DETERMINANTS OF REPRODUCTIVE HEALTH SERVICES UTILIZATION AMONG FEMALE ADOLESCENTS IN SANGOTEDO, ETI-OSA EAST LGA, LAGOS STATE, NIGERIA

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ABSTRACT: *Background: Reproductive and sexual health account for a sizeable portion of the global burden of sexual ill-health. At the same time, female adolescents' utilization of Reproductive Health Services (RHS) remains a global public health concern due to numerous predisposing factors of knowledge, attitude, and perception of the female adolescent. These services are crucial for their reproductive health and well-being. Studies have reported low utilization of RHS by female adolescents in Lagos State, resulting in an increase in teenage pregnancy, sexually transmitted infection and abortion, especially in Eti-Osa. Most studies on the utilization of RHS focused on women of reproductive age, not on female adolescents. Hence, this study investigated the determinants of reproductive health services among female adolescents in Sangotedo LCDA, Eti-Osa East LGA, Lagos State, Nigeria.*

Methods: This study utilized a cross-sectional design. Two hundred and fifteen (215) female adolescents from four secondary schools were selected using stratified random sampling. A structured and validated questionnaire with Cronbach alpha reliability coefficient ranging from 0.70 to 0.99 was used for data collection. Respondents' predisposing factor levels (knowledge, attitude, and perception) were measured on a 30-point rating scale. Utilization of RHS was measured on a 3-point rating scale. Data were analyzed using descriptive and inferential statistics at a 5% level of significance.

Results: Two hundred and fifteen (215) female adolescents of ages 10-19 years completed the questionnaire correctly. The mean age was 14 ± 1.8 years. Slightly above half (51.2%) were between the ages of 14 and 15 years. The majority (96.3%) of the respondents had low levels of predisposing factors that promote reproductive health service utilization. Less than half (40.4%) of the respondents utilized RHS. Furthermore, there was no statistically significant relationship between predisposing factors and female adolescents' utilization of reproductive health services (r =-0.39, p > 0.05).

Conclusion: The utilization of RHS is low among female adolescents. This study therefore recommended that intervention programs that will improve the predisposing factors of the female adolescents should be carried out regularly in primary health centers.

KEYWORDS: Reproductive health services, female adolescents, predisposing factors.

BACKGROUND TO THE STUDY

The reproductive and sexual health of adolescents has received considerable attention in the last 10 years from academics, public health professionals, and policy experts. Adolescence is a time of rapid growth and development, often experienced by people between the ages of 10 and 19 (WHO, 2020). It is a period when people change from childhood to adulthood and it is characterized by significant behavioral, psychological, and social changes that could endanger their lives (Nmadu et al., 2020). Adolescent reproductive and sexual health refers to teenagers' physical and emotional well-being and ability to prevent unintended pregnancies, unsafe abortions, STIs (including HIV/AIDS), and all types of sexual abuse and oppression (Nmadu et al., 2020).

A long time ago, adolescents were treated as a relatively homogenous group without considering how their particular cultural, social, and socioeconomic (earnings and academic achievement) circumstances affect their capacity to access and use reproductive health information to make informed decisions. These factors included maturity level, sex, religious practice, relationship status, place of residence, and level of education. However, there is growing evidence that adolescent girls have diverse concerns about their means of subsistence, depending on the socio-ecological factors that affect the environments in which they reside, as a result of the recent emphasis on a few of these themes. The current focus on diverse topics has led to the production of this evidence (Ninsiima et al., 2021).

The 1994 International Conference on Population and Development (ICPD) outcome in Egypt was a paradigm shift in how adolescents' needs were handled (ICPD, 1994). The conference recognized that adolescents have distinct requirements and are susceptible to certain risks. According to a WHO report in 2020, most adolescents start having sexual relations before they turn 20, and accessing reproductive health care is usually a challenge that confronts them. Adolescents are often uninformed about sexually transmitted illnesses and pregnancy prevention strategies. Scientists have studied the demand for adolescent-friendly reproductive and sexual health care services to combat their vulnerability to reproductive health problems, such as STIs, HIV/AIDS, and unwanted pregnancies that result from initial sexual act engagements (Ninsiima et al., 2021).

According to Ssebunya et al. (2022), reproductive and sexual health account for a sizeable portion of the global burden of sexual ill-health. The 2018 Guttmacher-Lancet Commission study also highlighted this discrepancy, noting that over 200 million women lack access to recent contraception, whereas over 350 million unsafe abortions occur worldwide (Starrs et al., 2018). In addition, out of 777,000 children born to adolescent mothers under the age of 15 in 2020, Africa accounts for 58%, Asia for 28%, and Latin America for 14% (Ssebunya et al., 2022). From the age of 19 years, the average number of adolescents in low- and middle-income nations have actively engaged in sexual intercourse, mostly due to their marital status and partially because they have had half of their pregnancies unintentionally (Starrs et al., 2018). Adolescents in Africa of age cohorts 15 and 19 make up 60% of all new HIV/AIDS infections, and there are around 1.7 million youths who have experienced various reproductive health difficulties (WHO, 2020).

Every year in Nigeria, one in 20 adolescents obtains a sexually transmitted illness, and less than 25 people account for 50% of all HIV infections (Munakampe et al., 2018). According to statistics, in Nigeria, adolescent mothers often wait around 15 years before having their first

sexual experience (DHS, 2018), while the country's overall adolescent fertility rate is 102 births per 1,000 females between the ages of 15 and 19 years (Bank, 2020). Additionally, the frequency of adolescent fertility was as high as 5.5 births per 1,000 adolescent females in southern Nigeria in 2018 (NPC, 2019). Consequently, the Nigerian government has undertaken significant steps and efforts to provide and improve the standards of juvenile sexual healthcare services via initiatives initiated by the Family Health Department (FMH) of the Health Ministry and its cooperation with NGOs. These include discounted rates in all public health facilities, free maternity treatment, and youth-friendly services (Banke-Thomas & Yaya, 2021). This was intended to assist teenagers in understanding their sexuality and safeguarding themselves against threats to sexual health (Banke-Thomas & Yaya, 2021).

Despite the government's call for improvement, adolescents in Nigeria still have limited access to reproductive health services, despite efforts to increase access. In addition, despite data demonstrating that adolescents deal with reproductive health issues, the notion of "healthy adolescents" persists. Several studies in Nigeria have demonstrated that adolescents utilize medical services less regularly than they should and are more prone to participate in sexual activity (Sanchez, 2020). Adolescents in Nigeria and several other sub-Saharan countries encounter considerable obstacles to having access to reproductive and sexual health services. Several individual predisposing factor variables contribute to the factors associated with reproductive health use in Nigeria and other African nations. This frequently results in concomitant hazards, including difficulty obtaining contraception, unsafe abortion, early pregnancy, and motherhood (Mehta & Seeley, 2020). Studies have revealed that contact with peers and family, socioeconomic status, a lack of financial independence, access to the Internet, and traditional perspectives, such as healthcare legislation, all influence how frequently female adolescents use reproductive health services (Mehta & Seeley, 2020).

