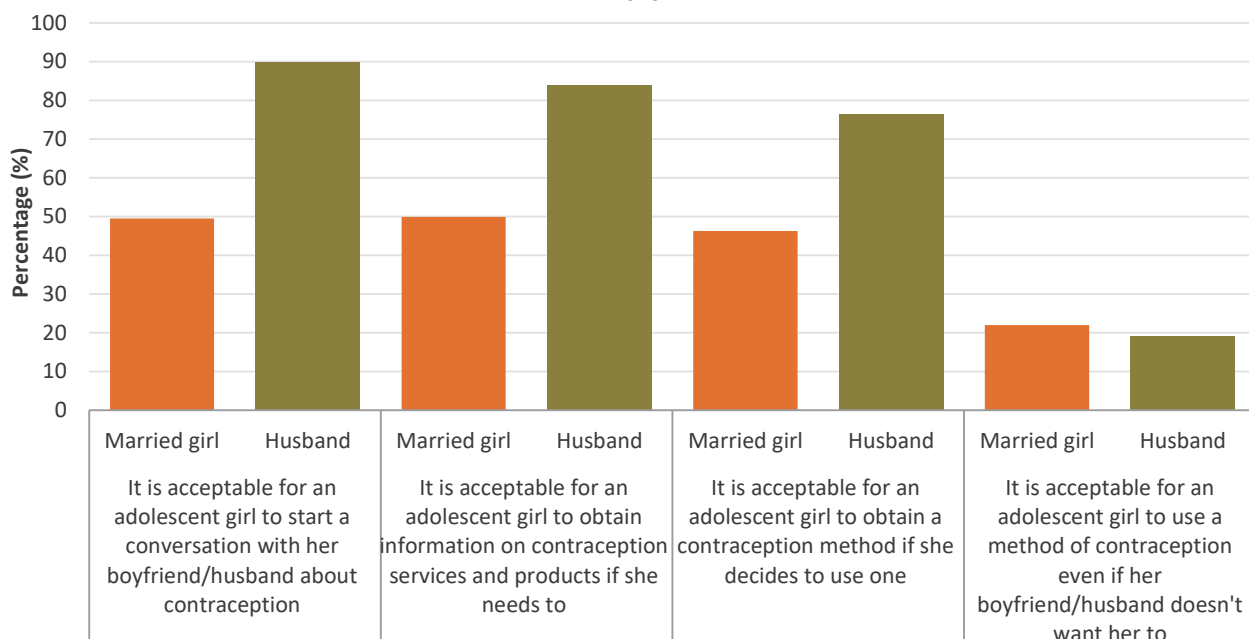
**Doma**



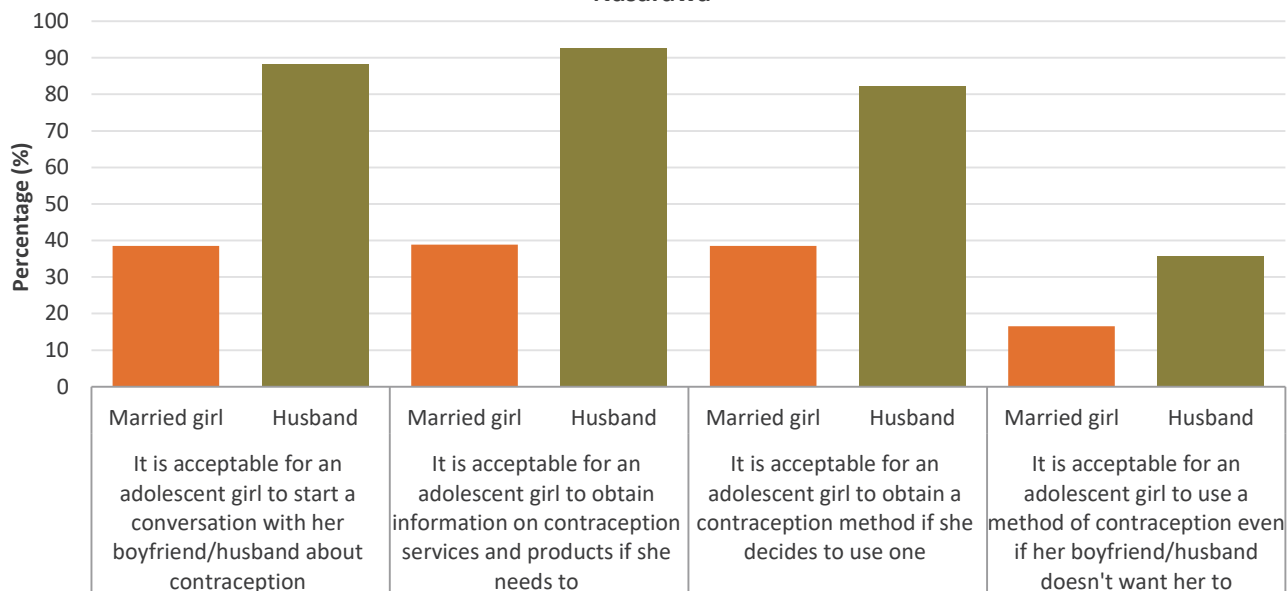
**Toto**



**Karu**



**Nasarawa**



## 7. Conclusions

### Key messages:

- **In Ogun, our findings for unmarried sexually active adolescent girls with respect to family planning indicators are consistent with national estimates from the most recent Nigerian Demographic Health Survey (NDHS) conducted in 2013.**
- **In Nasarawa, our findings for married adolescent girls with respect to family planning indicators are more positive than national results from NDHS 2013. This could be due to increasing trends in voluntary contraceptive use between 2013 and 2017, and/or due to regional variation in mCPR in Nigeria.**
- **The baseline survey has identified several priority areas for programme activities promoting contraceptive use, including 1) addressing fears, misconceptions and myths; 2) increasing intentions to use contraception; 3) increasing partner communication about family planning; and 4) fostering public approval of family planning by communities.**

Our findings for unmarried sexually active adolescent girls in Ogun are consistent with the most recent Nigerian Demographic Health Survey conducted in Nigeria (NDHS) in 2013.<sup>4</sup> National 2013 DHS estimates of mCPR for unmarried sexually active adolescent girls aged 15 to 19 years was 49.7% (Study protocol mCPR 47.5%; Study DHS mCPR (Appendix C) 45.3%).