Although there are obstacles to adolescents' access to reproductive health treatments in both rich nations as well as low- and middle-income nations, there are geographical distinctions, with adolescents' access to poorer nations like Nigeria being more severe. Therefore, this study adopted the PRECEDE model to further elucidate the individual predisposing factors associated with the utilization of reproductive health services in the study area of interest.

The PRECEDE model was adopted to explore the factors that influence reproductive health service utilization among female adolescents in the Sangotedo area of the Eti-Osa LGA. The PRECEDE model was chosen for this study because it provides a systematic and logical approach to analyzing the complex and multifaceted nature of reproductive health problems among female adolescents in study site settings. The model also allows for the integration of quantitative and qualitative methods to collect and analyze data from different sources and perspectives. Furthermore, the model enables the identification of priority areas for intervention and evaluation, based on evidence and stakeholder involvement.

Furthermore, adolescents undoubtedly require assistance in reproductive and sexual health; therefore, the PRECEDE model serves as a guide for providing diagnostic assistance for RHS interventions. PRECEDE diagnosis assistance involves identifying the health problems and needs of the target population as well as the factors that influence their behavior and environment. For female adolescents, some of the health problems and needs related to reproductive health are preventing unintended pregnancies, sexually transmitted infections (STIs), and HIV/AIDS, accessing safe abortion services, managing menstrual hygiene, and receiving counseling and education on sexual and reproductive rights. Some of the factors that

affect their reproductive health behavior and environment are knowledge, attitudes, beliefs, values, norms, skills, self-efficacy, peer pressure, family support, gender roles, stigma, and discrimination.

Therefore, this research seeks to investigate the determinants of reproductive health services utilization among female adolescents in the Sangotedo area of Eti-Osa LGA, in addition to suggestions for resolving identified issues.

The PRECEDE aspect of the model was adopted to provide further elucidation of how the important variables are linked so that they would be tailored to the needs and the hypotheses proposed, and concepts incorporated in developing the instrument, so that it would capture the phenomena being studied.

PRECEDE Framework

The acronym PRECEDE stands for "Predisposing, Reinforcing and Enabling, Construct in Educational/Environmental Diagnosis and Evaluation" which was developed by Green, Kreuter, Deeds and Patridge (1980) and later revised to include the rapidly growing knowledge in genetic factors to make it ecological in perspective (Green & Kreuter, 2005).

Predisposing Factors

Predisposing factors in the PRECEDE-PROCEED model include individual knowledge, attitudes, beliefs, and values that influence health-seeking behaviors related to reproductive health services. These factors may be influenced by cultural norms, religious beliefs, social support systems, and educational opportunities. To enhance reproductive health service utilization, interventions should focus on raising awareness, addressing misconceptions, and challenging societal norms related to reproductive health.

These three factors could be influencing the individual's behavior, hence the application of the PRECEDE model in Sangotedo for the study population.

Reproductive health services play a crucial role in promoting the well-being and empowerment of individuals, families, and societies. However, various determinants often hinder the utilization of these services among different populations. To conceptualize this study, only the PRECEDE aspect of this model will be adopted. The PRECEDE model provides a comprehensive framework for understanding these determinants and designing effective interventions to enhance the utilization of reproductive health services. This study aims to explore the application of the PRECEDE model in the context of reproductive health service utilization among female adolescents.

The PRECEDE model offers a thorough framework for comprehending the factors that influence female adolescents' use of reproductive health services. By using this model, the researcher hopes to encourage positive changes in the behaviors of female adolescents in Sangotedo, Eti-Osa LGA, Lagos State, Nigeria, who are seeking reproductive health care, ultimately leading to improved reproductive health service outcomes.

Applying the PRECEDE framework components to the factors that influence how often female adolescents use reproductive health care can help pinpoint the gaps and obstructions that keep this demographic from using and accessing these services. As an illustration, ignorance, stigma,

and false beliefs about these services are some predisposing variables that may affect the use of reproductive health services. Peer pressure, social norms, family support, and provider attitudes are some reinforcing variables that may influence their use of reproductive health treatments. The accessibility, cost, and quality of reproductive health care services are some enabling variables that may make them more likely to be used or discourage their use.

The framework offers a methodical manner to track and assess the efficacy and influence of the utilization of RHS on the desired goals.

In this study, health-seeking behavior, feelings, and/or attitudes, as well as knowledge of female adolescent attitudes about the usage of health care for reproductive health, drive people to seek out reproductive health care. (For example, if a female adolescent attends a reproductive health clinic, adequate quality reproductive healthier lifestyle education for her reproductive health will be available to her.) Female adolescents may alter their behavior if they believe they will learn new facts that will affect their decisions regarding reproductive health.

According to this research, the utilization of reproductive well-being facilities is a behavior; hence, understanding the theories underlying female adolescents' change in behavior is essential for comprehending how they use reproductive health services. As a predicate of behavior, people's ideas and attitudes define their intention to behave, and PRECEDE-PROCEED factors influence this intention.

METHODOLOGY

Research Design

The community-based cross-sectional structure will be utilized. The study aims to collect data at a particular point in time to determine the factors that influence female adolescents' utilization of reproductive health services in the population, both the intrapersonal factors of knowledge, perception, and attitude that are antecedents to the utilization of reproductive health services among female adolescents.

Study Location

The study interest (Sangotedo LCDA) is located in Eti-Osa East LGA, Lagos State, southwest Nigeria. Its geographical coordinates are 6'' 28' 0'' North, 3''38'0'' East. Its total land area is 180.54 km² (Shown in Figure 3.1). Ajah/Sangotedo, Lekki 1 & 2, are among the ten wards that make up this local government. Moreover, this local government territory is bordered by the localities of Lagos Island, Amuwo Odofin, and Apapa. The people in this local government are predominantly farmers, fishermen, traders, and business entrepreneurs. However, because the local government is located in the former Nigerian capital, the region is home to both local and foreign businesses. Some parts of these LGAs have commercial areas, for instance, hotels, and tourist sites which attract visitors from all walks of life. Female adolescents in these areas engage in a lot of businesses like petty trading and even commercial sex hawking. These types of unhealthy behaviors expose them to unprotected sex, unintended pregnancies/teenage pregnancies, unsafe abortion, and the consequences of early marriage which in turn predispose them to RH problems like STIs, HIV, and AIDS. In-school female adolescents from Lekki Phases 2, Sangotedo will be included in the study's target group. Nine (9) LGAs are grouped

into LCDAs in Lagos State. Five political wards make up the LCDA: Ajah, Sangtedo, Addo-Okeira, Badore, and Okun-Mopolokun. In the LCDA, there are six publicly financed Primary Health Care (PHC) facilities, which are situated at Addo, Badore, Sangotedo, Ajah, Ogombo, and Okun-mop PHC, as well as several private hospitals that offer barrier, injectable, oral, and intrauterine devices as forms of contraception.