In Nasarawa, our findings for married adolescent girls with respect to family planning indicators are more positive than results from NDHS 2013.<sup>4</sup> National 2013 DHS estimates of mCPR for married adolescent girls aged 15 to 19 years was 1.2% (Study protocol mCPR 14.4%; Study DHS mCPR (Appendix C) 8.7%). This could be due to increasing trends in voluntary contraceptive use between 2013 and 2017, and/or due to regional variation in mCPR in Nigeria. It is important to note that in NDHS 2013 mCPR showed significant variation by state in Nigeria.<sup>4</sup>

Myths and misconceptions are widespread among both unmarried and married adolescent girls and their co-habiting adults/husbands/male partners. Approximately half of unmarried adolescent girls in Ogun and half of married girls in Nasarawa believe that some modern contraception can stop a girl from ever being pregnant again even after she stops using it. Two thirds of unmarried adolescent girls in Ogun and half of married girls in Nasarawa believe that, if a modern contraception changes a girl's menstrual bleeding, it is bad for her health and can harm her womb. This may highlight a need to build trust and credibility of family planning products among both adolescent girls and the communities in which they live by addressing fears, misconceptions and myths.

Overall, 88.6% of unmarried, sexually active adolescent girls report not wanting a child in the next two years, yet a third are not currently using a contraceptive method. The main reasons these adolescents report for not using a contraceptive method include it not occurring to them to use contraception (41.8%), opposition by their partner to using contraception (9.7%) and fear of side effects (8.0%). This may highlight a need, for unmarried girls, to position contraception as relevant and valuable, to create a supportive environment for accessing services and to build trust and credibility of family planning products to increase intentions to use contraception among unmarried girls.

Overall, 38.8% of married, sexually active adolescent girls report not wanting a child in the next two years, yet four fifths are not currently using a contraceptive method. The main reasons for not using include wanting a/another child (34.6%), breastfeeding (20.9%) and it not occurring to them to use contraception (17.7%). This is in spite of the majority of married girls acknowledging the health benefits of family planning for spacing, including that modern contraception can help a girl delay the birth of her first child, if she wants to, and, after she begins to have children, to decide when to have another child. These data may highlight the need for a planned focus on addressing social norms around the interrelationship between marriage and early childbearing

among adolescent girls, and delivering communication on 1) benefits of delaying the birth of a first child and 2) benefits of a two- to three-year interval.

Among unmarried, sexually active adolescent girls aged 15–19, 66.4% are currently using a contraceptive method; 47.5% are using modern contraception. The male condom (33.4%) and the emergency pill (11.1%) are the most common modern methods used. Among married, sexually active adolescent girls aged 15–19, 17.4% are currently using a contraceptive method; 14.4% are using modern contraception. Injectables (4.1%) and the male condom (3.5%) are the most common modern methods used. Of those reporting using a method of contraception (modern or traditional), only about 1% of sexually active unmarried girls and 41% of sexually active married girls are using implants, IUDs and injectables. This may highlight the need to shift the method mix towards long-acting methods for birth spacing. Effective family planning counselling must prepare girls for the possibility that they will experience side effects and provide them with the information and tools to overcome them.

While the majority of unmarried girls felt able to start a conversation with their partners about contraception, and felt able to use a method of contraception even if their partner did not want them to, the proportion of married girls who felt able to carry out these actions was much lower. These data may highlight the need for a planned focus on partner communication for married girls to help create a supportive environment for accessing services.

Furthermore, while among both unmarried and married adolescent girls and their co-habiting adults/husbands/male partners the majority of respondents approved of married couples using a modern contraceptive method to avoid or delay pregnancy, much fewer respondents approved of unmarried couples using a modern contraceptive method to avoid or delay pregnancy. These data may highlight the need for a planned focus on tackling prevailing social norms with regard to unmarried couples and the use of modern contraception by fostering public approval of family planning by communities to help create a supportive environment for accessing services.

In summary, the key findings of this baseline report support focusing on programming activities to deliver the outputs outlined in the A360 Theory of Change on positioning contraception as relevant and valuable, building trust and credibility of family planning products and creating a supportive environment for accessing services.

## 8. Programmatic implications

### Identified priority areas for programme activities promoting contraceptive use:

- **Address fears, misconceptions, and myths to build trust and credibility of family planning products:** Myths and misconceptions were widespread among both unmarried and married adolescent girls and their co-habiting adults/husbands/male partners. Approximately half of unmarried adolescent girls in Ogun and half of married girls in Nasarawa believe that some modern contraception can stop a girl from ever being pregnant again even after she stops using it. Two thirds of unmarried adolescent girls in Ogun and half of married girls in Nasarawa believe that, if a modern contraception changes a girl's menstrual bleeding, it is bad for her health and can harm her womb. Effective family planning counselling must prepare girls for the possibility that they will experience side effects and provide them with the information and tools to overcome them. Counselling is also an important factor in shifting the method mix towards long acting methods for birth spacing. Currently, of those reporting using a method of contraception (modern or traditional), only about 1% of sexually active unmarried girls and 41% of sexually active married girls are using implants, intrauterine contraceptive device and injectables.
- **Increase intentions to use contraception by positioning contraception as relevant and valuable:** The main reason given by married adolescent girls for not using contraception was wanting a/another child. This was in spite of the majority of married girls acknowledging the health benefits of family planning for spacing. These data may highlight the need for a planned focus on addressing social norms around the interrelationship between marriage and early childbearing among adolescent girls, and delivering communication on 1) benefits of delaying the birth of a first child and 2) benefits of a two- to three-year interval.
- **Increase partner communication about family planning to help create a supportive environment for accessing services:** While the majority of unmarried girls felt able to start a conversation with their partners about contraception, and felt able to use a method of contraception even if their partner did not want them to, the proportion of married girls who felt able to carry out these actions was much lower. These data may highlight the need for a planned focus on partner communication for married girls.
- **Foster public approval of family planning by communities to help create a supportive environment for accessing services:** While the majority of respondents (girls and co-habiting adults) approved of married couples using a modern contraceptive method to avoid or delay pregnancy, far fewer respondents approved of unmarried couples using a modern contraceptive method to avoid or delay pregnancy. These data may highlight the need for a planned focus on tackling prevailing social norms with regard to unmarried couples and the use of modern contraception.

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## Appendix A: Implementation challenges and solutions

Challenge	State	Field response
<b>Difficulty accessing EAs</b>		
Because the standardised maps of EAs are more than 10 years old, they pose significant challenges during fieldwork. At times, street names have been misspelled or changed, landmarks no longer exist or areas are no longer inhabited.	Both	
Because of the rainy season, some EAs were inaccessible by any means of transportation—particularly those bordering or surrounded by a river.	Nasarawa	These EAs were replaced with a randomly selected EA in the same LGA.
Some EAs could not be located, despite multiple attempts by the advocacy personnel in contacting the National Population Commission and various local authorities.	Both	These EAs were replaced with a randomly selected EA in the same LGA.
Security challenges in Ogijo locality of Shagamu affected 71 selected EAs. Enumerators began working there but the communities became hostile.	Ogun	A field manager met the community head. Local security was arranged to accompany enumerators for a one-week period (the number of days the security personnel were available). EAs not completed in the period were replaced, as it was not possible to enter this area unaccompanied.
<b>Difficulty locating participants</b>		
It was more difficult than expected to find eligible girls in their households. Many were out all day working in shops, at the market or on the farm.	Both	Enumerators would travel to find an identified eligible girl. This included travelling outside of the EA to see a girl who lives in the EA as identified by the household head but working in a shop or on a farm located outside of the EA.
EAs in Ogun were smaller than expected, and fewer eligible girls than anticipated were found in each EA.	Ogun	Field teams visited more EAs than planned.
Some EAs had very few eligible girls as the dominant culture preferred later marriage.	Nasarawa	No specific response required; this was anticipated in the field plan.
<b>Refusals</b>		
Owing to the sensitive nature of the study, participant or guardian refusal was more of a challenge than we have experienced in other household surveys	Both	No specific response required.
At times, even after one parent gave permission, the other parent would arrive and ask to end the interview. For example, interviews commenced with the consent of the mother then fathers interfered and demanded that we explained what we were doing with their daughters.	Ogun	Enumerators were trained to answer the parent or guardian's questions, and to accept any refusal—even if it occurred mid-interview.
Some parents hesitated to give consent as they feared that discussing contraception might provoke their daughters to use it.	Both	Enumerators were trained to address these fears, and local guides were used to reassure parents. However, enumerators respected refusals when given.
We experienced a higher than expected refusal rate for the parent interview, which was initially offered to a random sample of 10% of sexually active girls.	Ogun	The selection interval for co-habiting adults was increased to 20% of sexually active girls using the same random selection technique initially agreed upon. All refusals were recorded in the questionnaire.



## Appendix B: Data tables

**Table B1. Percentage distribution of adolescent girl respondents by age, education, religion, language, employment, access to media (% ,n)**

Characteristic	Ogun n=12,053		Nasarawa n= 4,816			
	Ado-Odo Ota (Ix) n=6,043	Shagamu (Cx) n=6,010	Doma (Ix) n=908	Toto (Cx) n=952	Karu (Ix) n=1,434	Nasarawa (Cx) n=1,522
<b>Age (years)</b>						
15	26.8 (1,620)	27.7 (1,663)	20.6 (187)	7.5 (71)	4.6 (66)	9.1 (139)
16	16.6 (1,000)	16.2 (973)	19.2 (174)	14.0 (133)	10.8 (155)	12.6 (191)
17	16.9 (1,021)	15.1 (910)	20.0 (182)	18.2 (173)	16.2 (232)	19.8 (302)
18	21.3 (1,285)	21.2 (1,276)	19.9 (181)	25.3 (241)	28.5 (408)	23.7 (360)
19	18.5 (1,117)	19.8 (1,188)	20.3 (184)	35.1 (334)	40.0 (573)	34.8 (530)
<b>Education</b>						
No education	1.3 (81)	1.1 (66)	45.7 (415)	25.6 (244)	15.8 (227)	28.6 (435)
Quranic only	0.02 (1)	0.05 (3)	1.5 (14)	1.3 (12)	3.3 (47)	3.4 (52)
Primary	4.4 (264)	3.5 (210)	28.0 (254)	29.5 (281)	20.5 (294)	22.6 (344)
Secondary	89.8 (5,426)	90.6 (5,446)	24.6 (223)	41.8 (398)	56.9 (816)	42.4 (645)
Higher	4.5 (271)	4.7 (284)	0.22 (2)	1.8 (17)	3.4 (49)	3.0 (45)
Don't know	0 (0)	0 (0)	0 (0)	0 (0)	0.07 (1)	0.07 (1)
No response	0 (0)	0.02 (1)	0 (0)	0 (0)	0 (0)	0 (0)