Additionally, public health facilities are separated into wards in Lagos State LGAs. Since there is just one public hospital and two private hospitals in the Sangotedo district of Eti-Osa LGA, each ward has at least one public health center (PHC). Public health institutions will be specifically chosen for the study (which will be used to verify the availability of RHS).

The study area falls under Ikoyi District Three (III) which is one of the six education districts in the state. The district covers four (4) zones namely Epe, Eti-Osa, Ibeju-Lekki, and Lagos Island with the district headquarters at Falomo-Ikoyi, Lagos. The district currently has one hundred and thirty-two (132) junior and senior secondary schools. The study area of interest has one (1) Co-ed public secondary school and four (4) private secondary schools, namely: Community Secondary School (public), Kayron International Secondary School, Lekki Peculiar College, and Refiners School (private).

Inclusion and Exclusion Criteria

The participants recruited for this study were in-school female adolescents ages (10-19 years) who had lived in the research interest local government areas for more than half-a-year and had provided consent either directly or through guidance.

Female adolescents who were out of school and that had not resided in the study area for up to 6 months were not incorporated into this research work. In addition, the research did not include female adolescents who had provided consent but were unable to speak due to any medical or mental ailment.

Sample Size and Sampling Procedure

The sample size was calculated using the quantitative sample size estimate techniques as stated.

Formula:

$$n = Z^2pq/d^2$$

where:

Z is the confidence level converted to a Z-score. The confidence level for this study is 95% which translates to a Z-score of 1.96.

d is the marginal error (0.05).

q is the negative response (0.85)

where n is the requisite smallest number (if the target is more than 10,000 people that live there.

p = prevalence anticipated female adolescents who made use of reproductive and sexual health services (15 percent) (Sule et al., 2019).

Substituting:

Z = 1.96

P = 0.15

q = 0.85

d =0.05

$$n = \frac{(1.96 \, x \, 1.96) \, x \, (0.15 \, x \, 0.85)}{0.05 \, x \, 0.05}$$

n = 3.84 * 0.127/0.0025

n = 0.4876/0.0025

n = 195.

Ten percent (10%) of the sample size will be inputted to accommodate non-responses. Therefore, the minimum number of samples taken for this study will be **n = 195 + 20 = 215** participants.

Multi-stage sampling will be used for the selection of this research because of the high number of in-school female adolescents within this community. The population of in-school female adolescents will be divided into clusters according to classes. Next, a probability sampling approach is to be applied, with the primary clusters serving as the sampling units.

Simple random selection will be used to choose the secondary schools from the research region (simple balloting). Sangotedo has only one public secondary school with a very large population. The only co-ed public secondary and three private secondary schools were selected. The four schools are Community Secondary School, Eti-Osa East (public), Kayron International School (private), Lekki Peculiar School (private), and Refiners School (private).

There are four (4) secondary schools in the Sangotedo area, one public secondary school, and three private secondary schools comprising both senior and junior female students.

The number of respondents chosen from each school was proportionately selected by dividing the number of female students in the school, divided by the total number of female students in the four schools, multiplied by the calculated sample size.

Stratified random sampling, which uses several students from each school proportionately distributed across various classes, will be used to select the right number of samples for each of the secondary schools that have been selected. Groupings based on the different classes in the schools (JSS1-SSS3) will be made. Respondents from each school will be selected from the various arms of the selected institutions. The formula outlined in Ilori et al. (2020) involves multiplying the required number of female adolescent respondents in each arm of that school by the product of the overall sum of female adolescents in the class divided by the overall sum of female adolescent students in the school, which will be used to determine the desired sample size per school.

Female adolescent respondents will be picked from each class using a simple random sampling technique with the assistance of the school personnel from the class registers, picking the names of the female students randomly.

Variables

Independent Variables and Dependent Variables

A). Dependent Variable in the Research

The usage of RHS systems was the dependent variable.

B). Independent Variables

The independent variables include the following:

i) Predisposing factors include the female knowledge, perception, beliefs, values, self-concepts, and attitude towards ARHS.

Instrument Validity and Reliability

To determine the reliability's consistency within, using Cronbach's alpha coefficient, the survey items were calculated. The reliability of repeated tests will be used to calculate the correlation coefficient by administering the questionnaire to 20 of the study participants and then re-administering the same questionnaire to them after two weeks; this test-retest will be done in Abijo in Ibeju Lekki-Epe expressway area. The Cronbach's Alpha reliability coefficient ranging from 0.70-0.99 was used for data collection. The internal consistency of the instrument was assessed for internal consistency in Nigeria. The validity of the instrument was assured by designing the constructs based on the theoretical framework of the PRECEDE model. The literature review offered confirmation of the appropriateness of the variables in the study and Cronbach's alpha internal consistency for items reliability coefficient ranging from 0.70-0.99 was used for the pilot of the instrument, to indicate adequate reliability of the instrument.

DATA COLLECTION TOOLS AND PROCEDURE

For this study, a questionnaire was created. The questionnaire was developed and adapted from similar research studies on sexual and reproductive health services for adolescents.

The questionnaire was created in English, which is both the official language of Nigeria and the primary language of instruction in schools there. Therefore, oral instructions and explanations about the content of the questionnaire will not be given. There will be no translations.

The conceptual framework of the PRECEDE model developed by Green and Kreute (2005) served as a guide for the production of the questionnaire items, which were organized depending on the study's objectives. To ensure face validity, my supervisor and other lecturers in the department will thoroughly review the instrument. To determine the questionnaire's clarity, complexity, and applicability, 20 female adolescents from various backgrounds were interviewed. The questionnaire was grouped into five sections based on the PRECEDE

constructs: socio-demographic characteristics (5 items), predisposing (knowledge 19 items) attitude and perception (8 items), and utilization (9 items). All items were assessed with a Likert-scale response in which the choices ranged from "strongly agreed (5 points to strongly disagreed (1 point) and all other constructs were assessed through dichotomy responses of yes/no choices.