Characteristic	Ogun n=12,053		Nasarawa n= 4,816			
	Ado-Odo Ota (Ix) n=6,043	Shagamu (Cx) n=6,010	Doma (Ix) n=908	Toto (Cx) n=952	Karu (Ix) n=1,434	Nasarawa (Cx) n=1,522
<b>Religion</b>						
Roman Catholic	2.1 (125)	2.6 (157)	21.2 (192)	3.7 (35)	14.9 (214)	6.6 (101)
Protestant/other Christian	59.7 (3,609)	63.0 (3,786)	43.8 (398)	52.4 (499)	42.1 (604)	28.9 (440)
Muslim	37.8 (2,282)	34.1 (2,049)	34.8 (316)	43.4 (413)	42.0 (602)	64.3 (979)
Traditional	0.38 (23)	0.27 (16)	0.11 (1)	0.32 (3)	0.91 (13)	0.13 (2)
No religion	0 (0)	0.02 (1)	0.11 (1)	0.21 (2)	0.07 (1)	0 (0)
Other	0.03 (2)	0.02 (1)	0 (0)	0 (0)	0 (0)	0 (0)
Don't know	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
No response	0.02 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
<b>Language (outside home)</b>						
Yoruba	67.4 (4,071)	65.2 (3,918)	0 (0)	0 (0)	0.07 (1)	0.20 (3)
English	31.2 (1,883)	31.7 (1,906)	2.2 (20)	9.6 (91)	20.6 (295)	3.8 (58)
Pidgin English	0.89 (54)	1.8 (110)	1.2 (11)	1.1 (10)	18.9 (271)	1.4 (22)
Hausa	0.13 (8)	0.53 (32)	65.3 (593)	58.3 (555)	53.8 (772)	82.7 (1,259)
Other	0.41 (25)	0.72 (43)	31.1 (282)	31.0 (295)	6.6 (94)	11.8 (180)
Don't know	0.02 (1)	0.02 (1)	0.22 (2)	0.11 (1)	0.07 (1)	0 (0)
No response	0.02 (1)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
<b>Income-generating activity</b>						
Yes	24.8 (1,501)	20.2 (1,212)	41.1 (373)	40.1 (382)	39.4 (565)	46.1 (702)
No	75.1 (4,541)	79.8 (4,798)	58.8 (534)	59.7 (568)	60.6 (869)	53.7 (817)
Don't know	0 (0)	0 (0)	0.11 (1)	0.11 (1)	0 (0)	0.20 (3)
No response	0.02 (1)	0 (0)	0 (0)	0.11 (1)	0 (0)	0 (0)

Characteristic	Ogun n=12,053		Nasarawa n= 4,816			
	Ado-Odo Ota (Ix) n=6,043	Shagamu (Cx) n=6,010	Doma (Ix) n=908	Toto (Cx) n=952	Karu (Ix) n=1,434	Nasarawa (Cx) n=1,522
<b>Reads newspaper/magazine at least once a week</b>						
Yes	8.2 (493)	11.0 (659)	0.33 (3)	0.95 (9)	3.3 (47)	0.79 (12)
No	91.7 (5,541)	88.5 (5,316)	99.7 (905)	99.1 (943)	96.7 (1,387)	99.1 (1,508)
Don't know	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
No response	0.15 (9)	0.58 (35)	0 (0)	0 (0)	0 (0)	0.13 (2)
<b>Listens to radio at least once a week</b>						
Yes	47.5 (2,873)	42.2 (2,538)	16.1 (146)	18.4 (175)	40.7 (583)	35.5 (540)
No	52.4 (3,166)	57.7 (3,465)	83.6 (759)	81.51 (776)	58.9 (845)	64.3 (979)
Don't know	0.07 (4)	0.12 (7)	0.33 (3)	0 (0)	0.35 (5)	0.20 (3)
No response	0 (0)	0 (0)	0 (0)	0.11 (1)	0.07 (1)	0 (0)
<b>Watches television at least once a week</b>						
Yes	82.7 (4,995)	86.4 (5,193)	7.6 (69)	22.0 (209)	64.8 (929)	42.0 (639)
No	17.3 (1,046)	13.6 (815)	92.2 (837)	78.1 (743)	34.9 (501)	57.8 (879)
Don't know	0.03 (2)	0.03 (2)	0.22 (2)	0 (0)	0.21 (3)	0.20 (3)
No response	0 (0)	0 (0)	0 (0)	0 (0)	0.07 (1)	0.07 (1)
<b>Accesses internet at least once a week</b>						
Yes	39.7 (2,401)	45.6 (2,742)	0.88 (8)	3.0 (29)	14.2 (203)	5.1 (77)
No	60.3 (3,642)	54.3 (3,266)	99.1 (900)	96.9 (922)	85.4 (1,225)	94.7 (1,441)
Don't know	0 (0)	0.03 (2)	0 (0)	0.11 (1)	0.35 (5)	0.20 (3)
No response	0 (0)	0 (0)	0 (0)	0 (0)	0.07 (1)	0.07 (1)

Characteristic	Ogun n=12,053		Nasarawa n= 4,816			
	Ado-Odo Ota (Ix) n=6,043	Shagamu (Cx) n=6,010	Doma (Ix) n=908	Toto (Cx) n=952	Karu (Ix) n=1,434	Nasarawa (Cx) n=1,522
<b>Mobile phone access</b>						
Owns smartphone	40.2 (2,426)	39.1 (2,351)	4.4 (40)	6.7 (64)	26.4 (379)	15.1 (230)
Owns non-smart mobile phone	19.0 (1,148)	15.1 (908)	25.0 (227)	42.4 (404)	43.2 (619)	40.9 (623)
Accesses mobile phone at least once a week	5.6 (337)	12.2 (731)	1.9 (17)	2.7 (26)	2.5 (36)	2.0 (31)
Accesses mobile phone less than once a week	8.7 (525)	9.2 (555)	4.5 (41)	4.9 (47)	2.5 (36)	3.0 (46)
No mobile phone access	26.6. (1,606)	24.3 (1,462)	64.0 (581)	43.2 (411)	25.4 (364)	38.7 (589)
Don't know	0.02 (1)	0.03 (2)	0.22 (2)	0 (0)	0 (0)	0.13 (2)
No response	0 (0)	0.02 (1)	0 (0)	0 (0)	0 (0)	0.07 (1)

**Table B2. Sexuality, fertility and fertility preferences of adolescent girl respondents (Estimate, 95% Confidence Interval)**