The variables were grouped into two: dependent variables and independent variables. The usage of reproductive health services was the dependent variable while the independent variables were: predisposing factors of female knowledge, attitude, and perception of adolescent reproductive health services, enabling factors-accessibility, availability, affordability, and quality of care of adolescent reproductive health services, and the reinforcing factors of policy and regulation of adolescent reproductive health services.

Permission was sought from the relevant authorities to conduct the research in various secondary schools in the study region. The Ministry of Education, health, and the local government education authority were the list of chosen secondary schools. The study sites were visited two days before the data collection date. The female adolescents in the selected study sites were sensitized, informed of the data collection date, and established with the help of school leaders and other stakeholders. The bases for the research were visited on the data collection date; those who met the criteria and provided consent were recruited. Female adolescents below 18 years were provided with an assent form before the questionnaire was administered. Questionnaires were administered to the respondents by trained health research assistants and collected thereafter.

Data Analysis and Test of Significance

Quantitative data were examined using the data entry software for Windows version 25 of the statistical package for social scientists (SPSS). Data were numerically coded to classify them for easy analysis. Frequency, percentage and correlation were utilized to analyze the variables impacting various sexual and reproductive health care aspects, to identify any interactions between independent and dependent variables. The data was checked for wrong entry and cleaning. Quantitative data were shown as tables, and charts to make it simpler to interpret and explain the study's findings. All two hundred and fifteen questionnaires were returned.

Ethical Issues

The Babcock Health Research Ethics Committee was approached for ethical approval. In addition, a letter of introduction was also obtained from the head of the Department of Public Health. Furthermore, permission letters from the Ministry of Education and District 111, Falomo, Ikoyi office as well as the Ministry of Health were presented to the heads of these secondary schools to obtain permission before the data collection.

Before collecting any data, all participants were given their informed consent. There was a statement indicating that the study was only for educational reasons. Details on the privacy and anonymity of their data and identities were provided. The target sample of the study will only comprise individuals who were open to taking part after being properly informed of the purpose and methods of the investigation. Everyone who took part in the research had the option to opt-out or leave before it was over.

RESULTS

Socio-demographic Characteristics

Two hundred and fifteen female adolescent respondents participated in the study. The mean age was *14±1.77.* The respondents were all females 215 (100%). The majority of the respondents were Yorubas, 87 (40.5%) and of the Christian faith, 166 (77.2%). The respondents cut across all the classes, with more than half, 70 (32.6%) of the respondents in SSS1. The majority (89.8%) of the female adolescents' respondents were living with both their fathers and mothers.

Distribution of Socio-demographic Characteristics of Female Adolescents in Sangotedo LCDA, Eti-Osa East LGA of Lagos State, Nigeria

Table 1

Age (in years) 14±1.77	Frequency (n)	Percentage (%)
10–12	59	27.4
13–15	110	51.2
16 yrs and above	46	21.4
JSS1	20	9.3
JSS 2	38	17.7
JSS 3	35	16.3
SSS 1	70	32.6I
SSS 2	22	10.2
SSS 3	30	14.0
Religion		
Pentecostal	76	35.3
Protestant Christian	51	23.7
Catholic	39	18.1
Muslim	40	18.6
Traditional	8	3.7
No religion	1	0.5
Ethnic Group		
Igbo	68	31.6

Yoruba	87	40.5
Hausa	9	4.2
Others	51	23.7
Living Status		
Both parents	176	89.8
Single parents	23	11.7
Living with peers	10	5.1
Total	**215**	**100.0**

Awareness and Sources of Information on RHS

The top five sources from which the female adolescents heard about Reproductive Health Services are schools (60.0%), social media (54.9%), hospitals (52.6%), family (50.2%), and television/radio (45.6%). Other prominent sources mentioned by these girls were friends, churches, and Primary Health Care (PHC).

Table 1.2: Source of Information for Reproductive Health Services

Sources of Information	Yes	No
	N (%)	N (%)
Family	108 (50.2)	107 (49.8)
From friends	84 (39.1)	131 (60.9)
From school	129 (60.0)	86 (40.0)
From church	75 (34.9)	140 (65.1)
From mosque	17 (7.9)	198 (92.1)
From newspaper	23 (10.7)	192 (89.3)
From hospital	113 (52.6)	102 (47.4)
From tele/radio	98 (45.6)	117 (54.4)
From social media	118 (54.9)	97 (45.1)
PHC	63 (29.3)	152 (70.7)

Knowledge

Table 1.3: Respondents' Knowledge about Reproductive Health Services

Knowledge Variables for Consideration Awareness of Reproductive Health Services	Respondents in the study N = 215
Knowledge Items	**Yes** **N (%)**
Menstrual Health information/counseling	137 (63.7)
Family planning information & services	72 (33.5)
Voluntary Counseling and Testing of STI and HIV screening	101 (47.0)
Antenatal, postnatal	75 (34.9)
Post-abortion care	68 (31.6)
Sexual Education Services	158 (73.5)
Safe Motherhood services	79 (36.7)
Traditional Methods	98 (45.6)

The result of the analysis regarding respondents' level of knowledge revealed that more than half of the respondents, 137 (63.7%) were knowledgeable about menstrual health information and counseling, The analysis also revealed that less than half of the respondents, 72 (33.5%) were aware of family planning information and services. Less than an average of the respondents, 101 (47.0%) knew about voluntary counseling and testing for STIs and HIV screening. Less than half of the respondents, 75 (34.9%) were knowledgeable about antenatal and postnatal care. Less than average of the respondents, 68 (31.6%) were aware of post-abortion care services. Most of the respondents, 158 (73.5%) affirmed that they were very knowledgeable about sexual education services. Less than half of the respondents, 79 (36.7%) were aware of safe motherhood services. Less than half of the respondents, 98 (45.6%) were aware of traditional methods related to reproductive health. Regarding the awareness of reproductive health services by female adolescents in Sangotedo, Eti-Osa, LCDA, almost two-thirds of these female adolescents indicated that they were aware of Reproductive Health Services (68%) while 32% of them had never heard of it.

The respondents' level of knowledge of reproductive health services measured on an 8-point rating scale showed a mean score of 3.75 ± 1.5 among the female adolescents. The level of knowledge of reproductive health services was divided into categories: Those who scored less than or equal to 4 (≤ 4) were considered to have a poor knowledge of reproductive health services while those who scored between 5 and 8 were considered to have a good knowledge of reproductive health services. Majority of the female adolescents (67%) had poor knowledge of reproductive health services.

PERCEPTION

Table 1.4: Female Adolescents' Perception of Reproductive Health Services

Perceptions Statements	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
Reproductive health is important for my well-being and future.	114 (53.0)	69 (32.1)	4 (1.9)	15 (7.0)	13 (6.0)
Reproductive health services are safe and effective	86 (40.0)	48 (22.3)	8 (3.7)	34 (15.8)	39 (18.1)
Reproductive health services are only for married couples	16 (7.4)	36 (16.7)	19 (8.8)	44 (20.5)	100 (46.5)
Reproductive health services can prevent unwanted pregnancies and STIs	66 (30.7)	43 (20.0)	20 (9.3)	34 (15.8)	52 (24.2)
Reproductive health services are not accessible to female adolescents	22 (10.2)	22 (10.2)	8 (3.7)	84 (39.1)	79 (36.7)

The majority of these female adolescents agreed that reproductive health is important for their well-being and future (85.1%), while four of them neither agreed nor disagreed and few of these female adolescents disagreed (13.0%). Some of them perceived it to be safe and effective (62.3%) and believed it can prevent unwanted pregnancies and STIs (50.7%). Also, a good number of these female adolescents opposed the concept that the services are only meant for married couples (67.0%) and that the health services are not accessible to female adolescents (75.8%). This indicates that the female adolescents' perception aligned with the normal situation and general beliefs. The respondents' perception of reproductive health services was measured on a 10-point rating scale which showed a mean of 1.98 ± 1.75 among the respondents. Their perception of reproductive health services was divided into two categories, which were low and high. Respondents with less than or equal to 5 (≤ 5) were classified as those with a low perception while those that scored between 6 and 10 were classified under the high category. Majority of the respondents had a low perception of reproductive health services.

ATTITUDE

Table 1.5

Attitude of Female Adolescents on Reproductive Health Services

Table 4.6: Female Adolescents' Attitude towards the Reproductive Health Services

Attitude	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I will experience negative attitudes from family members while using reproductive health services	45 (20.9)	37 (17.2)	19 (8.8)	33 (15.3)	81 (37.7)

Female adolescents need to have easy privacy in Reproductive health services	68 (31.6)	74 (34.4)	38 (17.7)	23 (10.7)	12 (5.6)
Using reproductive health services in my community would make me feel shamed	33 (15.3)	35 (16.3)	18 (8.4)	41 (19.1)	88 (40.9)
I feel comfortable discussing reproductive health with healthcare providers	80 (37.2)	52 (24.2)	15 (7.0)	23 (10.7)	45 (20.9)
You need to have confidentiality in reproductive health services.	71 (33.0)	68 (31.6)	18 (8.4)	32 (14.9)	26 (12.1)
RHS workers need to be friendly to female adolescents	53 (24.7)	96 (44.7)	18 (8.4)	29 (13.5)	19 (8.8)

More than half of the female adolescents disagreed with having a negative attitude from family members while using reproductive health services (53.0%), and using reproductive health services in their community would make them feel ashamed (60.0%). More than 60% of them concurred with the facts that female adolescents need to have easy privacy in reproductive health services (66.0%); they feel comfortable discussing reproductive health with health care providers (61.4%); they need to have confidentiality in reproductive health services (64.6%); and the reproductive health services workers need to be friendly to female adolescents (69.4%).

The respondents' attitudes towards reproductive health services were measured on a 12-point rating scale, which showed a mean score of 2.50 ± 2.3 among the respondents. The attitude of the respondents was categorized into two. Respondents with less than or equal to 6 (≤6) were classified as those with a negative attitude while respondents that scored between 7 and 12 were considered to have a positive attitude towards reproductive health services. The majority of the female adolescents (93.0%) had a negative attitude towards reproductive health services.

Table 1.6: The Proportion of Respondents' Predisposing Factors That Promote Utilization of Reproductive Health Services

	Frequency(N)	**%**
Low factor (<=15)	207	96.3
High factor (>16-30)	8	3.7
Total	215	100.0
Mean ± SD	8.3 ±3.7	

The respondents' level of predisposing factors on reproductive health services measured on a 30-point rating scale showed a mean score of 8.3 ± 3.7. The predisposing factor was divided into two categories: low and high. Respondents who scored less than or equal to 15 (≤ 15) were considered to have a low predisposing factor for reproductive health services while those who scored between 16 and 30 were considered to have a high predisposing factor for reproductive health services. The majority of the respondents (96.3%) had low female adolescents reproductive health services.

Level of Utilization of Reproductive Health Services

Table 4.14: Utilization of Reproductive Health Services

ITEMS	F (%)
How often did you access reproductive health services? Offered by your community in the past year?	
Often	21(10)
Very Often	15(7)
Sometimes Often	118(55)
Never	61(28%)
What types of reproductive health services did you receive from the community providers?	
Safe abortion care	
Menstrual health services	11(5.1)
Family Planning services	162 (75.3)
Female condom Use	10 (4.7)
Reproductive health counseling services	3 (1.4)
Voluntary counseling and testing for STIs/HIV	1(0.5)
Pregnancy Test	28 (13.0)
Traditional Methods	1 (0.5)
Where can female adolescents obtain these reproductive health services in your community?	
Primary Health Centers	
Secondary healthcare Centers	176(82)
Tertiary Healthcare Centers	19(9)
Private Hospitals	1(0)
Chemist shop	19(9)
What barriers have you faced in using reproductive health services?	
Cost of reproductive health services	124(58)
Distance to the healthcare center	81(38)
Lack of privacy and confidentiality	10(4)
How satisfied were you with the quality of the reproductive health services provided by the community?	
Very Satisfied	109 (50.7)
Satisfied	64 (29.8)
Neutral	21 (9.8)
Dissatisfied	12 (5.6)

Less than half of the respondents (10%) stated that they often had accessed the reproductive health services offered by the community in the past year. In addition, less than half of the respondents (7%) agreed that they had very often accessed the reproductive health services offered in the community in the past year, while more than half of the respondents (55%) have sometimes often accessed the reproductive health service. Less than half of the respondents

(28%) never accessed the reproductive health services offered by the community in the past year. More than half of the respondents (75%) affirmed that Menstrual Health Care was the type of reproductive health services that they used while less than half of the respondents (5.1%) reported that Safe Abortion Care was the type they used. Very few of the respondents (4.7%) reported that they had utilized Family Planning Services. In addition, very few of the respondents (1.4%) agreed that they had used female condoms while also very few of the respondents (13.0%) affirmed to have used the reproductive health counseling services. Less than half of the respondents (0.5%) agreed that they used voluntary counseling and testing for STIs/HIV. Most of the respondents (82%) affirmed that they obtained these reproductive health services in their community from the Primary Health Care Centre, while very few of the respondents (9%) obtained reproductive health services from the Secondary Health Care Centers. Less than half of the respondents (9%) agreed that they obtained reproductive health services from Private Hospital. Only one of the respondents (0%) agreed to obtaining reproductive health services from the Tertiary Health Care Centre.