Characteristic	Ogun		Nasarawa		Karu (Ix)	Nasarawa (Cx)
	Ado-Odo Ota (Ix)	Shagamu (Cx)	Doma (Ix)	Toto (Cx)		
<b>Timing of last intercourse (%)</b>	n=6,043	n=6,010	n=908	n=952	n=1,434	n=1,522
Within past 4 weeks	6.5 (5.8-7.2)	8.2 (7.4-9.1)	51.9 (48.3-55.4)	48.5 (44.7-52.4)	50.8 (47.8-53.9)	49.2 (46.2-52.2)
Within past year	7.1 (6.4-7.9)	8.8 (8.0-9.6)	42.1 (39.1-45.1)	40.7 (37.2-44.2)	40.1 (37.3-43.0)	40.2 (37.6-42.9)
More than one year	9.4 (8.6-10.3)	10.5 (9.6-11.5)	4.5 (3.2-6.4)	9.8 (7.6-12.4)	7.1 (5.4-9.3)	7.4 (5.7-9.7)
Never had sex	76.9 (75.5-78.2)	72.1 (70.6-73.6)	0.88 (0.23-3.3)	0.42 (0.16-1.11)	0	0.20 (0.06-0.61)
Don't know	0.02 (0.01-0.12)	0.07 (0.03-0.18)	0.33 (0.11-1.0)	0.63 (0.25-1.6)	0.14 (0.04-0.55)	0.33 (0.12-0.92)
No response	0.12 (0.05-0.27)	0.28 (0.17-0.46)	0.33 (0.11-1.0)	0	1.8 (1.2-2.8)	2.6 (1.6-4.1)
<b>Median (interquartile range) age at first sexual intercourse</b>	n=1,389	n=1,654	n=894	n=942	n=1,406	n=1,475
	16 (15-17)	16 (15-17)	14 (13-15)	15 (14-16)	16 (15-17)	15 (14-16)
<b>Ever been pregnant (%)</b>	n=6,043	n=6,010	n=908	n=952	n=1,434	n=1,522
Yes	4.7 (4.2-5.4)	6.1 (5.4-6.8)	82.6 (79.4-85.4)	89.6 (87.3-91.5)	76.8 (73.5-79.8)	79.4 (76.4-82.2)
No	95.2 (94.5-95.8)	93.9 (93.2)	17.3 (14.5-20.5)	10.3 (8.4-12.6)	22.9 (19.9-26.2)	20.4 (17.7-23.3)
Don't know	0.05 (0.02-0.15)	0.05 (0.02-0.15)	0.11 (0.02-0.78)	0.11 (0.01-0.74)	0.21 (0.07-0.64)	0.20 (0.06-0.61)
No response	0	0	0	0	0.14 (0.04-0.55)	0
<b>Currently pregnant (%)</b>	n=6,043	n=6,010	n=908	n=952	n=1,434	n=1,522
Yes	0.78 (0.59-1.0)	0.85 (0.65-1.11)	31.9 (28.9-35.2)	30.4 (27.4-33.5)	31.5 (28.9-34.3)	31.1 (28.8-33.5)
No	99.2 (98.9-99.4)	98.8 (98.5-99.1)	66.4 (63.1-69.6)	66.9 (63.6-70.0)	65.8 (63.0-68.4)	65.6 (63.1-67.9)
Don't know	0.05 (0.02-0.15)	0.32 (0.20-0.50)	1.5 (0.85-2.8)	2.6 (1.8-3.9)	2.4 (1.8-3.4)	3.4 (2.5-4.4)
No response	0	0	0.11 (0.02-0.76)	0.11 (0.01-0.75)	0.28 (0.11-0.73)	0
<b>Age-specific fertility rates (per 1,000)</b>	n=6,043	n=6,010	n=908	n=952	n=1,434	n=1,522
15-19	6.0 (4.3-8.3)	9.0 (6.7-12.0)	250.0 (219.6-283.1)	255.3 (226.0-286.8)	212.0 (187.2-239.1)	221.4 (197.6-247.3)

Characteristic	Ogun		Nasarawa			
	Ado-Odo Ota (Ix)	Shagamu (Cx)	Doma (Ix)	Toto (Cx)	Karu (Ix)	Nasarawa (Cx)
<b>Ever given birth (%)</b>	n=6,043	n=6,010	n=908	n=952	n=1,434	n=1,522
Yes	2.0 (1.6-2.4)	2.6 (2.2-3.2)	55.7 (52.0-59.4)	66.2 (62.8-69.4)	47.2 (43.7-50.7)	55.0 (51.7-58.2)
No	98.0 (97.6-98.4)	97.4 (96.8-97.8)	44.3 (40.6-48.0)	33.8 (30.6-37.2)	55.8 (49.3-56.3)	45.0 (41.8-48.3)
Don't know	0	0	0	0	0	0
No response	0	0	0	0	0	0
<b>Median (interquartile range) age at first birth</b>	n=119	n=159	n=506	n=630	n=677	n=837
	18 (16-18)	17 (16-18)	16 (15- 17)	16 (15- 17)	17 (16- 18)	16 (15- 17)
<b>Planning status of most recent birth (%)</b>	n=119	n=159	n=506	n=630	n=677	n=837
Wanted then	9.2 (4.8-17.1)	11.3 (7.0-17.8)	87.9 (85.0-90.4)	80.2 (76.2-83.6)	81.5 (77.7-84.8)	91.0 (88.6-93.0)
Wanted later	87.4 (79.4-92.6)	81.8 (74.3-87.5)	11.1 (8.7-14.1)	17.9 (14.7-21.7)	15.8 (12.9-19.2)	8.6 (6.7-10.9)
Wanted no more	1.7 (0.42-6.5)	6.3 (3.4-11.2)	0.79 (0.30-2.1)	1.3 (0.64-2.5)	1.3 (0.66-2.7)	0
Don't know	0	0	0	0.32 (0.08-1.3)	0.44 (0.14-1.4)	0.12 (0.02-0.85)
No response	1.7 (0.42-6.5)	0.63 (0.09-4.4)	0.20 (0.03-1.4)	0.32 (0.08-1.3)	0.89 (0.40-1.9)	0.24 (0.03-1.7)
<b>Unmet need for modern contraception (%)</b>	n=821 <sup>3</sup>	n=1,025 <sup>3</sup>	n=792 <sup>3</sup>	n=800 <sup>3</sup>	n=1,237 <sup>3</sup>	n=1,351 <sup>3</sup>
No unmet need	66.5 (63.0-69.9)	68.3 (65.1-71.3)	80.9 (77.7-83.8)	72.5 (68.9-75.8)	77.8 (74.9-80.4)	80.0 (77.2-82.6)
Unmet need for spacing <sup>1</sup>	33.3 (29.9-36.8)	31.4 (28.4-34.6)	18.2 (15.4-21.3)	26.5 (23.3-30.0)	21.7 (19.0-24.5)	19.7 (17.1-22.5)
Unmet need for limiting <sup>2</sup>	0.24 (0.06-0.97)	0.29 (0.09-0.90)	0.88 (0.42-1.8)	1.0 (0.51-1.9)	0.57 (0.25-1.3)	0.30 (0.11-0.78)
Total unmet need	33.5 (30.1-37.1)	31.7 (28.7-34.9)	19.1 (16.2-22.3)	27.5 (24.2-31.1)	22.2 (19.6-25.1)	20.0 (17.4-22.8)

1 Unmet need for spacing includes pregnant women whose pregnancy was mistimed; fecund women who are non-pregnant, who are not using any modern method of contraception, and say they want to wait two or more years for their first/next birth; and postpartum amenorrheic women, who are not using any modern method of contraception, and say at the time they became pregnant they had wanted to delay pregnancy.

2 Unmet need for limiting refers to pregnant women whose pregnancy was unwanted; fecund women who are non-pregnant, who are not using any modern method of contraception, and want no more children; and postpartum amenorrheic women, who are not using any modern method of contraception, and say at the time they became pregnant they had not wanted any more children.

3 Total number of adolescent girls aged 15–19 years who are fecund and sexually active (sex in the past year), or postpartum amenorrheic or pregnant.

**Table B3. Background characteristics of husbands and co-habiting adult respondents surveyed (% ,n)**

Characteristic	Ogun n=337		Nasarawa n=326			
	Ado-Odo Ota (Ix) n=176	Shagamu (Cx) n=161	Doma (Ix) n=74	Toto (Cx) n=74	Karu (Ix) n=86	Nasarawa (Cx) n=92
<b>Relationship to adolescent girl</b>						
Husband	0 (0)	0 (0)	98.7 (73)	94.6 (70)	88.4 (76)	96.7 (89)
Co-habiting partner	0 (0)	0 (0)	1.4 (1)	5.4 (4)	11.6 (10)	3.3 (3)
Mother	54.0 (95)	37.3 (60)				
Father	0.57 (1)	1.2 (2)				
Grandmother	2.3 (4)	1.2 (2)				
Aunt	14.2 (25)	22.4 (36)				
Sister	24.4 (43)	28.6 (46)				
Brother	1.1 (2)	0.62 (1)				
Stepmother	1.1 (2)	1.2 (2)				
Neighbour	1.7 (3)	3.1 (5)				
Other	0.57 (1)	4.3 (7)				
No response	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
<b>Age (years)</b>						
20-29	22.7 (40)	33.5 (54)	27.0 (20)	44.6 (33)	39.5 (34)	35.9 (33)
30-39	22.2 (39)	23.0 (37)	47.3 (35)	35.1 (26)	43.0 (37)	52.2 (48)
40-49	30.7 (54)	28.6 (46)	6.8 (5)	9.5 (7)	7.0 (6)	6.5 (6)
50-59	15.9 (28)	10.6 (17)	0 (0)	0 (0)	1.1 (1)	1.1 (1)
60-89	5.7 (10)	3.1 (5)	0 (0)	0 (0)	0 (0)	0 (0)
Don't know	2.8 (5)	1.2 (2)	18.9 (14)	10.8 (8)	9.3 (8)	4.3 (4)

Characteristic	Ogun n=337		Nasarawa n=326			
	Ado-Odo Ota (Ix) n=176	Shagamu (Cx) n=161	Doma (Ix) n=74	Toto (Cx) n=74	Karu (Ix) n=86	Nasarawa (Cx) n=92
<b>Education</b>						
No education	17.1 (30)	5.6 (9)	31.1 (23)	21.6 (16)	5.8 (5)	18.5 (17)
Quranic only	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1.1 (1)
Primary	22.7 (40)	14.9 (24)	16.2 (12)	6.8 (5)	4.7 (4)	9.8 (9)
Secondary	39.8 (70)	49.1 (79)	46.0 (34)	58.1 (43)	59.3 (51)	50.0 (46)
Higher	20.5 (36)	30.4 (49)	6.8 (5)	13.5 (10)	30.2 (26)	20.7 (19)
Don't know	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
No response	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
<b>Religion</b>						
Roman Catholic	2.3 (4)	3.1 (5)	14.9 (11)	1.4 (1)	15.1 (13)	0 (0)
Protestant/other Christian	70.5 (124)	66.5 (107)	47.3 (35)	46.0 (34)	45.4 (39)	29.4 (27)
Muslim	27.3 (48)	29.8 (48)	37.8 (28)	52.7 (39)	39.5 (34)	70.7 (65)
Traditional	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
No religion	0 (0)	0.62 (1)	0 (0)	0 (0)	0 (0)	0 (0)
Other	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
Don't know	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
No response	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
<b>Language (outside home)</b>						
Yoruba	85.2 (150)	79.5 (128)	0 (0)	0 (0)	0 (0)	0 (0)
English	11.9 (21)	18.0 (29)	5.4 (4)	13.5 (10)	27.9 (24)	5.4 (5)
Pidgin English	2.3 (4)	1.9 (3)	0 (0)	0 (0)	11.6 (10)	2.2 (2)
Hausa	0.57 (1)	0 (0)	75.7 (56)	66.2 (49)	53.5 (46)	80.4 (74)
Other	0 (0)	0.62 (1)	18.9 (14)	20.3 (15)	7.0 (6)	12.0 (11)
Don't know	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
No response	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)



**Table B4. Family planning knowledge, attitudes and beliefs of husbands and co-habiting adult respondents surveyed (% , 95% Confidence Interval)**

Characteristic	Ogun	Shagamu (Cx)	Nasarawa			
	Ado-Odo Ota (Ix)		Doma (Ix)	Toto (Cx)	Karu (Ix)	Nasarawa (Cx)
<b>Ever heard of contraception</b>	n=176	n=161	n=74	n=74	n=86	n=92
Yes	96.0 (92.0-98.1)	99.4 (95.7-99.9)	66.2 (55.0-75.9)	64.9 (52.9-75.2)	79.1 (69.2-86.4)	72.8 (61.8-81.6)
No	4.0 (1.9-8.0)	0.62 (0.09-4.3)	33.8 (24.2-45.0)	35.1 (24.8-47.1)	20.9 (13.6-30.8)	27.2 (18.4-38.2)
Don't know	0	0	0	0	0	0
No response	0	0	0	0	0	0
<b>Agreed with misconception about contraception</b>	n=169	n=160	n=49	n=48	n=68	n=67
Some modern contraception can stop a girl from ever being pregnant again even after she stops using it	59.8 (51.9-67.2)	66.3 (58.2-73.5)	42.9 (30.0-56.8)	62.5 (49.2-74.2)	60.3 (48.1-71.3)	56.7 (44.7-68.0)
If a modern contraception changes a girl's menstrual bleeding, it's bad for her health and can harm her womb	68.6 (61.2-75.3)	71.3 (63.7-77.8)	57.1 (42.1-71.0)	72.9 (58.8-83.6)	67.7 (55.0-78.2)	59.7 (47.5-70.9)
Some modern contraceptives can make adolescent girls permanently fat	63.9 (56.6-70.6)	68.1 (59.9-75.4)	51.0 (36.3-65.6)	56.3 (42.3-69.3)	48.5 (37.0-60.3)	65.7 (50.8-78.0)
Adolescent girls who use modern contraception sleep with too many men	62.1 (54.1-69.5)	48.8 (41.6-56.0)	49.0 (34.9-63.2)	66.7 (52.5-78.3)	42.7 (31.2-54.9)	55.2 (41.3-68.4)

Characteristic	Ogun		Nasarawa			
	Ado-Odo Ota (Ix)	Shagamu (Cx)	Doma (Ix)	Toto (Cx)	Karu (Ix)	Nasarawa (Cx)
<b>Agreed with benefits about contraception</b>	n=169	n=160	n=49	n=48	n=68	n=67
Preventing unwanted pregnancies is a benefit of contraception	92.3 (86.6-95.7)	95.0 (90.4-97.5)	91.8 (80.0-96.9)	93.8 (81.7-98.1)	95.6 (87.3-98.6)	85.1 (74.7-91.7)
Some contraception methods reduce sexually transmitted infections	68.6 (62.0-74.6)	80.0 (73.2-85.4)	81.6 (64.7-91.5)	79.2 (64.9-88.6)	85.3 (72.9-92.6)	79.1 (67.4-87.4)
Modern contraception can help a girl to delay the birth of her first child, if she wants to	91.1 (85.4-94.8)	90.0 (84.7-93.6)	83.7 (70.9-91.5)	87.5 (73.9-94.5)	89.7 (80.2-94.9)	94.0 (84.7-97.8)
After she begins to have children, modern contraception can allow a girl to decide when to have another child	91.7 (86.4-95.1)	90.0 (84.1-93.9)	87.8 (75.7-94.3)	95.8 (84.2-99.0)	92.7 (83.8-96.8)	91.0 (81.1-96.0)
Using modern contraception can allow a girl to complete her education, find a better job, and have a better life	75.7 (68.1-82.0)	78.1 (71.4-83.6)	91.8 (76.6-97.5)	95.8 (84.2-99.0)	89.7 (80.4-94.9)	92.5 (83.0-96.9)
<b>Approved of using contraception</b>	n=169	n=160	n=49	n=48	n=68	n=67
Married adolescent girls aged 15–19 years using a modern contraception method to avoid or delay pregnancy	77.5 (69.9-83.7)	78.1 (69.8-84.7)	69.4 (54.1-81.4)	43.8 (28.3-60.6)	75.0 (63.7-83.7)	73.1 (58.2-84.2)
Unmarried sexually active adolescent girls aged 15–19 years using a modern contraception method to avoid or delay pregnancy	42.6 (36.0-49.9)	55.6 (48.0-63.0)	44.9 (30.7-60.0)	43.8 (28.3-60.6)	42.7 (30.8-55.4)	46.3 (34.4-58.6)

Characteristic	Ogun		Nasarawa			
	Ado-Odo Ota (Ix)	Shagamu (Cx)	Doma (Ix)	Toto (Cx)	Karu (Ix)	Nasarawa (Cx)
<b>Agreed with statements on adolescent girls accessing and using contraception</b>	n=169	n=160	n=49	n=48	n=68	n=67
It is acceptable for an adolescent girl to start a conversation with her boyfriend/husband about contraception	55.0 (47.4-62.4)	58.1 (50.1-65.7)	81.6 (68.6-90.1)	89.6 (76.5-95.8)	89.7 (80.2-94.9)	88.1 (77.6-94.0)
It is acceptable for an adolescent girl to obtain information on contraception services and products if she needs to	65.1 (57.5-72.0)	68.1 (60.1-75.2)	83.7 (69.7-91.9)	89.6 (77.7-95.5)	83.8 (72.3-91.1)	92.5 (83.0-96.9)
It is acceptable for an adolescent girl to obtain a contraception method if she decides to use one	53.3 (46.0-60.3)	61.9 (53.9-69.3)	77.6 (63.5-87.3)	85.4 (73.0-92.7)	76.5 (65.0-85.1)	82.1 (69.7-90.1)
It is acceptable for an adolescent girl to start a conversation with her boyfriend/husband about contraception	48.5 (40.7-56.4)	58.1 (50.4-65.5)	14.3 (6.4-29.0)	18.8 (9.7-33.1)	19.1 (11.2-30.8)	35.8 (23.4-50.5)

## Appendix C: DHS mCPR definition and results table

DHS definition of mCPR among 15–19-year-old girls:<sup>4</sup>

### MARRIED

Number of married 15–19-year-old girls reporting use of modern contraceptives at the time of the survey

Number of married 15–19-year-old girls

### UNMARRIED

Number of unmarried sexually active\* 15–19-year-old girls reporting use of modern contraceptives at the time of the survey

Number of unmarried sexually active\* 15–19-year-old girls

Modern contraception: male and female sterilisation, contraceptive implants, intrauterine contraceptive devices (IUDs), injectables, oral contraceptive pill, emergency contraceptive pill, male condom, female condom, Standard Days Method (SDM), Lactational Amenorrhoea Method (LAM), diaphragm, spermicides, foams and jelly.

\*Sexually active girls: those who report having sexual intercourse in the past 30 days

(NOTE: in our analysis we used a slightly modified DHS definition for unmarried girls and we included those who were sexually active in the past 12 months)

mCPR definition	Pros	Cons
<b>Study protocol mCPR</b>	<ul style="list-style-type: none"> <li>Denominator reflects the population at risk (of pregnancy), i.e., sexually active women who are not infecund, pregnant, or amenorrhoeic</li> <li>More informative for programming</li> <li>Easier to tease out the separate impacts of an intervention on (1) use of contraception in population at risk of pregnancy and (2) number of pregnancies (age-specific fertility rates are a secondary outcome in our study)</li> </ul>	<ul style="list-style-type: none"> <li>Not directly comparable to DHS</li> </ul>
<b>DHS mCPR</b>	<ul style="list-style-type: none"> <li>More widely used definition</li> <li>Direct comparison can be made for married women with DHS</li> <li>The DHS definition is helpful for international comparisons</li> </ul>	<ul style="list-style-type: none"> <li>Denominator doesn't reflect population at risk of pregnancy for married women</li> <li>Definition for unmarried women would be sexually active within 12 months (30 days in DHS) therefore still not directly comparable with DHS</li> </ul>

**Table C1. Percentage distribution of married and sexually active unmarried adolescent girls aged 15–19 years who currently use contraception, by method used (DHS definition) (% , 95% Confidence Interval)**

Characteristic	Ogun		Nasarawa			
	Ado-Odo Ota (Ix)	Shagamu (Cx)	Doma (Ix)	Toto (Cx)	Karu (Ix)	Nasarawa (Cx)
<b>No. of girls<sup>1</sup></b>	822	1,022	908	952	1,434	1,522
<b>Any method</b>	65.2 (61.5-68.7)	61.6 (58.0-65.0)	6.6 (5.1-8.5)	8.8 (6.9-11.3)	15.1 (13.3-17.0)	9.8 (8.1-11.7)
<b>Any modern method<sup>2</sup></b>	42.2 (38.7-45.9)	47.9 (44.6-51.2)	4.7 (3.5-6.3)	7.7 (5.8-10.1)	12.6 (10.9-14.4)	8.1 (6.6-9.8)
<b>Modern method</b>						
Implant	0.12 (0.02-0.86)	0.68 (0.33-1.4)	0.77 (0.38-1.6)	0.42 (0.13-1.4)	3.5 (2.6-4.6)	1.8 (1.1-2.8)
IUD	0	0.10 (0.01-0.70)	0	0.32 (0.07-1.3)	0.14 (0.04-0.55)	0
Injectables	0.24 (0.06-0.97)	0.29 (0.10-0.90)	2.2 (1.4-3.4)	3.2 (2.0-4.8)	2.4 (1.7-3.3)	2.2 (1.4-3.2)
Daily pills	1.7 (0.98-3.0)	1.2 (0.64-2.1)	0.11 (0.02-0.76)	0.84 (0.40-1.8)	1.0 (0.62-1.7)	2.0 (1.4-2.8)
Emergency pills	9.9 (8.0-12.1)	11.1 (9.2-13.3)	0	0.21 (0.05-0.82)	0.91 (0.52-1.6)	0.39 (0.18-0.86)
Male condom	29.6 (26.5-32.8)	33.6 (30.7-36.5)	1.5 (0.95-2.5)	1.7 (0.98-2.9)	3.8 (2.9-5.0)	1.1 (0.62-1.77)
Other modern method	0.73 (0.34-1.6)	0.98 (0.53-1.8)	0.11 (0.02-0.79)	1.1 (0.54-2.0)	0.77 (0.43-1.4)	0.72 (0.41-1.3)
<b>Any traditional method</b>	23.0 (19.8-26.5)	13.7 (11.5-16.2)	1.9 (1.1-3.1)	1.2 (0.65-2.1)	2.5 (1.7-3.6)	1.7 (1.0-2.8)
<b>Not currently using</b>	28.5 (25.3-31.8)	33.1 (29.8-36.5)	55.2 (51.7-58.6)	49.9 (46.2-53.6)	44.4 (41.5-47.3)	48.5 (45.7-51.3)
<b>Don't know</b>	0.49 (0.18-1.3)	0.39 (0.12-1.3)	0.22 (0.05-0.88)	0.11 (0.01-0.76)	0	0.07 (0.01-0.47)
<b>No response<sup>3</sup></b>	5.8 (4.5-7.6)	5.0 (3.8-6.5)	38.0 (34.5-41.6)	41.2 (37.9-44.6)	40.6 (37.8-43.4)	41.7 (38.9-44.4)
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0

1 Unmarried girls who report sexually activity in last 12 months in Ogun; All married girls in Nasarawa

2 Modern methods include female sterilisation, male sterilisation, contraceptive pill (oral contraceptives), IUD, injectables (Depo-Provera), implants (Norplant), female condom, male condom, diaphragm, contraceptive foam and contraceptive jelly, LAM, SDM, cycle beads.

3 Girls who reported no sexual activity in last 12 months or reported being pregnant were not asked about use of modern contraception in the survey.