Majority of these female adolescents (58%) mentioned cost of reproductive health services (58%) as the barrier they faced in using the reproductive health services, while less than half (38%) reported the distance of the Health Care Centre to their dwelling places as a barrier for not using the health services. In addition, 10 of these female adolescents admitted lack of privacy and confidentiality as a barrier for not using the reproductive health services.

Half of the respondents (50.7%) expressed that they are very satisfied about the quality of the Reproductive Health Services provided by the community. Less than half of the respondents (29.8%) were satisfied with the quality of reproductive health services; very few of them were neither satisfied nor dissatisfied (9.8%). In addition, very few of the female adolescents (5.6%) claimed to be dissatisfied with the quality of reproductive health services provided by the community. The proportion of the respondents (40.4%) were female adolescents that utilized reproductive health services in Sangotedo LCDA, Eti-Osa LGA of Lagos State, with a mean score of $2.02 \pm .864$. The prevalence of female adolescents that utilized reproductive health services was reported to be 71.62%. (See Table 4.15.)

Table 2: Proportion of Respondents that Utilized Reproductive Health Services among Female Adolescents

	Female (n=215)	
	Frequency (n)	**Percentage (%)**
	215	40.4
Mean ±SD	2.02 ±.864	

Independent variables
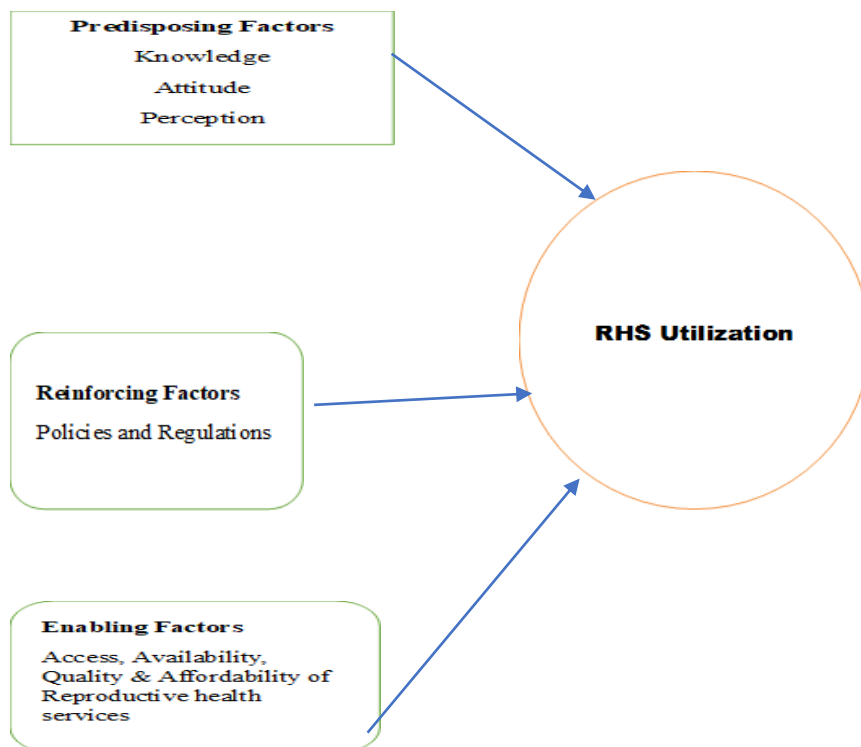
Dependent Variable

Figure 2.2: The PRECEDE Conceptual Framework Showing the Contextual Factors for Adolescent Use of Reproductive Health Services and its RHS outcomes

Test of Hypotheses

Four hypotheses were tested for this study. In testing these hypotheses, Pearson correlation was conducted at 0.05 level of significance. The decision rule applied was that if the p-value computed was less than or equal to the cut off p-value of 0.05, the null hypotheses would be rejected in favour of the alternative hypothesis and vice versa.

H$_0$: There is no significant relationship between personal factors and female adolescents' utilization of reproductive health services.

Pearson correlation analysis showed that there was no significant relationship between personal factor and utilization of reproductive health services *(r = 0.03, p = 0.56)*, which implies that factors such as female adolescents' knowledge, perception and attitude do not have a relationship with the utilization of reproductive health services. Hence, the null hypothesis cannot be rejected. (See Table 4.15.)

Table 4.15: Correlation between Personal Factors and Female Adolescents' Utilization of Reproductive Health Services

Variables	r value	*P*-value (n=215)
Personal factors	0.03	0.56
Utilization of reproductive health services		

DISCUSSION

This community-based study investigated the reproductive health service utilization and its determinants among female adolescents. The findings of this study showed that the respondents were female adolescents within the ages of 10-19 years. This is similar to the study of Gebreyesus et al. (2019) that was carried out in the district of Northern Ethiopia, where all of the respondents in this study were female adolescents within 15-19 years with a mean age of 17.35 ± 1.63 years. A higher mean age of 17.71 ± 1.19 was reported by Chaltu et al. (2022) in a similar study among the adolescents attending secondary schools in Haramaya District, Eastern Ethiopia. This might be because there were more female adolescent respondents (64.0%) of higher age. Majority of the respondents were reported to be females from the Yoruba ethnic group and Christians, which is in line with the findings of Adebayo et al. (2017) which was also done in the mainland of Lagos State. This is because the studies were carried out in the southwest region of Nigeria which has a larger number of residents that are Yorubas and Christians. Majority of the respondents were reported to have secondary level education and most of the respondents were reported to be living with their parents. This finding is similar to the finding of Odo et al. (2018) which reported that the majority of the respondents were living with both parents. This might be because of the age range of these female adolescents because it is the norm for female adolescents of this age bracket to still be residing with their parents in this part of the world. These findings suggest that the female adolescents in Sangotedo LCDA have diverse socio-demographic backgrounds that may influence their reproductive health needs and preferences.

Knowledge of Reproductive Health Services

Majority of the female adolescent respondents (67.9%) were reported to have a low level of knowledge of reproductive health services. This finding is similar to the study of Nmadu et al. (2020) in a community in northwestern Nigeria which reported limited knowledge of the respondents. The findings are at variance with the study of Volita et al. (2019) carried out in Makassau, Indonesia, where their knowledge level was reported to be high, at 59%. The study of Gebreyesus et al. (2019) carried out in Ethiopia reported that the respondents (95.5%) were knowledgeable about reproductive health services and that they had learned about them from various sources.

Majority of the respondents (96.7%) have low perception of reproductive health services utilization among female adolescents. This is similar to a study conducted by Napit et al. (2020) in Nepal which showed that approximately 24.7% of the female participants in the survey revealed that influences like fear and nervousness associated with seeking RHS and concerns about being seen while receiving these services are responsible for the negative perception. In

addition, this is also in line with a study by Ninsiima et al. (2021) in the sub-Saharan area of Africa which discovered that organizational characteristics affected the use and accessibility of services for reproductive and sexual healthcare, which include the incorrect perception of health workers' attitudes. The findings are at variance with the study carried out in Ethiopia by Gebreyesus et al. (2019), where the perception level was reported to be high (691%).

Majority of the respondents (93.0%) have a negative attitude towards reproductive health services utilization. This is similar to the discovery made by Ninsiima et al. (2021) that organizational characteristics affected the use and accessibility of services of RH, which include incorrect perception and attitude of health workers towards adolescents. This is in line with a similar study conducted in Nigeria by Envuladu et al. (2022), which revealed that more than three quarter (76.6%) of the adolescent respondents had not used RH facility before and that 56.0% were not eager to use a reproductive health facility if they had a future problem due to lack of privacy and secrecy and, in addition, unfavorable attitude of workers. This indicates that privacy is an important factor for RHS access and satisfaction among female adolescents in Sangotedo LGA. This study revealed that there is no relationship between predisposing factors and utilization of reproductive health services among female adolescent respondents.

Utilization of Adolescent Reproductive Services

The prevalence of reproductive health use among female adolescents is 71.6% in this study.

The majority of the respondents (55%) reported that they accessed a friendly reproductive health facility in their community in the past year. This is in variance with the study conducted in Owerri, Southeastern Nigeria by Onyeneke et al. (2021) which reported that the level of utilization of reproductive health services is still low among respondents (65.1%) in the study area. Majority of the respondents (58%) affirmed that the barriers they have faced in using reproductive health services is the cost of the reproductive health services. This is also similar to the study conducted by Adebayo et al. (2019) in Lagos State, Nigeria, which reported there was poor utilization of reproductive health services among the respondents (34.6%). This might be attributed to the socio-economic status of the respondents in various regions and exposure to reproductive health. Majority of the female adolescent respondents (75.3%) revealed that the type of reproductive health services received by their community providers was menstrual health care. More than half of the respondents (82%) affirmed to have obtained reproductive health services from the primary health centers. This is similar to the study of Odo et al. (2018) which reported that the majority of the reproductive health services were geographically accessible but very few were financially accessible to adolescents. Half of the respondents (50.7%) reported that they were very satisfied with the reproductive health services provided by the community. The findings imply that female adolescents in Sangotedo utilize reproductive health services. This is in variance with the studies that indicated that young women in sub-Saharan Africa region have the least understanding of contraceptive options compared to other regions (Smith, 2020) and, in addition, is in variance with the study by El-Khatib et al. (2020) that in sub-Saharan Africa, 68% of young people do not receive contraception. The identified utilization of reproductive health services includes: access, types of RHS, barriers, place and feedback of RHS.

There was no significant relationship between predisposing factors and utilization of reproductive health services among female adolescents.

The predisposing factors identified in this study include knowledge, attitude, and perception.

RECOMMENDATIONS

Reproductive health intervention programs aimed at improving the attitude of female adolescents' utilization of reproductive health services should be carried out regularly at health centers to correct the impression of some of them who believe that reproductive health services are strictly for married women undergoing antenatal care.

CONCLUSION

Utilization prevalence rate among female adolescents was high, which implies that female adolescents utilize more reproductive health services in Sangotedo. The female adolescents had a low knowledge of reproductive health services which influenced the use of reproductive health services. The attitude of female adolescents towards reproductive health services utilization was found to be negative. There was no significant relationship between predisposing factors and utilization of reproductive health services among female adolescents.

Lessons Learned from the Study

Female adolescents who are more informed about reproductive health services are more likely to use these services. In addition, discussions about reproductive health within families and communities can positively influence service utilization. This stresses the importance of family and community involvement in adolescent reproductive care.

REFERENCES

Abdurahman, C., Oljira,L Hailu,S.et al. Sexual and reproductive health services utilization and associated factors among adolescents attending secondary schools. Reprod. Health 19, 161 (2022). https://doi.org/10.1186/s12978-022-01468-w

Adeomi, A.A., Adeoye, O.A., Adewole, A., Israel, O. & Temitayo-Oboh, A. (2014). Sexual risk behaviors among adolescents attending secondary schools in a Southwestern State in Nigeria. *Journal of Behavioral Health, 3(3)*:176-180.

Ajide, K. & Balogun, F. (2018). Knowledge of HIV and intention to engage in risky sexual behavior and practices among senior school adolescents in Ibadan, Nigeria. *Archives of Basic and Applied Medicine, 6,* 3–8.

Ayoade, O.T., Blavo, F.J., Farotimi, A.A. & Nwozichi C.U. (2015). Sociodemographic factors as predictors of sexual behavior of secondary school students in Lagos State, Nigeria. *International Journal of Medicine and Public Health, 5*:152-6.

Bank, W. (2022). *Adolescent fertility rate (births per 1,000 women ages 15–19), Nigeria.* Retrieved January 3, 2023, from https://data.worldbank.org/indicator/SP.ADO.TFRT?locations=NG.

Bornemann, Reinhard (Personal communication, February 28, 2006).

Cortez, R., Saadat, S., Marinda, E. & Oluwole, O. (2015). *Adolescent Sexual and Reproductive Health in Nigeria* (pg 1-4). Health, Nutrition, and Population Knowledge Brief, World Bank.

Envuladu, E.A., Massar, K. and de Wit, J. (2022). Adolescents' sexual and reproductive healthcare-seeking behavior and service utilization in Plateau State, Nigeria. *Healthcare, 10*, 301. https://doi.org/10.3390/healthcare10020301.

Eti-Osa Local Government: Background". Eti-Osa Local Government. Archived from the original on 2011-07-10. Retrieved 2008-04-11.

Ezenwa, u., Mbachu, C, Ezumah, N, Eze, I, Agu, C,Agu I, Onwujekwe, O. (2020) Exploring factors Constraining utilization of Contraceptive service among adolescents in South east Nigeria: an application of the socio-ecological model. BMC Public health 20, 1162 (2020). https:/doi.org/10.1186/s12889-020-09276-2

Federal Ministry of Health (Nigeria). National Strategic Framework on the Health & Development of Adolescents & Young People in Nigeria; Federal Ministry of Health: Abuja, Nigeria, 2011.

Femi-Adebayo, T. T., Kuyinu, Y., Adejumo, O.A. and Goodman, O. (2017). Factors affecting utilization of youth-friendly health services in Lagos State, Nigeria. *International Journal of Adolescent Medicine and Health* pp.1-6.

Ilori, O. R., Awodutire, P. O. and Ilori, O. S. (2020). Awareness and utilization of adolescent reproductive health services among in-school adolescents in urban and rural communities in Oyo State. *Niger Medicine Journal* 61, 67-72.

International Conference on Population and Development, (1994). *Report of the International Conference on Population and Development*, Cairo 5-13, 1994.

Janighorban, M., Boroumandfar, Z., Pourkazemi, R. *et al.* Barriers to vulnerable adolescent girls' access to sexual and reproductive health. *BMC Public Health* **22**, 2212 (2022). https://doi.org/10.1186/s12889-022-14687-4

Munakampe, M.N.; Zulu, J.M. and Michelo, C. (2018). Contraception and abortion knowledge, attitudes and practices among adolescents from low and middle-income countries: A systematic review. *BMC Health Services Research*, 18, 1–13.

Napit, K., Khadga B. S., Sudip, A., Magar, R., Paudel, B., Dhakal, T.B.R. and Archana A. (2020). Factors associated with utilization of adolescent-friendly services in Bhaktapur district, Nepal. _Journal of Health, Population, and Nutrition _39_:2

National Population Commission, (NPC) and ICF (2018). Nigeria Demographic and Health Survey 2018. Abuja, Nigeria, and Rockville, Maryland: NPC and ICF.

Nigeria DHS, 2018 - Final Report. Retrieved January 3, 2023, from https://dhsprogram.com/publications/publication-fr359-dhs-final-reports.cfm

Ninsiima, R., Chiumia, I.K. and Ndejjo, R. (2021). Factors influencing access to and utilization of youth-friendly sexual and reproductive health services in sub-Saharan Africa: a systematic review. Reproductive Health *18*, 135.

Nmadu, A.G., Mohammed, S. and Usman, N.O. (2020). Barriers to adolescents' access and utilization of reproductive health services in a community in north-western Nigeria: A qualitative exploratory study in primary care. *African Journal of Primary Health Care and Family Medicine, 12*(1), a2307. https://doi.org/10.4102/ .

Odo, A.N., Samuel, E.S., Nwagu, E.N., Nnamani, P.O., & Atama, C.S. (2018). Sexual and reproductive health services (SRHS) for adolescents in Enugu state, Nigeria: A mixed methods approach. *BMC Health Services Research, 18*, 92.

Onyeneke, JU, Ibebuike j, Vincent, C.C.N. (2021) Utilization of reproductive health services among youths in Owerri, Southeastern Nigeria. International Journal of Science & Healthcare Research.2021 6(3): 54-62.DOI: https/doi/org/1052403/ijshr.20210710

Sanchez, E.K. (2020). Influences on seeking a contraceptive method among adolescent women in three cities in Nigeria. *Reproductive Health 17*,167 https://doi.org/10.1186/s12978-020-01019-1.

Scott, R. H., Wellings, K. and Lindberg, L. (2019). Adolescent Sexual Activity, Contraceptive Use, and Pregnancy in Britain and the U.S.: A Multidecade Comparison. *Journal of Adolescent Health*. *66*(5),582-588. doi 10.1016/j.jadohealth.2019.11.310. Epub 2020b3.

Smith, J. (2020). Improving Adolescent Access to Contraception in Sub-Saharan Africa: A Review of the Evidence. *African Journal of Reproductive Health*, *24*(1), 152-164.

Ssebadduka B. and Nanyingi, M. (2021). Determinants of Adolescent and Youth Sexual and Reproductive Health Service Utilization in Hard-To-Reach Communities of Amudat District, Uganda. *African Journal of Health Sciences34,*4, -5.

Ssebunya, R.N., Boopa, M., Nguyen, D. (2022). Disparities in Accessing Sexual and Reproductive Health Services and Rights Among Adolescents and Young People During COVID-19 Pandemic: Culture, Economic, and Gender Perspectives. *Current Tropical Medicine Rep 9*, 234–242 https://doi.org/10.1007/s40475-022-00274-5

Starrs, A. M., Ezeh, A. C., Barker, G., Basu, A., Bertrand, J. T. and Blum, R. (2018). Accelerate progress—sexual and reproductive health and rights for all: report of the Guttmacher–Lancet Commission. *Lancet, 391*, 2642–92.

Statista. (2021). *Nigeria: Age structure from 2011 to 2021*. Retrieved January 3, 2023, from: https://www.statista.com/statistics/382296/age-structure-in-nigeria/

Sule, H.A., Akor, J.A., Toluhi, O.J., Suleiman, R.O., Akpihi, L. & Ali, O.U. (2015). Impact of sex education in Kogi State, Nigeria. *Journal of Education and Practice, 6(3)*. ISSN 2222-1735.

Sule A.I, Titiloye M.A, Arulogun O. S. (2019) Knowledge, perception and experience of sexual entrapment among undergraduate students of the University of Ibadan, Nigeria. Gates Open Res. 2019 May 15; 3:1466. doi: 10.12688/gatesopenres.12954.1. PMID: 35300289; PMCID: PMC8901584.

The United Nations Funds for Population Activities (UNFPA). (2013). *The State of the world population 2013: "Motherhood in childhood, facing the challenge of adolescent pregnancy"*. New York, New York: UNFPA.

United Nations, (2013). Department of Economic and Social Affairs, Population Division. *Adolescent fertility since the International Conference on Population and Development (ICPD) in Cairo*. New York, New York: United Nations.

World Health Organisation. (2020). *World Health Organisation (WHO): global consultation on adolescent-friendly health services: a consensus statement*. Retrieved January 4, 2023, from https:// healtheducationresources.unesco.org/library/documents/global-consultation-adolescent- friendly-health-services-consensus-statement.

World Health Organisation. (2022). *World Health Organization fact sheet. Adolescent pregnancy*. Retrieved January 5, 2023, from: https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy

World Health Organization (2018). Recommendations on adolescent sexual and reproductive health and rights. Geneva: World Health Organization.

World Health Organization. (2022). *World Health Organization fact sheet. Adolescent pregnancy*. Retrieved January 5, 2023, from: https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy