

**EXPLORING THE INFLUENCING FACTORS
ON ADOLESCENT SEXUAL BEHAVIOUR
AND REPRODUCTIVE HEALTH CHALLENGES
IN NIGERIA: A CASE STUDY OF PLATEAU STATE**

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Exploring The Influencing Factors On Adolescent Sexual Behaviour And Reproductive Health Challenges In Nigeria: A Case Study Of Plateau State

A thesis submitted in partial fulfillment of the requirement for the degree of Master of Public Health

By

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Declaration:

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List of abbreviations

AIDS	Acquired immune deficiency syndrome
ART	Antiretroviral Treatment
ASRH	Adolescent sexual and Reproductive Health
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CPD	International Conference on Population and Development
FCT	Federal Capital Territory, Abuja
FGD	Focus group discussion
FLHE	Family Life and HIV & AIDS Education
FMOH	Federal Ministry of Health
HCP	Health care providers
HCT	HIV counseling and testing
HIV	Human Immunodeficiency virus
IDI	In-depth interview
LGA	Local Government Area
LG	Local Government
LGBTI	Lesbian, gay, bisexual, transgender, intersex
NACA	National Agency for the Control of AIDS
NDHS	Nigerian Demographic and Health Survey
NGO	Non-governmental organization
MSM	Men who have sex with men
PLHA	People living with HIV/AIDS
PMTCT	Prevention of mother-to-child transmission
SRH	Sexual and reproductive health
STI	Sexually transmitted infection
UNGASS	United Nations General Assembly Special Session

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Abstract

Introduction: Adolescents in Nigeria initiate sex early and have various sexual experiences with diverse reasons for their sexual behaviour. While some practice safe sex, others engage in unprotected sex resulting in SRH problems such as unintended pregnancy, unsafe abortion and STI.

Objectives: The study aims to explore factors influencing the sexual behaviour of Nigerian adolescents in order to inform contextually appropriate responses in Plateau State.

Methodology: A review of literature and a qualitative study using a combination of FGD among adolescents 18 to 19 years and in-depth interviews with health care providers and parents who have adolescent children.

Results: Findings from literature and the case study shows that Adolescents engage in various sexual practices ranging from penetrative vaginal sex to anal sex. Diverse reasons were deduced from the findings for their sexual behaviour to include pleasure; love and peer pressure especially for those in school. Forceful sex and transactional sex was the major reason for those out of school. Multiple and concurrent sexual partners were reported more among out of school females. The major outcomes of adolescent sexual behaviour in both the literature and case study were unintended pregnancy, unsafe abortion and STI/HIV. Reports from the case study revealed adolescents have devised local methods of abortion and others consult quacks and non professionals for abortion due to fear, stigma and judgmental attitude of health care providers. Most parents and HCP with the exception of one did not approve of contraceptives for adolescents.

Conclusion: Most adolescents practice unprotected sex in Nigeria. While most in school adolescents engage in sex for the pleasure, most out of school had either forceful or transactional sex. Multiple, concurrent and sex with older partners was reported more among out of school adolescent. Unintended pregnancy is common in the study resulting mostly into unsafe abortion for in school females and child marriage for out of school females.

Recommendations: Based on the findings of this thesis, there is a need to provide both in school and out of school counseling and SRH services for adolescents. The local methods of abortion should be researched into for better understanding and importantly also is the need to train HCP on ASRH in Nigeria.

Key words: Adolescent, sexual behaviour, Sexual and Reproductive health, unintended pregnancy, Plateau State, Nigeria

WORD COUNT: 13,075

Introduction

Adolescents constitute an important proportion of the population of Nigeria, they are classified by WHO to be individuals within the ages of 10 to 19 years.¹ It is a delicate stage that presents with challenges especially that of sexual and reproductive health due to the developmental changes.^{2,3} It is important that they experience safe and pleasurable sexual life, the absence of which may expose them to reproductive health challenges.^{4,5}

Adolescent sexual behaviour is influenced by several factors. However, having access to the right sexual and reproductive health information and services is an important step in structuring and addressing their sexual and reproductive health needs.^{6,7}

My experience as a field trip coordinator working in some rural communities of plateau state drew my attention to the high rate of teenage pregnancy and child marriage in some communities. This led to a research that we conducted among 192 teenage females in a district that showed a 25.5% prevalence rate of teenage pregnancy and 45% rate of abortion.⁸

My interest in conducting this study came about, as I got more involved with national programme on adolescents health and working with some NGO on girl child marriage in Nigeria. I realized from fieldwork and discussion with adolescents that various factors influence their sexual behaviour, which needs to be understood.

The main objective of this thesis was to explore the influencing factors to adolescent's sexual behaviour. Also to explore the reproductive health problem with the aim of providing a contextualized recommendation that will help in policy formulation and intervention programme for adolescents

The thesis comprised of a search of relevant literature to assess the factors, which defines the conduct of adolescent sexual behaviour and reproductive health issues in Nigeria and a qualitative case study in Plateau State that explore the sexual experiences and the drivers to adolescent sexual practices and health seeking behaviour.

1.0 Chapter 1: Background Information on Nigeria

1.1 Geography and Demography

Nigeria is situated in the West coast of Africa and lies between latitude 4016 and 13053 north and longitude 2040 and 14041 East. It is a country with a great geographical diversity and two main lands; the lowlands and highlands. It shares borders with the Republic of Niger and Chad in the north, the Republic of Cameroon on the east and the Republic of Benin on the west.⁹

It is a fast growing country and the most populated in Africa; the population has risen to about 182,000,000 by 2015.^{10,11} The total fertility rate is 5.7 children/woman and about 23% of women began child bearing by the age of 15-19 years.^{9, 11} It is the 7th in the list of countries by population with a median age of 17.8years,^{12,13} with a large population of young people, about one third are between the ages of 10 and 24 years.^{14,15} Based on the last census of 2006, the population of adolescents ages 10-19 years in Nigeria is about 22%, which is more than one fifth of Nigeria's population.¹⁶

1.2 Political Administration

Nigeria operates a Federal System of Government, which is divided into three levels; the Federal, the State and the Local Government Area (LGA). There are 36 states and the Federal Capital territory. The states are divided into 774 LGAs with 9,565 wards although broadly divided into six geo-political zones; the South-South, the South-East, the South-West, the North-East, the North-West and the North Central zones.¹⁷

1.3 Health Situation

The health indices in Nigeria is poor, the country contributes 32% of the global death due to malaria.^{17,18} While there has been some slight improvement in some health indices such as newborn and child mortality, maternal mortality in the last five years has remained unacceptably high at a ratio of 576 per 100,000 live birth and the worst figures are in the northern part of the country.⁹

Child marriage is a major problem in Nigeria; NDHS 2013 shows that 28.8% of females between ages 15 and 19 are currently married. The rate is as high as 76% in the North and 10% in the South Eastern part of the country. Adolescent fertility rate is 122 per 1000 women; amidst the low contraceptive rate among adolescents.^{9,19, 20,21}

To address the sexual and reproductive health problems of adolescent, the national adolescent reproductive health policy was developed with establishment of youth friendly health centers in some part of the country. These centers are however not adequately utilized by adolescents.²²

Figure 1: Map of Nigeria



Source: <http://www.mapsofworld.com/nigeria/nigeria-political-map.htm>

1.4 Background information on Plateau State

1.4.1 Geography and demography of Plateau State

Plateau State is located in the North Central region of Nigeria. It has 17 local LGAs and shares boundaries with Kaduna State (North West), Bauchi State (North East), Nassarawa State (South West) and Taraba State (South East). The state has an estimated population of 3.2 million, an annual growth rate of 2.8% and an estimated population of about 4 million. It has a large population of adolescent constituting about 32% of the total population in the state.²³ The State is divided into three senatorial zones namely Northern, Central and Southern senatorial zones.¹⁸

1.4.2 Socio-cultural background

English is the official language with literacy rate of about 58% in the State. The state has over forty ethno-linguistic groups including settlers. Some of the indigenous tribes in the state are the Berom, Afizere, Amo, Anaguta, Jarawa, Tarok. These ethnic groups share similar traditions and culture and are predominantly farmers while others are civil servants and petty traders.^{23,24}

1.4.3 Health situation in Plateau State

Plateau state is one of the states that has been classified as a “hot zone” of HIV infections with a prevalence rate of 16% in Jos North LGA of the state.²⁵ Some health indices in the state are worse than the national average, like the under-5 mortality rate which was 165/1000 when the national figure was 138/1000 and the MMR that was 800/100,000 live birth when the national figure was 576/100,000.^{9,26} The contraceptive prevalence rate in the state is 15.2% while the use of modern contraceptive is only 14.4% in the state.⁹

1.4.4 Health System of Plateau state

The Health system in the state is in three levels, the tertiary health care, which is overseen by the Federal government, the secondary level controlled by the state and the Primary Health care (PHC) level controlled by the LG. In addition, there are some faith based and privately own health facilities. The primary health care facilities are found in almost all the communities but faced with the challenge of limited resources and staff, so do not run a 24-hour service; while the secondary and the tertiary health facilities are concentrated at the urban areas.²⁶

There are 904 PHC Facilities, 59 Secondary Health Facilities and 3 tertiary Health Facilities in the state located within 5 to 200km to the users.²⁶ Most of the health facilities provide maternal health care services ranging from antenatal care, skilled birth delivery, post-natal care and family planning services. There are no specific SRH services for adolescents but the family planning services are open to both married and singles and the treatment of STI is integrated into the health care services.²⁶

There are 27 health facilities in the state providing integrated sexual and reproductive health (SRH) and HIV services but not accessible to about 38% of the population in the state due to distance.^{9,27} Although abortion services are not offered in the health facilities, the post abortion and other SRH services available but mostly out of pocket payment and beyond the reach of adolescents.

2.0 Chapter 2: Problem statement; Justification and Methodology

This chapter describes some major sexual and reproductive health challenges of adolescent sexual behaviour in Nigeria. It justifies the reason for the study, the objectives of the thesis and the details of the methods of the study and literature search.

2.1 Problem Statement

It has been projected that the population of young people in Nigeria will exceed 57 million by the year 2025, a large proportion of which are adolescents.²⁸ Recent report shows that about 28% of adolescent in Nigeria are sexually active and the median age of sexual debut is about 15 years.^{9,29,30,31}

Many adolescents in Nigeria lack the skills to negotiate safe sex and delay the onset of sexual activities. This is of concern considering that age at first sexual intercourse is an important indicator of the possibility of unintended pregnancy and STI.^{9,23,29}

Inconsistent and incorrect condom use is a common practice among adolescents in Nigeria resulting in unintended pregnancy that ends in unsafe abortion and its complications.^{32,33} It is also exposing them to STI and HIV with a prevalence of 17% among adolescents in the southeastern part and 14% in the northern part of the country.^{33,34,35,36}

Nigeria reports a yearly abortion rate of 25 abortions/1000 women more than a quarter of which are from adolescents resulting from unintended pregnancy.^{37,38} In the southern part of Nigeria, about 32% of the cases of unsafe abortion was among adolescents.^{39,40,41}

Worst still is the fact that they are often missed identified by health care providers as children and considered not appropriate target for contraceptive information and services.^{42,43,44} The youth friendly health centers, which should meet the SRH needs of the adolescents, are also not in the capacity to do so, leaving them to resort to other means.⁴⁵

2.2 Justification

We all have the right to a satisfying and safe sex life and the freedom to decide when to do so.⁶ However, for most adolescents, the decision to protect themselves from pregnancy and STI are influenced by many factors.⁴⁶

While many factors have been identified to influence the decisions of adolescents on their sexual behaviour, the influencing factors differ according to geographical, cultural, social, ethnic and economic context. Understanding the different influencing factors based on the context,

provides a very significant insight into the SRH challenges and gives a direction on appropriate interventions.^{31,46}

It is only when an underlying problem is understood that an appropriate intervention can be proposed to address it. Understanding the influencing factors to adolescent sexual experiences and problems should be done with them and not without them if meaningful progress is to be achieved.

This thesis sought to explore the different influencing factors to adolescent sexual behaviour, their RH problems and their perceptions on the SRH needs. The findings from the study will bring to limelight important factors in addressing the sexual and reproductive health problems of adolescents in Plateau state and Nigeria as a whole.

2.3 Objectives of the study

2.3.1 General objective:

To explore the factors influencing the sexual behaviour and reproductive health problems of adolescents in Nigeria in order to recommend a more appropriate adolescent sexual and reproductive health policies and services.

2.3.2 Specific objectives of the research:

1. To describe the sexual experiences of adolescents in Nigeria
2. To describe the knowledge and attitude of adolescents in Nigeria on SRH
3. To describe the sources of information and the health seeking behaviour of adolescent on SRH in Nigeria
4. To explore the influences to adolescent sexual behaviour in Plateau State
5. To explore the reproductive health problems of adolescents and their treatment seeking behaviour in Plateau State
6. To make recommendation that will inform better policy formulation and services that will address the SRH needs of adolescents in Nigeria in general and Plateau State in particular

2.4 Methodology

The thesis was a combination of literature review of relevant studies on adolescent sexual experiences and reproductive health challenges in Nigeria as well as a qualitative case study of ASRH in Plateau State Nigeria.

2.4.1 Search Strategy for Literature Review

The articles and reports used in this thesis were retrieved from PUBMED, Google Scholar, Google, Medline, Guttmacher Institute, the WHO, UNICEF, UNDP web sites and grey literatures from the Federal Government of Nigeria, the Ministry of Health and Plateau state government. Reports that were not published were gotten through direct contact with staff of the ministry; only articles that were published in English were used for the thesis.

Key words:

The key words used were; Adolescents, Influencing factors, sexual behaviour, reproductive Health, reproductive problems, reproductive health needs, outcomes, Plateau State, Nigeria, SRH services, health care providers, ASRH policy.

The MeSH words used in the search engine are:

Adolescents AND plateau state, " Age of sexual debut AND/OR Nigeria", "Adolescent sexual practices in Nigeria", "Adolescent reproductive health problems Nigeria", contraceptive use AND/OR adolescents AND Nigeria, Adolescent pregnancy in Nigeria, "STI treatment seeking behaviour among adolescents in Nigeria", health worker AND/OR adolescent SRH AND Nigeria, "Community norms and adolescent sexual and reproductive health in Nigeria", "Gender norms and adolescent sexuality in Nigeria"
Words were connected using Boolean operators such as "OR", "AND", "AND/OR" to search for literature

2.4.2 Methodology for case study

2.4.2.1 Study area

The study was conducted in two LGAs of Plateau State; Jos North and Bassa LGAs from 30th June 2016 to 21st July 2016. The two LGAs were selected out of the 17 LGAs in the State. Jos North was purposively selected being the LGA where the capital city Jos is located. Bassa was selected through a simple random sampling technique by balloting out of the four LGAs (Mangu, Jos East and Jos South and Bassa) around Jos metropolis.

2.4.2.2 Study design

The study was a qualitative exploratory study that focused on adolescents, health care providers and parents of adolescents residing in the study communities.

2.4.2.3 Inclusion and exclusion criteria

Only adolescents within ages 18 and 19 years, health care workers in the health facilities situated in the study areas and parents with adolescent children in the study areas whose children are not participating in the study and gave their informed written consents were included in the study

The Nigerian constitution defines a minor as a person under the age of 18, implying that those between the ages of 12 and 17 years need to give assent while the parent gives consent for them to be included in a research. The time constraints in this study did not allow for the long wait for parental consent therefore adolescents less than 18 years were excluded from the study.

Adolescents between the ages of 18 and 19 years who are currently married or working were excluded from the study to ensure homogeneity of the study participants.

2.4.2.4 Procedure for data collection

The researcher collaborated with the “Voice for the girl child”, a local NGO working with adolescents in Plateau State to identify both the schools and the communities in the LGAs for the study.

Two methods were applied in the qualitative study: Eight Focus group discussions with adolescents between the ages of 18 to 19 years who were in groups of males and females, in school and out of school. The FGD with those in school was conducted in halls within the schools identified by the adolescents but after school hours while for those out of school, it was conducted in hall in the community. For all the groups, the FGD lasted for about two hours.

Two adolescents were trained as facilitators and real names were not used only nicknames to assure confidentiality.

The second method was an in-depth interview with 4 health care providers and 4 parents who had adolescent children but not the parents of the participating adolescents. The interview was conducted at their approved time and place, which lasted about an hour

Details of the methodology and the procedure for data collection are attached in annex 2.

The questions for the FGD and the IDI were adapted from the UNFPA and WHO data collection instruments for adolescent SRH survey.^{47,48,49} Some of the questions that did not address the objectives of the study were omitted while some questions were added or modified to fit into the objectives of the study.

2.5 Ethical considerations

Ethical approval was obtained from KIT Ethical Review board and the Jos University Teaching Hospital Ethical committee in Nigeria. Permission was obtained from the ward heads of the two communities, the principals of the secondary schools and an informed consent was obtained from the participants before commencement of the study.

2.6 Data Analysis

After the close of everyday, the research team transcribed both the note taken and the audio recording. Common themes were generated from the responses and categorized accordingly. The responses were then entered into the excel sheet and given codes based on the themes and similarities in responses. The results were presented according to the majority and important minority responses. Verbatim quotes were then used to illustrate important findings, which together with the analyzed results and findings from literature were used for discussion.

2.8 Conceptual framework

The conceptual framework chosen for this thesis is the model by Awusabosare and Biddlecom from Guttmacher institute.⁵⁰

The model was chosen because it is specific to adolescent sexual behaviour and reproductive health. It is a comprehensive model with three basic concepts and the interplay between the concepts describes the complexity of the influencing factors on adolescent sexual behaviour, which results in the outcome.

The first concept is what the model described as the context in which adolescents live; they are the influencing factors to adolescent sexual behaviour. They include socio economic state, the immediate social environment like parents and peers and the secondary social environment like the religious organization. Others were the community norms and values, school and access to media and information. The context influences the knowledge and behaviour which either on its own or interrelated, influences the current behaviour and the intentions of adolescent on sex, pregnancy and contraceptive use.

This model was chosen over the ecological model and the theory of planned behaviour model. The theory of planned behaviour for instance, did not consider other influencing factors peculiar to the context of Nigeria such as socio-economic factors, environmental, community norms, peer pressure and political influences. It considered only the individualized factors in decision making. The ecological model on the other hand did not look into the intentions of the adolescents in the display of their behaviour, which is an important area in understanding their behaviour and considering any intervention.

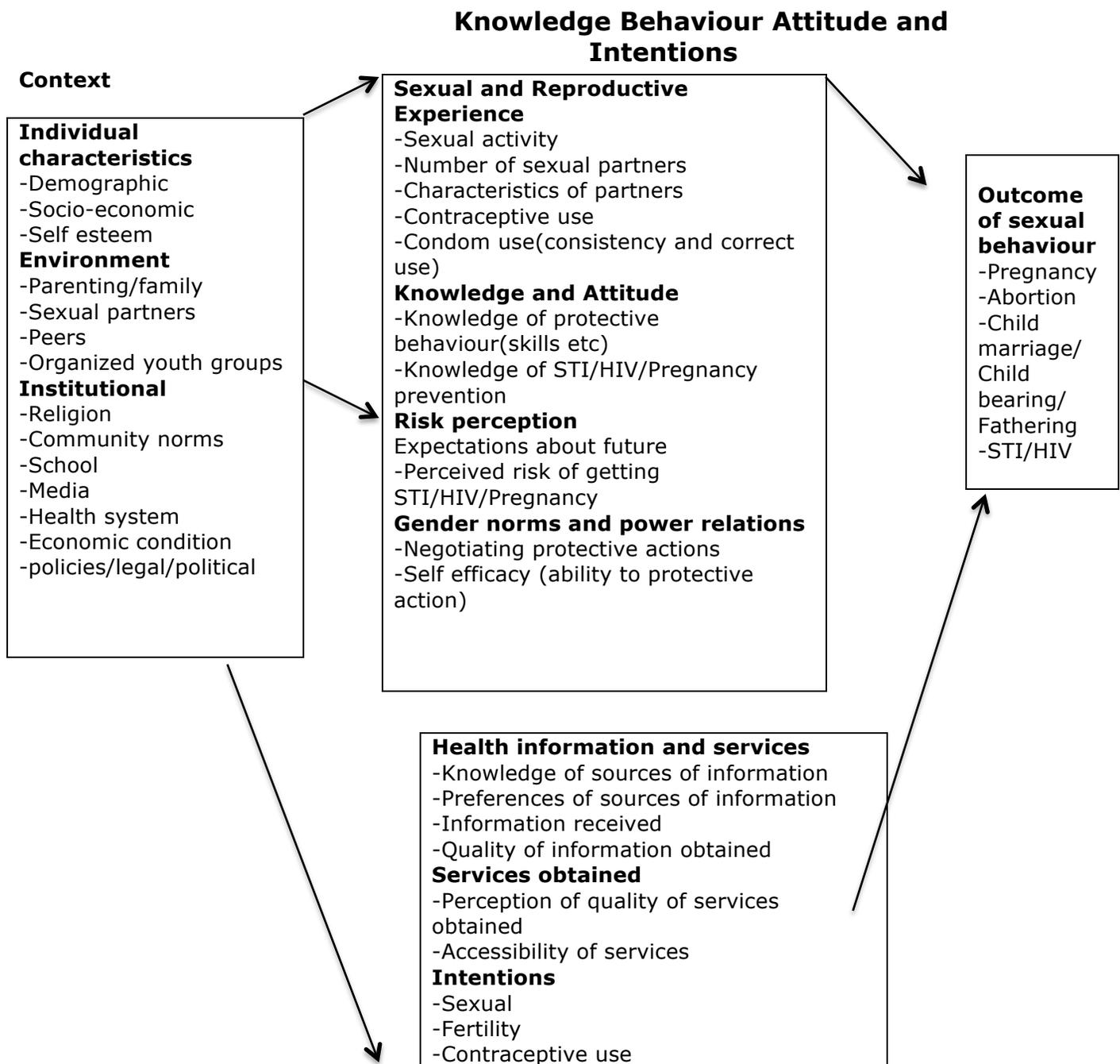
The two models did not consider the interplay between the various influencing factors whereas the influences to adolescent sexual and reproductive health problems are multidimensional.

However, the model was adapted to fit into the objectives of the thesis. The adapted model merged the knowledge, attitude and behaviour and the current behaviour and intentions, which the original model had as two separate components. This is because the study was not comparing the past and the present sexual behaviour. Secondly, there were similarities and overlap in the two sections amounting to repetition and there was no section on the outcome of the sexual behaviour, which the thesis aimed to explore.

The original model is found in annex 1

Figure 2: Conceptual Framework

Influencing factors to adolescent sexual behaviour and Reproductive health



Source: Adapted from Awusabo-asare & A. Biddlecom. The Guttmacher institute. 2006

The review of literature capture the broad concept of the model by describing the relevant findings from both published and gray literature in Nigeria on adolescent sexual and reproductive health while the case study explored the SRH experiences, influencing factors and challenges based on the model.

The structure of the framework and its various components informed the choice of the questions that were used in the instrument of data collection to ensure every aspect was covered during the interview.

3.0 Chapter 3: literature review

This chapter reports the findings of the context in which adolescents in Nigeria are living and their various sexual experiences, sources and preferences of SRH information and services. It describes how the context has implications on their sexual and reproductive choices and behaviour and the outcome of their sexual behaviour if unprotected.

3.1 Context of adolescents lives influencing sexual behaviour

3.1.1 Individual characteristics of adolescents influence sexual behaviour

Many factors act as drivers to adolescent sexual initiation and reasons for sexual relationship. Love, pleasure and fun were among the top reasons given by adolescents who participated in a national survey across 12 states in Nigeria for their sexual activity while others said they were forced into sex.^{51,52} Although sexual debut is reported by some at earlier age, the median age has been 15 years with adolescents between the ages of 15 to 19 years engaging more in sex.^{9,51,53,54}

Controversy exists from studies about the association between educational status and sexual behaviour of adolescents. While some studies have found that literate adolescents engage more in sex due to exposure to social media,^{55,56} others have found that sexual activity was more among adolescents with no or lower form of education.⁵⁷

Socio- economic status viewed as a proxy for poverty was perceived to have influence on sexual behaviour of adolescents. Though arguable, but transactional sex was associated with sexual initiation mainly among female adolescents in Nigeria who viewed it as a means of survival.^{58,59} Financial benefit was also the reason given by some adolescents for sexual initiation especially with older person which restricts their power to negotiate condom use.^{52,60,61}

On the other hand, data extracted from the 2013 NDHS did not support the view that the high level of sexual activity is a function of household poverty. It reported that although poverty exposed adolescents to sexual risk such as low condom use, those from wealthy homes were exposed to pre-marital sex due to access to media.⁶²

3.1.2 Environmental influence on adolescent sexual behaviour

Peer influence was the reason a significant number of adolescents in a study in Imo state gave for sexual activity. Pressure from peers to initiate sex and information sharing on sexual activity, how to prevent pregnancy and what to do when pregnant were mentioned as triggers to sexual initiation.^{52,58,63} The same finding was reported among adolescents in Northern Nigeria.^{64,65}

Studies have shown that having sex due to the influence of alcohol was documented mainly among males than females.^{55,66} Other adolescents

however stated that their uncontrollable sexual urge is the reason they cannot abstain from sex.^{58,67,68}

Quality parental relationships and social support are seen as avenues of communication and sexual education among adolescent. Lack of this connectedness and ties between parents and children allow for negative influence and early sexual activity as reported in some studies in Nigeria. Also, family members are seen to exert some influence on adolescents through their own risky behaviour which adolescent learn very fast.^{66,69,70,71}

3.1.3 Institutional influences on adolescent sexual behaviour

Religion is another factor that was documented in some studies to be associated with abstinence from sexual activity, as adolescents who had high religious value self-reported lower experience of sexual intercourse but of course this is ambiguous and debatable by others who are of the opinion that religion may not really have an influence.^{55,72,73}

3.1.4 Community and Gender Norms

The socially defined role and power ascribed to men and women has been shown to affect the reproductive health of adolescent differently.^{74,75} In some part of Nigeria, especially the northern part of the country, the persistence of child marriage is a norm exposing the adolescent to early sexual initiation. The mother in-laws, couples with the community norm and the desire for children, put pressure on the adolescent girl to have children thereby denying them access to contraceptives and exposing them to early child bearing.^{74,76}

Adolescent males also face intense pressure to initiate sex without adequate knowledge due to the gender norms build around power, risk taking and masculinity. These norms promote gender base violence and having multiple sexual partners believing that the male have utmost control.^{77,78} These gender roles brings about unbalanced power relations making adolescent females vulnerable to sexual assault.

A tradition in southern Nigeria view men as sexually aggressive and virile, permitting them to have as many sexual partners as they wished. This is unlike the females, who are expected to submit to the men, placing them in a difficult position to resist sexual advances from the men.^{77,79}

Some adolescent students who participated in a study reported that males always prove to be "macho" while females have to "prove their love" in a relationship as a result of gender roles.⁷⁹ Either way, it has a consequence on the sexual behaviour of both sexes.

The inequality faced by Nigerian females on the bases of the gender norm setting that places the male child above the girl has been reported to have a negative effect on their SRH. A study in western Nigeria reported that females are unable to assert their right to negotiate sex or condom use

because of the perceived superiority of the man and the expectations to submit to the demands of the man.^{56,60,80}

3.1.5 Health providers knowledge and attitude influencing adolescent sexual behaviour

Available data has shown that some of the restricting factors to contraceptive use are sometimes the unfriendly, judgmental and stigmatizing behaviour of HCP in addition to the lack of, or improper information on contraceptives for adolescent. Other studies found the cost of care and the limited availability of services as the reasons hindering adolescents from seeking care in the health facilities.^{81,82,83}

Unintended pregnancy among adolescents has been attributed not only by the limited availability of contraceptive for adolescents but also to the inadequate knowledge of some HCPs on contraceptives.⁸⁴ In Delta state, southern Nigeria, more than half of the health care providers interviewed had no adequate knowledge of emergency contraceptive.^{84,85}

Lack of trained and skilled HCPs is a barrier to effective delivery of comprehensive ASRH services. For instance, findings revealed that only about one quarter of the HCPs in the Niger delta region of the country had good knowledge of ASRH. The health system culture where STIs are perceived as disease of adults and STI clinic appear adult oriented with no guidelines on STI treatment for adolescents is also a hindrance to effective treatment for adolescents.^{85, 86,87,88}

Though there are HCPs in Nigeria who agree that adolescent should be provided with information and services on SRH including abortion services, others opt to preaching abstinence only rather than providing contraceptives to adolescents who seek care. This is because they believe that it is either morally, religiously or culturally wrong to talk to young people about sex or that discussing sexuality issues is a motivation for adolescents to be sexually active and engage in premarital sex.^{81,85}

There is no doubt that promoting abstinence among adolescents is one of the options of preventing pregnancy and STI, but it must be acknowledged that this has encounter some failure and some adolescents perceive abstinence to be totally impracticable, therefore, leaving them with only the option of abstinence as some health providers do, will actually be exposing them to more risky sexual behaviour.^{81,89}

3.2 Knowledge, Behaviour, Attitude and Intentions

3.2.1 Sexual and reproductive experiences of adolescents in Nigeria

Adolescents exhibit different forms of sexual behaviour, some of which could be safe while others may be unsafe in terms of risk to transmission of STI, HIV and pregnancy. Quantitative studies conducted in the south and southwestern part of the country have documented that at least 7 out of 10

adolescents have initiated sex, with males being more sexually active though other studies recorded females being more sexually active.^{90,91,92}

Although heterosexual sex has consistently been reported as the commonest type of sex in Nigeria, some adolescents in the North and western Nigeria reported sexual intercourse with same sex and others with both sexes.^{51,93} The forms of sexual practices are mainly penetrative vaginal sex followed by oral sex, masturbation and anal sex practices either between opposite sex or same sex.^{51,63,93}

The report of the National HIV sero-sentinel survey in Nigeria conducted in 2014 showed that while adolescents initiate sex early, about half of both males and females have concurrent sexual partners.^{51,53} Age mixing was also observed among adolescent with more females than males have sexual partners who are much older than them including close relatives.^{51,53,54,93}

In Jos, Plateau state, about 38% of sexually active adolescents have stated having multiple sexual partners while significant others especially females, like in other studies attested having nonconsensual or forceful sex.^{92,93,94} This usually correlates with poor negotiating skills and inconsistent condom use.

Condom use has reportedly been low among adolescents, 70% of sexually active adolescents in a study in Plateau said they never used condom during sexual intercourse. This is a high predictor of unintended pregnancy and transmission of STI/HIV.^{51,57,94}

3.2.2 Knowledge and use of contraceptive among adolescents

Correct knowledge of contraceptive use is relevant in addressing the sexual and reproductive health problems of adolescents. Very few adolescents in Karu area of Abuja could precisely identify when a girl is likely to get pregnant.⁹⁵ Likewise, less than 50% of adolescents had good knowledge of contraceptive with male condom being the most popularly known contraceptive among them.^{95,96,97}

In a survey conducted among secondary school adolescents in the south and eastern part of the country, about 67% had a good knowledge of contraceptive and the danger of unprotected sex.^{98,99,100} This however was not the case with the qualitative study in the North, which showed a poor knowledge of contraceptive among adolescent.^{101,102,103}

Adolescent sexuality and reproductive health has become of great concern. Worrysome is the fact that even among adolescent who have knowledge of safe sex practice, less than one third of the sexually active use contraceptives while other studies report less than 10% use.^{95,96,98,99,103}

It can be depicted even from the different studies cited above that there may be disparity in the level of knowledge and awareness of contraceptive among adolescents but utilization is on the whole very low.⁹⁴

3.2.3 Perception of Risk among adolescents

The perception of adolescents on HIV/STI as documented in a study in Onitsha, determined their likelihood to engage in safer sexual practice.^{59,104} The attitude of adolescents towards premarital sex and their perception that insistence on condom use is an indication of lack of trust has been reported to be predictive of their sexual behaviour.⁹⁴ Also, the misconception among adolescents that one is unlikely to get pregnant or be infected with STIs during first sexual exposure is the reason for the submission to casual and unprotected sex in some instances.^{74,105}

3.2.4 Self-esteem and power relations

Generally, self-esteem, which is influenced by many factors such as societal norms and social context like the type of relationship between family and friends, is expressed by the confidence and value placed on oneself. Studies conducted in Jos and Oyo among school students revealed that low self-esteem was associated with higher risky sexual behaviour and this was for both males and females.^{60,106,107}

3.2.5 Adolescent's sources of information and services on sexual and reproductive health

Media plays a primary role as a source of information on SRH for adolescents. Some adolescents in Nigeria have access to Internet, television and digital technology, which exposes them to a lot of sexual information that have both positive and negative influence.^{108,109,110} For others, their major source of information is from friends and peers who over burden them with unguided information and pressure to initiate sex.^{72,108}

Evidence has revealed that in Nigeria, out of school adolescents who may be living on their own or found in the street have either the media or peers as their source of information. While those in schools have their parents and teachers in addition to the media and friends as their sources of information.^{111, 112,113}

Though some adolescents may have their parents as educators, the credibility is sometimes questioned considering the cultural context of Nigeria where parents are skeptical about discussing sex and sexuality issues with children.^{112,113,114}

3.2.6 Adolescent Health seeking behaviour for SRH challenges

It is a huge challenge for adolescents in Nigeria to obtain sexual and reproductive health information and services as it is culturally perceived by many to be "immoral".^{35,115} The resistance faced on this issue has posed a problem for adolescent leaving them to various choices on the preferred place for health care in relation to sexual and reproductive health.¹¹⁵

The utilization of health facilities by adolescent seeking for treatment and care for SRH problems have recorded a very low patronage in Nigeria. A cross-sectional study in western Nigeria showed that only 11% of adolescent have tested for HIV.¹¹⁶ Despite their desire for sexuality education, contraceptives and STI treatment, utilization of health services has been poor and reasons given were fear of being stigmatized, non-availability of drugs and perceived cost of treatment.^{35,116,117}

Most adolescents in Nigeria seek care for STI, pregnancy or abortion by first trying self-treatment, going to traditional healers or patent medicine sellers as their primary source for treatment. They present to the health facility often as a last resort and usually with complications.^{35,95,118,119}

It is pertinent then to understand the health seeking behaviour of adolescents and factors influencing their behaviour in a particular context for the most appropriate intervention to be introduced.

3.2.7 Adolescents intentions on sexual and reproductive health

Having sex for some adolescent in Nigeria is an intentional act to show love and have pleasure as reported in the eastern part of the country. Although it was a school-based study, the same finding was reported in the western part of the country. For other females, the inability to negotiate safe sex as a reason for non-protective sex.^{111,120}

Adolescents in other studies revealed that they desired to prevent early pregnancies and STI but struggle with power relations and lack of negotiating skills when it comes to contraceptives use.^{42,43,44}

While very few adolescent saw pregnancy as an opportunity to be married to a man that could care for them, many never wanted to get pregnant. That was mostly the reason for abortion among adolescent's females.^{120,121}

3.2.8 Outcomes of adolescent's sexual behaviour

Adolescent pregnancy is a daunting problem in Nigeria. Studies have shown the prevalence of unintended pregnancy among adolescents to be 23% in the west, 36% in the southwest and 26% in the North central part of the country.^{8,110,122,123,124,125}

Unmet need for contraception has also been found to be responsible for the unintended pregnancy among adolescent, this in most instances end in unsafe abortion.^{126, 127} In southwestern Nigeria for example, 27.4% unintended pregnancy among adolescents in a secondary school all ended in abortion while other studies recorded about 60%.^{93,115,118,128,129}

It is imperative to say that not all pregnancies at this age end in abortion but the concern is the overwarming negative effect associated with adolescent pregnancy. Among the pregnant women attended to in a tertiary teaching hospital in Nigeria, teenage pregnant women had the worse

complications. Some of which are; anemia, obstructed labor and its sequel; genital fistulae, low birth weight and perinatal mortality.^{130,131,132}

Getting pregnant may not even be the most disturbing problem for some adolescents in Nigeria but actually the fact that in most cases it interferes with their education. Evidence from studies has shown that those who are pregnant as students either dropout of school or are dismissed from school, majority of whom may never get back to school again.^{133,134,135} Others are forced by their parents into child marriage as a result of the pregnancy. Of recent, Nigeria has been identified as a hot spot zone where child marriage is at its highest especially in northern Nigeria.^{136,137}

Unsafe sexual behaviour puts adolescents at a risk of being infected with STI which has a more devastating effect than in adult because of the immature reproductive organ.^{138,139} A survey in Anambra State documented that 48.8% of the sexually active adolescent self-reported a symptoms of STI.^{140,141} Similarly, a study among both rural and urban adolescents in Nigeria documented 29% prevalence of STI among the sexually active group, while in Jos, HIV prevalence of 3.7% was documented among adolescents who had non-consensual sex without using condom.^{101,102,141}

All the above findings from studies conducted across Nigeria will be used later in comparison with the result of the case study presented in the next chapter for discussion

4.1 Chapter 4: Results of case study

This chapter describes the study findings and especially the results of 8 FGDs conducted with adolescent males and females aged 18 to 19 years in school and out of school. Also, the IDI conducted with 4 HCP and 4 Parents.

4.1.1 Age At Sexual Debut

The age at sexual debut (age at first sexual intercourse) was similar for females and males, most of the females reported 10 to 15 years while most of the males reported 11 to 16 years as age of sexual debut. There was no difference in the responses of those in school and those out of school. Two out of the four parents interviewed expressed worry about the early sexual behaviour of adolescents while the other two had no idea what adolescents were doing

"Females begin sex from age 10 to say 15 years"
(Female out of school)

"Ahhh, males here start having sex from 11 to 15 years"
(Male In-school)

" Please help us, the way these children take drugs here is a problem, both males and females go to that joint to take drugs and misbehave"
(Female parent)

4.1.2 Adolescent sexual experiences

The sexual experiences of adolescents may differ depending on their level of exposure and environment; this study has shown some differences in the experiences of the different groups of adolescents.

Forms of sexual practices

Quite a number of different sexual experiences were mentioned in the discussions, most of the females in school mentioned; romance, kissing and vaginal sex while a few mentioned anal sex, oral sex, sex with two sexual partners at a time.

The males mostly mentioned vaginal sex, masturbation, anal sex, oral sex and sex chat (through sharing pictures and having imaginary sex using their phones).

"The commonest sex among adolescent is vaginal sex but males also have sex through the anus, two males can use a candle inside both of their anus and be having sex"
(Male in school)

"It common for females to masturbate using cucumber, carrot, snooker stick, or any object, even toys when they cannot see a man to have sex with or they hate men"
(Female in school)

"I as a girl can have sex with two guys at the same time, when one is having sex with me through the vagina, the other will be having sex through the anus, we call it two some." (Female in school)

The sexual experience of the adolescents out of school was slightly different. Both out of school males and females mentioned vaginal sex mostly. Anal sex and oral sex was not mentioned although a few said they have heard about it but not a practice among them.

Females out of school mostly reported, non-consensual forceful sex by older men or relations, transactional sex for monetary gains and rape by older men. This is a practice they complained is rampant.

"Older men force females to have sex with them and threaten them not to tell anyone, rape is very common here"
(Female out of school)

Sexual partners

The sexual partners mostly revealed by females in school were males, fellow females ("same sex") and older men (sugar daddy), a few other females in school mentioned fathers, brothers, uncles and teachers as sexual partners. Majority of the males in school mentioned females, fellow males ("same sex") and prostitutes while few of the males mentioned older women (sugar mummy).

"Some fathers are having sex with their daughters, like my friend"
(Female in school)

"Some females do prostitution, my cousin is doing it right now, right now she is there, they pay her, she stands out and people pick her for money"(Female in school)

While the males out of school mostly mentioned females as sexual partners, the females out of school shared issues like older men and close relations living in the same house being sexual partners.

"Females have their guys that they can have sex with but it is common to have sex with older men like your father as long as they can give you money, they are called sugar daddy or ATM"(Female out of school)

"My uncle got me pregnant but I could not tell anyone because he threatened me so I had to meet friends to help me abort the pregnancy. I almost died"(Female out of school)

4.1.3 Reasons for adolescent sexual behaviour

The adolescents in this study cited various reasons for having sex or being sexually active.

Fun, pleasure and love

Both the males and the females mostly cited pleasure, love, influence and pressure from friends and peers, money or material gain (transactional sex) as reasons for sexual activities.

"Sometimes you cannot control yourself and want to have sex, so you do so for fun and pleasure. It is part of the show of love for your guy"

(Female in school)

"When you love a guy you have to prove it by having sex when he asks for it"(Female out of school)

Transactional

"You have sex with older women and they settle you with money"

(Male out of school)

Watching pornography or nude activities

Other common reasons given by adolescent males were; watching pornography, uncontrollable urge for sex and curiosity, a similar response was given by the females in school but the females out of school mostly mentioned watching films with some nude activities as a trigger to sexual act.

"Watching movies makes some females want to have sex and among friends they put pressure and say if you don't have sex you are a small girl" (Female out of school)

"Sometimes guys want to have sex just out of curiosity or wanting to experiment" (Male in school)

"My uncle introduced me into pornography and since then I can't stop and I even find more sight on my own, I have more than 7 girlfriends and have sex all the time" (Male in school)

Gender and power relations

Most males in school reported sexual act as a proof of their manhood and to show their capabilities to friends while the males out of school mentioned it was an expectation to fulfill as a man but sometimes is the influence of drugs. The females out of school mostly reported being forced by older men including family members to have sex, following an abuse.

"When I was in primary 4, ladies look down on me so I have to prove something to them by having sex with them" (Male in-school)

"My friend sleeps around and it is because her uncle forced her to have sex with him and because of anger and feeling that there is no need behaving as

*a good girl, she now has sex with anybody, even if not her boyfriend”
(Female in school)*

Peer pressure, vengeance and influence of drugs

Peer pressure was a common reason given by all the groups for engaging in sex while the males mostly out of school mentioned the influence of alcohol but interestingly is the act of vengeance and anger as a reason for sex given by females

*“When you don’t have sex your friends will say you are not mature”
(Female in school)*

*“You can have sex with another man when you want to get back at your boyfriend and he will be jealous and come back”
(Female in school)*

“When you take drugs or alcohol you will have sex and we put drugs inside drinks like tramol and have sex with the females”(Males out of school)

Reason for not having sex

Few of the males and females in school gave reasons for delaying sex. Some reasons were; religious believe, to earn respect from future husband and the fear of disease and death

“It is good for a girl to remain a virgin until she marries so that her husband can respect her” (Female in school)

“We don’t want to get disease or get pregnant so it is better not to have sex and you know a girl will not have money to take care of herself or her baby and may even die during abortion so is better to avoid it” (Female in school)

“I don’t do such things and I don’t keep bad friends, it is against my religion”(Male in school)

4.1.4 Knowledge and risk perception on pregnancy, STI and HIV

While males and females who are in school showed some knowledge of the risk of STI, HIV and pregnancy by describing some of the symptoms, route of transmission and preventive measures. The adolescent males and females out of school had poor knowledge of STI and risk perception and even the females who knew the risk of unprotected sex lack the negotiating skills and the ability to insist on condom.

“Genital discharge and itching can be because of malaria, typhoid or toilet disease”(Male out of school)

*“A girl cannot get pregnant during the first sexual intercourse”
(Female out of school)*

"Using condom for sex is risky so is better to have sex without it, risky sex is when you have sex with a girl menstruating and when you take codeine you cannot get a girl pregnant "
(Male out of school)

"It is not always that you have condom when you want to have sex but when you suspect that the girl is sick you can even use nylon bag if you don't have condom just to protect yourself" (Male in school)

"It is not always that you can negotiate sex, if you don't want him to be angry you just allow him have sex" (Female out school)

4.1.5 Sources of sexuality and reproductive health information

The sources of information frequently mentioned by adolescent males and females in school were social network (face book, twitter, whatsapp, internet websites) friends/peers, magazine and relations while majority of adolescents out of school mostly mentioned peers, friends and films (TV) as their main source of information.

Social media and digital technology

"It is my uncle that introduced me to a website in the internet and for most of us these days we get information from internet, Facebook, to go, even if you don't have phone you can borrow and use"
(Male in school)

"Most females have phone and we can get information from the net, social media and books" (Female in-school)

Friends and peers

"We can get information on sex and reproductive issues through friends, radio and film" (Female out school)

"If you are experiencing any problems just tell your friends and they will tell you what to do or the drugs to buy" (Female out of school)

Many adolescents in school and out of school expressed a challenge in discussing with their parents and religious leaders because the only message is abstinence. This was confirmed by the parents who said it was difficult for them to discuss with their children and also mentioned putting fear in the children to prevent them from having sex rather than educating them

Parents and religious leaders

"My parents will only say be careful now you are a big girl but will not say be careful about what and will not teach you what to do"
(Female out of school)

"Me I cannot discuss with my parent at all, my father is a no go area (it is impossible to have a discussion with my father)" (Male in school)

*" In the church they only talk to us about abstinence that is all"
(Female out of school)*

"If a girl starts menstruating, we have to put fear in her so that she does not have sex, like saying if you allow a man play with you, you will die"(Female parent)

" It is not easy for fathers to discuss with their children, they talk more with their mothers" (Male parent)

4.1.6 Intentions on sexual practices

A good number of the adolescents in school attested that it is their intention to have sex and even opt for unprotected sex for various reasons like, deliberately wanting to enjoy the pleasure of sex but some females out of school mentioned the desire for pregnancy with the intention of marrying the partners. For most males both in school and out of school, having sex was in response to pressure and societal expectations.

Intentions for sexual behaviour

"When you have your boyfriend that you love, you will want to have sex with him out of love on your own"(Female in school)

"Let me just say that when a girl start getting matured like developing breast, they can say they want to get married or she can get pregnant so that she will marry"(Female out of school)

No intention for sexual behaviour

"Some females are forced by their uncles or brothers to have sex and when they enjoy it they continue to have sex"(Female out school)

"There is this thing they call circumcision and when they do it the females will just start having sex, some is out of anger"(Female in school)

4.1.7 Outcome of Adolescent Sexual behaviour

Three major SRH problems were specifically mentioned during the discussion as challenging to adolescents namely; unintended pregnancy, unsafe abortion and STI/HIV.

Pregnancy

On a whole, all the adolescents in the FGD repeatedly mentioned that pregnancy is a major problem faced by adolescent females in all the communities, the males in school and out of school estimated that pregnancy rate is about 6 to 7 out of 10 females while the females estimated

that about 7 females out of 10 will be pregnant. Parents and HCPs also confirmed this.

"Pregnancy is a common thing here, out of 10 females you can see 6 or 7 females pregnant, in fact every month a girl will be pregnant here"(Male in school)

"Hey females use to get pregnant here very common, 7 out of 10 females can be pregnant"(female out of school)

"Young people of this days are beyond us, we don't even understand them and we hardly even know when they are pregnant except when some give birth"(Female parent)

"Pregnancy is very common here but most of them is when they have complications from abortion that you see them"(Male HCP)

Art and methods of abortion

On the issue of abortion, all the respondents mentioned that it is a common practice for adolescent females to abort unintended pregnancy either for the fear of being condemned by people, being sent out of school or forced to get married. Most of the females mentioned using local methods and females in school frequently mentioned going to chemist or quacks for abortion.

"When they are pregnant (unintended pregnancy), ahhh is abortion straight, 3 to 4 out of 5 females will abort the pregnancy"
(Male in school)

Local method of abortion

The local methods were common practice mentioned by both groups. They are practices based on advice of peers and friends who reported it has worked for them.

"Add plenty Tomtom (sweet) into lacasera, allow it to dissolve and drink it and the pregnancy will be aborted or you cannot get pregnant"
(Female in school)

"I have seen a lady in my house who drank bitter leaf water to do abortion, she started bleeding and was in pain and the baby came out"
(Female out of school)

Medical methods of abortion

The medical methods mentioned mostly by females in school is not in the hospital, most prefer or meet quacks because it is illegal to carry out abortion.

"Females go to chemist for drugs to abort pregnancy or arrange with some health workers that will do D/C in some places" (Female in school)

" There is a man in a chemist here that will remove the pregnancy even at 5 months, my friends pregnancy was 5 months and it was removed because she was afraid of her step mother"
(Female in school)

Foot Note: To confirm the above report, one of the female participants acted as a dummy patient and went to the chemist man pretending to be 5 months pregnant and requested for abortion and the man agreed he was going to do it for #5,000.

STI/HIV

STI was also a problem reported by most of the adolescents, commonly mentioned was gonorrhea and the symptoms described were vaginal and penile discharge, genital itching, pain while passing urine and blood in urine, HIV was also mentioned mostly among the out of school adolescents. The HCPs also mentioned gonorrhea as the commonest STI seen.

"Gonorrhea is common among young males here, even females, they will be crying when passing urine and have vaginal discharge"
(Male in school)

"The common adolescent problem seen here is gonorrhea, HIV and most of those that are pregnant only come after abortion with quacks and there is complication."(Male HCP)

Child marriage

Child marriage was mostly mentioned among out of school female and child marriage for both sexes is mostly as a result of unintended pregnancy leading to school dropout particularly for the female adolescents. Parents also attested to it.

"Both females and males are getting married early here, if you get a girl pregnant they can force you to marry her if the boy accept"
(Male out of school)

"Some females are forced to get married because they are pregnant but some can get married even if not pregnant like my friend"
(Female out of school)

"It is very common here, females get married at the age of 15 years, some is because they are pregnant then you will be forced to get married" (Female out of school)

"Females dropout of school because there is no money and they are forced by parents to get married to rich men" (female out of school)

"At any age they can get married especially when the girl is pregnant" (Female parent)

"When a girl is pregnant she has to follow the man and marry him" (Female parents)

4.1.8 Prevention of pregnancy

Various methods of preventing pregnancy were mentioned in the different FGDs, the use of modern contraceptives and the local methods.

Local methods of preventing pregnancy

What was frequently mentioned by both the in school and out of school females was the local methods of using concentrated salt, local bitter leaf and douching.

"If you don't want your girl to get pregnant, immediately after sex let her take hot water with plenty salt inside or Andrew liver salt" (Male out of school)

"Some females will tie cotton wool with thread and insert into the vagina immediately after sex and pull it forcefully to clean up the sperm and prevent pregnancy" (Female out of school)

Modern methods of preventing pregnancy

Very few females in school use modern contraceptives and emergency contraceptives to prevent pregnancy. It was not mentioned among out of school adolescents

"To prevent pregnancy you have to use family planning, different types you can get from the chemist or hospital" (Female in School)

"You can take postinor 2 (emergency contraceptive) within 72 hour of having sex if you don't want to get pregnant" (Female in school)

Abstinence

Very few adolescents in school said they would choose to abstain for fear of getting pregnant and because of religious values

"Some females will say no they don't want to have sex so that they can continue with their education or because of fear of death and some do not have sex so that they can keep themselves as virgins for their husbands" (Female in school)

"When females get pregnant they are forced to leave school most times but the males can continue with their education" (Female in school)

4.1.9 Use of sexual and reproductive health care services by adolescents

Poor utilization of health care facilities by adolescents was reported; the most repeated reasons given by all the groups were fear of condemnation, stigma and judgmental attitude of the HCPs as well as breach of confidentiality.

"Sometimes when you go to the hospital, they will ask why you are there, concluding you have done something bad and will report to your parents, they cannot keep confidential things" (Male in school)

Majority of the adolescents both in school and out of school said they prefer to consult friends to tell them what to do based on their experiences or visit the patent medicine vendor (chemist).

"I prefer to ask my friends for their opinion on what to do, some guys go to the traditional healer for medication" (Male out of school)

"The chemist is a better place for females to go when you have vaginal discharge or itching because it is more private, very sharp (without delay) and not costly" (Female out of school)

The adolescents in school complained of the delay encountered in the health facilities, the bureaucracies and the cost of hospital fee as reasons for poor utilization.

"It is better to go to the chemist when you think you have STI or any problem because the chemist man will not ask too much question but in the hospital you will collect card from a different person, see the doctor, then he will send you to the lab and then you come back again before he sends you to the pharmacy to collect drugs and everybody will know your problem"(Female in school)

4.1.10 Health provider's knowledge and skills on ASRH:

The interview with the health care provider revealed that they have no training on ASRH; one of them said she has an interest but have no required equipment and environment to offer such services to adolescents.

"I was trained on reproductive health in 2009 and I talk to parents about their adolescent children because of my personal interest as a victim of teenage pregnancy"(Female HCP)

"I have never been trained on adolescent sexual and reproductive health, I am only using my experience" (Male HCP)

Foot Note: The principal researcher also informally had an interview with some HCP not part of the study to confirm the findings on the training and also got same report of lack of training on ASRH.

Attitude of Health care providers

Two of the health care providers said it was acceptable to provide sexual and reproductive health services like contraceptives, emergency contraceptives and post abortion services to adolescents while others felt it was not right because it will make the adolescents more sexually active. All the parents in the IDI did not approve of contraception for adolescents.

Health care providers attitude in support

"The rate of sex among adolescents is becoming alarming and they are getting pregnant and STI, it is better to give them contraceptives than leave them to come down with the consequences." (Female HCP)

" I am a victim of teenage pregnancy so I know how it feels, I personally attend to them even outside official work without the knowledge of their parents, I even provide condom for them"
(Female HCP)

Attitude not in support of contraceptives

"Me I will not encourage contraceptive for adolescents because that will encourage them to commit adultery except for the married adolescents"(Male HCP)

"If you don't provide contraceptives for them, the fear of getting pregnant or getting HIV will prevent them from having sex but if you give them they will feel secure and be having sex which is bad"
(Male HCP)

"Noooo, I cannot allow contraceptive for adolescents, that will make them more promiscuous, it will be like license to go and have sex, it is against our culture and religion"
(Female parent)

Availability of adolescent sexual and reproductive health services Available

There are no functional youth friendly health services available in Plateau State and no service specifically targeted at adolescents in the clinics except the general care for everyone whom they said can be provided for adolescents who need it.

"Utilization of Adolescent Reproductive Health Services for anything is from morning to afternoon but the night is for women coming to deliver" (Female HCP)

"The family planning we have is for all women and is condom, pills and injectable, it is free but they pay 500 naira for the card." (Female HCP)

4.1.11 Sexual and reproductive health needs

The adolescents made some recommendations as urgent needs to improve their sexual and reproductive health; they mentioned what should be directed at adolescents, their parents and the HCPs.

Needs of adolescents

Those in school mostly mentioned that they needed sexuality education but by NGO and not their teachers. They complained of being ridiculed or used as topic of discussion when they discuss sexuality issues with teachers. Most females out of school requested for a free education since school fees is a big challenge for dropping out of school and a reason why some of them are taken advantage of. The males out of school were rather more concerns about the females whom they said follow older men because of money and most said skill acquisition should be provided especially for the females.

"We need counseling from NGO, when we talk our teachers we become topic of discussion and they can even expel you from school"(male in school

*"We need free education for females because most are dropout and poverty is the reason why they are having sex with men for money"
(Female out of school)*

"Government should provide skill acquisition for females so that they can stop sleeping with older men for money"(Male out of school)

Needs of Parent

Frequently mentioned by males in school is the need to educate parents on how to educate their children on sex education while those out of school mostly mentioned that parents should be taught to show love to their children.

"Parents should be educated on how to teach their children about sex and sexuality"(Male in school)

*"Parents should be taught to make their children their friends and tell them the truth and not only saying be careful, be careful for what?"
(Female out of school)*

Needs of health care providers

Almost all the adolescents talked about the need for clinic with friendlier HCP who can keep secret.

"We need a clinic that the health care workers can keep secret and will be friendly, let them go from house to house to teach young people what to do"(Female out of school)

The findings from the literature search and that of the case study were used for the discussion.

5.0 Chapter 5: Discussion of literature review and case study

5.1: Discussion

This chapter is a discussion of the case study and the findings of the literature review, comparing similarities and differences and the probable reasons for the observations.

5.1.1 Sexual experiences of adolescents

The responses from the different respondents concurred with the fact that adolescent in Nigeria initiate sex quite early. Both in school and out of school had similar responses agreeing with findings from the literature.^{142,143,144,145}

It seems from this study and studies in Ibadan and Port Harcourt that females initiated sex a little earlier than males probably because some are forced into sex.^{146,147}

The reports of various forms of sexual practices ranging from penetrative vaginal sex to anal sex including "same-sex" were in line with the review of literatures. However, forceful sex and rape was commonly reported among out of school females. It could be deduced that being out of school could have exposed them to being on the street or at the mercies of people who in the bid to help them take advantage of them. The experiences of these adolescents is similar to those of their peers in other parts of the country reporting forceful sex among out of school adolescents.^{68,111,148}

Few adolescent reported sex with more than one sexual partner either of the same sex or opposite sex; an example is a girl having sex with two males through different routes at the same time. This has also been documented in few studies but the fear is the higher risk of unprotected sex during such sexual act.^{149,150}

It was observed from this study that both females and males engage in transactional sex, though reported commonly among out of school females and confirming the findings from the literature search. This is against the popular belief that it is a practice among females. It is usually with partners much older, nicked name as either sugar mummy or sugar daddy with obvious power relation's asymmetry but for the monetary benefit.^{30,51,54}

Other sexual partners mentioned here which were not a common findings from studies were close relations/ family members such as uncles, aunts, fathers and teachers. This is obviously a forceful and non-consensual sex as reported by most of adolescents,⁹³ although both sexes and groups reported multiple and concurrent sexual partners, it was commonly reported by out of school-females. Some studies have reported similar findings with unequal power relations, attributing less education and economic status as reasons for such practice.^{53,54,151}

5.1.2 Reasons for sexual behaviour

Not all adolescents go into sex for the same reason; various factors influence their decisions for sex and this also depends on the context and environment. For majority of those in school, it was for pleasure and fun while for the adolescents out of school, it was mainly because they were forced or due to peer pressure. This is a repeated findings from literatures.^{54,143,152} it is clear that their different contexts defined the reason for their sexual behaviour as in line with the framework.

Personal behaviour like alcohol consumption and the use of drugs was also identified as an influence for risky sexual behaviour.^{152,153} These were obvious findings reported by the adolescent and the parents concurring with the literatures.

While some complained of condom interfering with sexual pleasure and satisfaction, others complained of access, cost, lack of privacy and the stigma associated with the purchase of condom as reasons for unprotected sex.^{99,154,155} The out of school female adolescents complained of not being able to negotiate condom use when forced into sex or when it is transactional but some said an intention to get pregnant is a reason for not using condom. Which implies that unprotected sex is not entirely a deliberate act. These situations are in line with similar findings from other parts of the country.^{154,155,156}

The role of gender and power relations was also linked to economic disadvantage state of adolescents, resulting in their inability to negotiate safer sex. When both sexes involved in cross generational sexual relationship, it deters the practice of safe sex.^{51,93}

An interesting finding here are two distinct roles of self-esteem, while the males mostly reported feeling superior to the females as a reason for their sexual act, females reported respect for the males and the desire to please the men as a reason for accepting sex or even willing to remain virgins. Although some school of thought have contested the argument that economic benefit is the reason for sexual behaviour, this may be slightly different in the context of Nigeria. The case study and the literature have given some evidence that poverty was a driving force for sexual activity. This was especially among out of school adolescent females and a weapon used by older men to have sex and even marry the females.^{68,157,158}

Despite the growing desire for adolescents to experience sex and the documented evidence of early age at sexual debut, some adolescents have reasons to delay sex. Some of the reasons gathered from literature and the case study were; religious beliefs, fear of disease and pregnancy and the desire for a girl to gain respect from the future husband.^{51,54,71}

5.1.3 Knowledge and risk perception on pregnancy, STI and HIV

This study considered unprotected sexual behaviour, inconsistent use of condom and multiple or concurrent partners as high risk which makes adolescents vulnerable to STI, HIV and unintended pregnancy.¹⁵⁵ Some of the adolescents knew that having unprotected sex was risky but still went ahead anyway while others had a misconception that first intercourse cannot lead to pregnancy or that it is only when a partner appears sick that sex with such a person is risky.^{96,98}

Those in school seemed to have better knowledge of STI and HIV transmission and prevention than those out of school where someone thought that STI symptoms such as vaginal discharge and itching are symptoms of malaria and typhoid fever. Though the literature findings agreed with the result that those in school were more knowledgeable, the misconception documented here on STI was not found in the literature.^{51,102,103} Having multiple and concurrent sexual partner was a common practice among all the groups but acknowledged as a commoner practiced among females out of school.^{111,159} Some however did not perceive it as risky.

5.1.4 Intentions for sexual behaviour

Adolescent females out of school are especially unable to assert their right to negotiate safe sex subsequent to threat, forceful sex or the monetary benefit. In some cases, it was said to be out of respect for the men. For others, it was an intentional act to show love, have fun and show appreciation or deliberately to get pregnant so they can get married.

The desire to prevent unintended pregnancy and STI is seen by the use of other improvised means aside from condom such as nylon bags. A few of the adolescents however, use condom during sexual act because of the fear of contracting STI or getting pregnant as it is documented in other studies.^{111,120,121}

5.1.5 Source of information for sexual and reproductive health

Not many adolescents get sexual and reproductive health information from teachers, parents or HCP, however there are few HCP who give such information to adolescents like the case of the HCP in this study.

Both groups expressed their challenge in discussing sexuality issues with their parents. This was confirmed from the parents who admitted that it was difficult to discuss with their children and choose to put fear in them as a way of preventing them from sexual vices. This is a known fact reported in most of the literatures.^{113,114}

A clear distinction was observed between the sources of information for adolescents in school and those out of school. The in school confirmed that their main source of information was from the social media, internet and friends while those out of school reported friends, films and religious

institutions as their main source of information for SRH. This is not different from the findings in southern and southwestern part of the country.^{150,155}

5.1.6 Adolescent health seeking behaviour

The adolescents reported that seeking health care from the hospital was not a common practice, which is not just peculiar to these adolescents but also documented in the literature search. Those in school will mostly seek the services of either quacks or patent medicine vendors, the out of school adolescents will either seek for advice from peers, go to chemist or traditional medicine practitioners.^{35,95,119}

Both groups have devised means to terminate the pregnancy but it is not yet clear the mechanism of action of the concoction they use. These practices were not found in the literature search and obviously, these choices are not unconnected to the criminalization of abortion in Nigeria and the stigma associated with it.

The fear of being expelled from the school if discovered they are pregnant is another reason for secretly seeking abortion among the in school. Other reasons given for not seeking hospital care for SRH problems were the bureaucracies in health facilities, which exposes them to many caregivers, infringing on their privacy. Services have no flexible timing, which was confirmed by the HCP that opening hours are around 9am to 4pm in addition to the cost of treatment considering that they do not earn income. This is a reflection of findings from other studies.^{22,160, 161,162}

Despite the development of adolescent sexual and reproductive health policy in Nigeria, most HCP have not been trained on ASRH and still hold on to their personal, religious and cultural beliefs against professionalism. The HCP interviewed accepted for instance that teenage pregnancy and STI among adolescent is a problem but three out of four interviewed did not accept providing contraceptives to single adolescents, this is coupled with the fact that the clinic environment is not equipped and conducive for such services. This findings reflects the report of similar studies across the country.^{83,85,163,164}

The same response was gotten from the parents who all disapproved of contraceptives for adolescents. These are sure reasons why the adolescents will be skeptical about seeking care in the health facilities.

This is however not the perception of all parents.^{59,102,165,166}

5.1.7 Outcomes of adolescent sexual behaviour

The most commonly reported SRH problems of the adolescents in the literature and case study was the high rate of unintended pregnancy reported by all the groups, including the parents and HCP. The only difference is that while majority of those who are in school reported unsafe abortion as the outcome of the pregnancy, those out of school reported teenage marriage as the commonest outcome of the pregnancy. The high

rate of abortion recounted by both adolescents and HCP is not surprising considering the high rate of unsafe sex and unintended pregnancy.^{110,124,125}

Other SRH challenges faced by adolescents from case study and literatures is the increasing HIV and STI prevalence rate among adolescents within the ages of 15 to 19 years.^{144,167} The common STI recounted was gonorrhoea which was also confirmed by the HCP.

In the North, a girl is given out in marriage as a teenager on the grounds of culture or religion, which is not a common practice in the southern and eastern part of the country. The main reason for child marriage as reported by most adolescents and parents in this study, is pregnancy. This was however not a common finding from studies^{157,158,168}

5.1.8 Sexual and reproductive health needs of adolescents

The adolescents discussed three categories of needs that they considered important for them; SRH information and counseling, Acceptable and accommodating SRH services, Education and Life Skill acquisition.

Those in school requested sexuality education, counseling on SRH and the need for parents to be educated on adolescent sexuality. There are evidence from other studies that parents desire that their children should be educated on sex and sexuality while few others actually educate their children on sexuality issues.^{59,165,166}

They also requested a convenient clinic with HCP who will be friendly and ensure confidentiality; this cannot be contested because both the literature and interview with HCP reported the inconveniences in the clinic and their poor capacity to handle ASRH issue. Adolescents in other studies in the country made the same recommendation.^{102,169}

Those out of school requested for free education and skilled acquisition for the females to limit the rate of school dropout; transactional sex and child marriage, which they believe is the reason older men, are taking advantage of the females. Indeed, poverty has been identified as the underlying cause of child marriage even in the northern part of the country where religion is taken as a cover. The females in the North who for the respect for parents comply with the marriages, have suggested education for the females as a way out of the menace of child marriage.^{102,170,171}

5.2 Critical review of case Study

Sample representativeness. The study was relevant and timely considering the importance of the sexual behaviour of adolescent to their health. However, Nigeria is a large country with 36 states and 774 LGA, therefore, this study cannot be generalized to the whole state. The study was restricted to adolescent ages 18 to 19 year but those below the age of

18 years also have peculiar SRH experiences and challenges which if included would have broadened the scope of the findings

Research design. A qualitative study is acceptable for an exploratory study like this but it could have been better if it was a mixed study of both qualitative and quantitative for better triangulation of the findings.

Conduct of the survey and possible bias. Although the confidentiality was assured, being female in the midst of the adolescent males could have biased their responses. Some of the males probably exaggerated their responses to boost their ego but they were not together with the females and moreover, similar responses were generated in all the groups including the responses from the females.

Lack of time limited the proper training of adolescents as research assistance to independently conduct the research and minimize bias.

From the discussion, one could tell the adolescents were eager to say more but limited by time which the principal researcher wanted to adhere to based on the approval of the guidelines and the permission from the schools.

One cannot rule out that the parents in this interview probably gave socially desirable responses either in favor of or against the SRH behaviour and challenges of adolescents even though they were encouraged to be honest.

Review of framework. The framework was broken into details that enhanced the understanding of the context which influences the sexual behaviour of adolescent but it did not address the outcome of adolescent sexual behaviour as a separate entity but treated it under SRH experiences.

6.0 Chapter 6: Conclusion and Recommendation

6.1 Conclusion

Both the literature findings and results of the case study found that sexual debut among Nigerian adolescents begin about the age of 15 years. Various forms of sexual practices were reported ranging from penetrative vaginal to anal sex. Same-sex practice was reported by both sexes but predominantly among in school adolescents.

Diverse reasons have been proffered by adolescent for their sexual activities, those in school mostly mentioned pleasure and love while those out of school mostly initiated sex because they were either forced into it or go into sex for the financial gain.

Transactional sex that is frequently reported among out of school females is now seen among males also. Their sexual partners are either their age mates or much older including close relations. Multiple and concurrent partners were mentioned more among adolescents out of school.

Social media was the most important source of information for adolescents in school unlike those out of school who relied mainly on the information from friends.

Despite the reported challenge of unintended pregnancy, abortion and STI among adolescents, HCP and parents have not approved the provision of contraceptives for adolescents contributing to the reasons why adolescents seek care from unqualified sources.

6.2 Recommendation

The following recommendations are made based on the findings of both the literature review and the case study. It is divided into three major sections; research, policy and implementation

6.2.1 Research Needs

There is a need to research into the various methods of abortion especially the local methods of abortion practice by adolescents in Nigeria

Interventional Research should be conducted among the patent medicine dealers (chemist) to ascertain the methods of abortion provided to adolescents.

More research is needed determine the structural influences of transactional sex among adolescents

6.2.2 Government/Policy

Adolescents should be allowed full involvement in the policy formulation, strategic development and the implementation of the strategies. This will ensure better understanding of their problems and design of programme that will address their challenges.

The government should reverse the law decriminalizing abortion in the interest of young females who seek for abortion at the detriment of their lives with quacks

The government should come up with a strong policy against school proprietors expelling females from schools as a result of pregnancy, which terminates their education, and expose them to early marriage and poverty

It is a violation of human rights for a teacher to have sex with an adolescent student, punitive measures should be taken against both teachers and family members convicted of sexually abusing children

6.2.3. Implementation

Adolescent sexual and reproductive health counseling should be constituted in school and out of school to equipped adolescents on how to handle sexual and reproductive health challenges

Skill Training and acquisition should be organized for adolescents who are out of school as a form of empowerment to limit the rate of transactional sex and child marriage

NGO and government should organize workshops and seminars for parents and teachers on ASRH and how to initiate SRH education at home

ASRH should be part be part of the school curriculum for HCP with refresher training and supportive supervision to improve their skills and attitude on service delivery to adolescents.

Health care facilities should be organized to provide a convenient environment and opening hours to meet the needs of adolescent.

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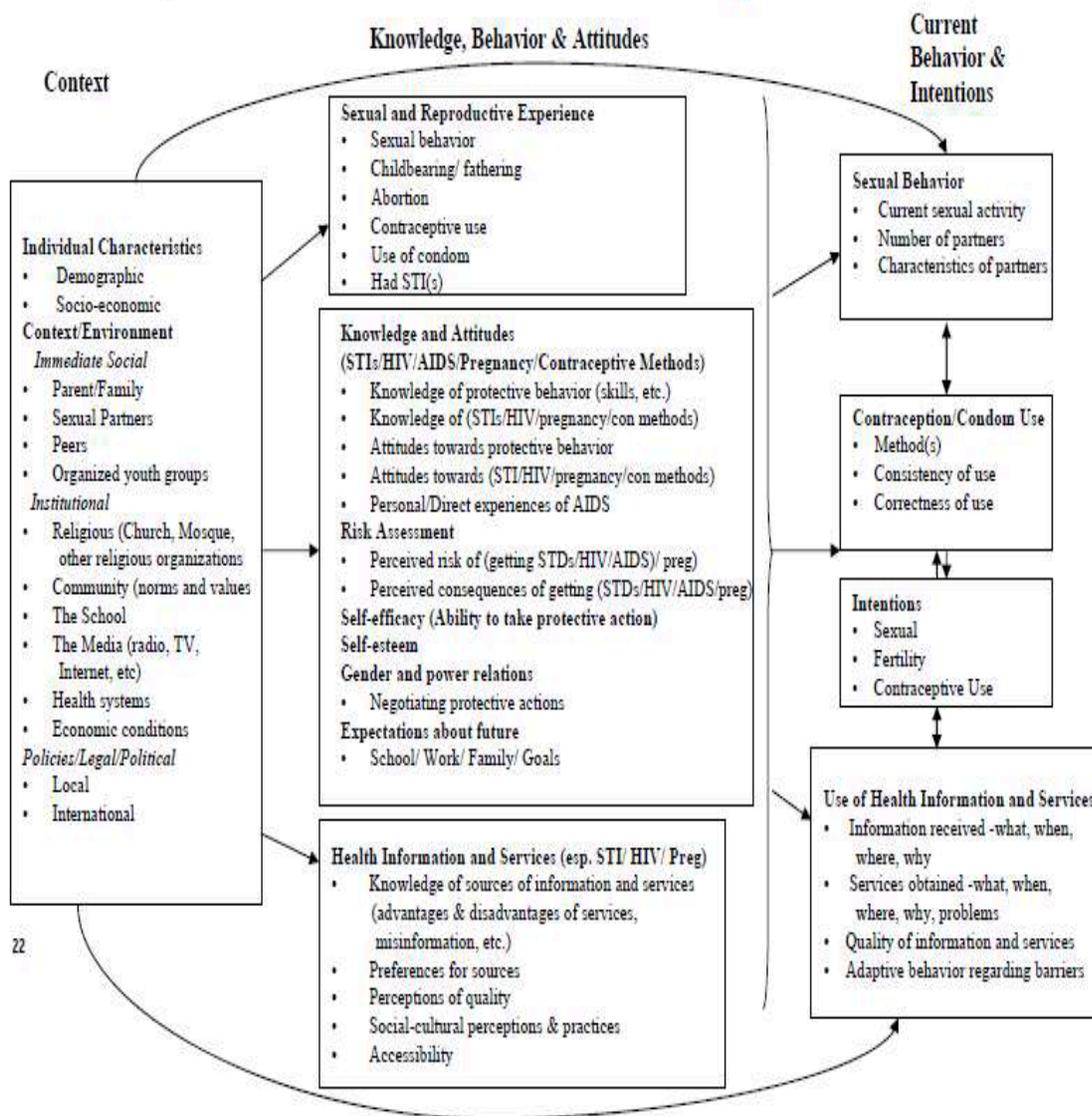
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Annexes

Annex 1: Conceptual framework

Conceptual Framework of Adolescent Sexual and Reproductive Health



Source: Awusabo-asare & A. Biddlecom. The Guttmacher institute. 2006

Annex 2:Methodology for case study

Study design

The study was a qualitative which used a Focus group discussion with the adolescents and an in-depth interview with the health care providers and parents of adolescents in the study areas. The study was conducted among adolescents between the ages of 18 and 19 years

Study area

The study area was plateau state, Nigeria. Plateau state is one of the 36 states in Nigeria, it is divided into 17 Local government Areas (LGAs). Jos North LGA that is an urban LGA was purposively selected and Bassa LGA was selected through a simple random sampling out of the four LGAs around Jos metropolis. Tudun wada ward in Jos north and Bassa ward in Bassa LGA were selected purposively for the study.

Study population

The study population was adolescent males and females divided into urban and rural, in school and out of school for the FGD, health care providers in the urban and rural health facilities for an in-depth interview and parents of adolescents in the study areas.

Sampling Method

The researcher collaborated with Voice for the girl child, a local NGO working with adolescents in Plateau State to identify adolescents who were willing and gave their consent to participate in the study.

Permission was taken from the schools and we were allowed to interact with the students in the absence of the school authority and a list of senior students from ages 18 to 19 years was generated and subsequently, 12 adolescents who gave consent for the study were included in the FGD in each of the schools.

For adolescents out of school, we worked together with the youth leaders in the two communities to identify adolescents who gave consent to be part of the study.

A total 8 FGD were conducted, 4 FGD with adolescents in school and 4 FGD with adolescents out of school. The selection ensured homogeneity in the group by separating them base on sex and educational status (in school and out of school) for the FGD. Informed written consent was obtained from adolescents who are 18-19 years before including them in the study.

The health care providers were recruited on the basis of those who have worked with adolescents or provide services relevant for adolescents such as family planning, HIV and STI services. Permission was taken from the Community health officer/ Nurse in charge of the clinics and the list of the health care providers were obtained to identify those who work in the family planning unit and the STI or HIV unit who were interviewed after obtaining consent from them

The research team worked with the local NGO (Voice for the girl child) to identify parents of adolescents but not the adolescents participating in the

FGD who gave their consent for the study and an in-depth interview was conducted.

Data collection

Information was collected from the adolescents through an FGD and from the health care providers and parents of adolescents through an IDI.

Focus Group Discussion

In total, 8 FGD was conducted, 4 FGD in the urban LGA and 4 FGD in the rural LGA. The FGD in each of the LGA was further categorized into males and females, in school and out of school. The FGD was conducted in the community at the most convenient place chosen by the participants that provided enough privacy and freedom to speak, the discussion lasted for about 2 hours each using an FGD guide. Visual images were used to initiate discussion and elicit responses from the participants.

The FGD explored the sexual behaviour of adolescents, their perception of risky sexual behaviour, factors influencing their sexual behaviour, gender issues affecting their behaviour, the common sexual and reproductive health problems, their sexual and reproductive health needs, their health seeking behaviour and their suggestions on how to address their health needs.

With the permission of the participants, an audio tape recorder was used to record the discussion while a note taker took notes to compliment the recordings

In-depth Interview

The IDI explored the knowledge of health care providers on adolescent sexual and reproductive health problems, their attitude towards adolescents seeking SRH services, the availability of adolescent sexual and reproductive health care services in the health facilities and their suggestions on ways of addressing the problems.

The IDI lasted for about an hour using a semi-structured open-ended interview guide for the interview. The interview was conducted in a private area most convenient for the respondents to ensure privacy and confidentiality. With their permission, audio recording was done with note taking. Eight IDI was conducted in this study, four in each of the wards selected for the study, four males and four female health care providers. In addition, 4 IDIs was conducted among parents in the communities exploring their knowledge and perception about adolescent sexual behaviour in the community, gender issues in the community, traditional practices affecting adolescents and early marriage in the community

Data processing and analysis

The data processing began right from the time of data collection by ensuring all relevant questions have been asked and information gotten. At the close of every day after the FGD and the IDI, the team met together to share notes, compare notes and tape recording. The information from the FGD and the IDI was categorized according to the themes and codes were assigned to the responses.

The information was summarized based on similar responses in a matrix form and triangulated to cross check for internal consistency and reliability. The information was transcribed and analysis using excel and the results was presented in text form addressing each of the specific objectives

Quality assurance

Training: All the research assistants were trained for three days on adolescent sexual and reproductive health problems, the FGD guide and the IDI guide. The training included role-play on FDG and IDI using the instrument to familiarize with the data collection and correct any mistakes. The training included data collection in Hausa Language to establish that the research assistants understand the content.

Translation of instruments: The FGD and IDI guide was translated to Hausa and back translated to English maintaining the standard and content of the guide. This is because some of the adolescents who are out of school may not understand or speak English well but Hausa is a common Language that is spoken in these communities.

Pre-testing: The instruments was pre-tested in Bukuru Gyel which is a different community before data collection, this enabled the researcher detect ambiguity which were corrected and also assisted with the competence of the research assistants in data collection

Annex 3: Research table

	OBJECTIVE	ISSUES	TECHNIQUE	RESPONDENTS
1	To explore the sexual experiences of adolescents	Sexual practices -Vaginal intercourse -Anal sex -Oral sex -Masturbation -Age at first sexual intercourse -Number of sexual partners . Knowledge of contraceptive . Correct and consistent use of condom . Sexual abuse .Physical abuse . Use of pornographic images Alcohol and substance abuse	FGD	Adolescent males and females -In school -Out of school
2	To explore the reasons for adolescent sexual practices	Pleasure exploration . Cultural practices performed on adolescents in the community Child marriage Self-efficacy Self-esteem Gender issues on males, females, age, masculinity, feminist power relations Expectations about the future	FGD	Adolescents males and females In-school Out-of-school
3	To explore the knowledge and attitude of adolescent on SRH	Sexuality Timing of pregnancy STI Risk assessment	FGD	Adolescent males and females -In school

				-Out of school
4	To explore adolescent sources of information and use of health care services	<p>Sources of information for SRH</p> <p>Access to contraceptive and condom</p> <ul style="list-style-type: none"> . Health seeking for STI . Health seeking for pregnancy . Health seeking for emergency contraception and /or abortion <p>6.Barriers to health service utilization</p> <p>So-cultural practices</p> <p>Religious belie</p>		
5	To explore the perception of health care providers and parents of adolescents on adolescent sexual behaviour and barriers to accessing health care	<p>Perception of adolescent sexuality,</p> <p>Perception on adolescents seeking SRH care perceptions on adolescents seeking contraceptives and condom in health facilities</p> <p>Availability of ASRH services in Health facilities</p>	KII	<p>Health care providers</p> <p>Parents of adolescents</p>

Annex 4: Data collection tools

Focus group discussion guide

Greetings and explanation by Moderator

Introduction

Hi, we are very happy you are able to make it here today for the discussion. It is important that we know ourselves so let's begin by introducing ourselves; we can either use our first names or our nicknames (beginning with the moderator)

The details of the research is as written in the consent form. If you are okay with that we can begin the discussion.

Questions

ADOLESCENT SEXUAL EXPERIENCES

- Do adolescents here have relationship such as girlfriend or boyfriend?
- What does it mean for adolescents to have a boyfriend or a girlfriend?
- At what age do adolescent here or did you start having sex (sexual debut)?
- What type of sexual practices do adolescents here commonly engage in? Probe into Sexual practices, types of sexual activities and names used to describe
- With whom do they usually have sex? Probe into types of relationship and with whom? Sexual partners? Number of sexual partners
- Are adolescents able to negotiate sex? Are they able to say yes or no?
- Are they able to insist on condom use? Contraceptive use

REASONS FOR ADOLESCENT SEXUAL BEHAVIOUR

- There is always a reason behind what people do and how they behave, what are the reasons why adolescent go into sexual activities? Probe into factors influencing sexual behaviour (Age, environment, socio-economic, gender norms, transactional sex)
- What experience makes adolescents become sexually active? Probe for, sexual pleasure, exploration, expressions of love, gender norms, sexual molestation, physical sexual violence
- Do you feel superior or inferior to insist on what you want during sexual relationship?
- What is done in this community when females/males approach puberty? Probe FGC, child marriage

KNOWLEDGE AND RISK PERCEPTION ON PREGNANCY, STI AND HIV

- When is a girl likely to get pregnant?
- Can a girl get pregnant at the first sexual intercourse? Probe reason for answer

- What are the ways of preventing pregnancy among adolescents in this community? Probe into abstinence, modern and traditional contraceptive methods
- Is getting pregnant among adolescents seen as a problem?
- What do you know about STI and HIV? Probe for symptoms
- Do you think adolescent having sex are at risk of STI
- How can one be infected with STI and HIV?
- What are the risky sexual behaviour adolescents embark on? Probe for unprotected sex
- Do adolescents take such risk? Do they consider it as risky?

SOURCES OF SEXUALITY AND REPRODUCTIVE HEALTH INFORMATION

- Is sexuality or issues of sex openly discussed between adolescents and adults? Probe for reasons either for yes or no
- What are the types of information adolescents get o sexuality and reproductive issues from older people
- How do adolescents or how do you get information about sexuality, sex, contraceptives, pregnancy etc?
- Which is your most preferred source of getting information on sexuality and reproductive issues? Why?

ASRH PROBLEMS

- When adolescent females get pregnant against their wish, what are the common things they do? Probe for abortion and teenage marriage
- What happens to the males who get the females pregnant?
- Are you aware of some infections someone can get by having sex? Probe
- When adolescents have STI where do they go for treatment
- What are the common sexual and reproductive health problems of adolescents in this community?
- What is the sexual and reproductive health needs of adolescents in this community?

USE OF SEXUAL AND REPRODUCTIVE HEALTH CARE SERVICES BY ADOLESCENTS

- When you need sexual and reproductive health information or want to ask questions related to sex and reproductive health where do you go or who do you ask?
- When adolescents in this community have sexual and reproductive health problems where do they go for treatment? Probe for self medication, patent medicine seller, traditional healers, etc
- What are the reasons why adolescents do not go to health facilities for treatment in this community?

Annex 5: IDI question guide for health care providers

Introduction

Good day ma/sir, I am -----a Master's student with Royal Tropical Institute in the Netherlands. I am carrying out a research on ASRH for my thesis as criteria for obtaining my certificate. I will kindly want to have an interview with you on this topic to explore your knowledge and perception on ASRH services.

Confidentiality (Refer to the consent form)

I want to ask for your permission to take notes and to record the discussion with a tape recorder just to enable me recall the discussion. The tapes will be destroyed within 6 months of the completion of the study

Background Characteristics:

Locality of facility: Rural / Urban

Position of Health care provider interviewed:

a. Nurse

b. CHO

Sex of person interviewed: Female / Male

Q1: Health provider's knowledge and skills on ASRH:

- How long have you been working in this clinic? Did your basic nursing/medical training include adolescent health?

—

- Have you attended any RH training recently?
(If yes please specify)

- Have you attended any specific training in ASRH services or STI/HIV training workshops?

What are some of the adolescent sexual and reproductive health problems you know?

What types of contraceptives are available in your clinic for adolescents to access?

- What is your opinion about providing contraceptive for young people to prevent unintended pregnancy?

—

—

What is your opinion about providing emergency contraceptive for adolescents?

what are some of the common STI that adolescents present with in your clinic?

Q2: Service provider Attitudes in ASRH Services:

- What is your opinion on providing ASRH services for young people below age 20 years, some of them may still be in school?

—

—

- What is your understanding of youth-friendly services?

—

—

- Do you or your clinic provide sexual and reproductive health information and services to adolescents?

—

—

Utilization of Adolescent Reproductive Health Services

Q3: ASRH Services Provided in this Clinic:

- What services do you provide to clients of the age groups less than 20 years at this health clinic?

• Do you feel that young people have needs for RH services and yet they are not coming to clinic? If so, why is this?

• How can adolescents from this community be encouraged to visit your clinic if they need to discuss RH matters with you?

• Do you feel confident and competent in providing ASRH services and counseling for young people? Why?

• Do you feel this clinic is adequately set up and equipped to offer ASRH services? If no, what needs to be put in place to strengthen ASRH services?

If an adolescent come to you for contraceptives, what will you do

Q4. Any other relevant questions

Annex 6: IDI question guide for parents of adolescents

Introduction

Good day ma/sir, I am -----a Master's student with Royal Tropical Institute in the Netherlands. I am carrying out a research on ASRH for my thesis as criteria for obtaining my certificate. I will kindly want to have an interview with you on this topic to explore your knowledge and perception on ASRH

I refer you back to the consent form for the details and confidentiality of the interview

Background Characteristics

LGA-----

Age-----

Sex

1. Male
2. Female

Q1: Are adolescent sexual behaviour a problem in this community? Probe into types of behaviour

- What are the reasons for this behaviour in your opinion?

—

- Are adolescents in this community at risk of pregnancy and abortion (Probe more into details)

—

- What can be done to reduce the number of adolescents getting pregnant?

—

- Are adolescents in the community at risk for STI or HIV? Why or why not?

—

- Do you approve of contraceptive use by young people to prevent unintended pregnancy and STI? Probe for reason given

-
-
- What are the reasons that adolescents might not seek care for sexual or reproductive health problems?

At what age are young people expected to have sexual relationship? For males and females(probe or child marriage)

Are there special preferences given to adolescent females or males? Why?

What is expected of a man or a woman when it comes to sexual relationship? Probe into gender norms, negotiation for sex

What kinds of traditional rites or ceremonies are practiced for adolescents in the community? (FGM, forced marriage, abduction, wife-inheritance, etc.)

- Do these practices put adolescents at any risk? Why or why not?
-

when is a girl or a boy expected to get married in this community?

THANK YOU FOR YOUR TIME

Annex 7: Consent form for FGD with adolescents

Good day, I am ----- a master's student with Royal Tropical Institute, Amsterdam, The Netherlands. I am conducting a research on adolescent sexual and reproductive health problems and needs. This research will also help in understanding the adolescent sexual and reproductive health problems with the aim of a possible change in policy that will improve the health of adolescent.

I will appreciate your participation to share your experience and knowledge of the topic. I will appreciate your openness and sincerity in the discussion. The discussion will be about adolescent sexual behaviour and practices, the determinants, adolescent sexual and reproductive health problems and needs.

Participation in this study is optional and even in the process of the discussion, you can choose not to answer any question or ask to leave the study at any moment if you are uncomfortable.

If you agree to participate, I will like to seek your permission to use a tape recorder for the purpose of recalling the discussion. I assure you that your name will not be mentioned anywhere in the research. I will only need your name, address and phone number for communication purposes and to enquire your willingness and consent to join the study. . With your permission we will use tape recorders during the discussion, which will be destroyed within 6 months of the completion of the study

In the event of a recall of a hurtful memory, there is a trained counselor who will assist with counseling and where necessary referrals will be made to the Jos University Teacher hospital for further counseling sessions.

Where there is an obvious sexual abuse, with your permission, the case will be reported to the relevant organization that will assist you and ensure the case is properly handled

In case of any question or clarification on any issue, you can contact me on this number
+234 8034517244. I promise to answer every question to the best of my knowledge.

If you agree to participant in the research, I will like you to write your name and signature below

Respondent's declaration:

I have read and understood fully the content of this form and accept to be a part of the study, contributing honestly all that I know about the topic to be discussed.

Name: -----

Signature: -----Date: -----

Address -----phone number-----

Witness signature:----- Date: -----

--

Annex 8: Consent form for IDI with parents/ care givers

Good day ma/sir, I am ----- a master's student with Royal Tropical Institute, Amsterdam, The Netherlands. I am conducting a research on adolescent sexual and reproductive health problems and needs.

I will appreciate if you share your wealth of experience and knowledge of the topic. I will appreciate your openness and sincerity in the discussion. The discussion will be about your knowledge and perception on adolescent sexual behaviour, their reproductive health problems, your perception on accessing sexual and reproductive health service and the traditional practices done to adolescent females and males in this community.

Participation in this interview is optional; you may choose not to answer any question or even end the interview without losing any benefit

If you agree to participate, I will like to seek your permission to use a tape recorder for the purpose of recalling the discussion. I assure you that your name will not be mentioned anywhere in the research. I will only need your name, address and phone number for communication purposes and to enquire your willingness and consent to be interviewed. With your permission we will use tape recorders during the interview which will be destroyed within 6 months of the completion of the study.

There is no risk to you as a result of taking part in this interview. This research may not benefit you directly now but will benefit adolescents in this community.

In case of any question or clarification on any issue, you can contact me on this number

+234 8034517244. I promise to answer every question to the best of my knowledge.

If you agree to participant in the research, I will like you to write your name and signature below

Respondent's declaration:

I have read and understood fully the content of this form and accept to be interviewed, contributing honestly all that I know about the topic to be discussed.

Name: -----

Signature: -----Date: -----

Address -----phone number-----

Witness signature:----- Date: -----

Annex 9: Consent form for IDI with health care provider

Good day ma/sir, I am ----- a master's student with Royal Tropical Institute, Amsterdam, The Netherlands. I am conducting a research on adolescent sexual and reproductive health problems and needs.

I will appreciate your participation to share your experience and knowledge of the topic. I will appreciate your openness and sincerity in the discussion. The discussion will be about your knowledge on adolescent sexual and reproductive health, your perception on accessing health care services the sexual and reproductive health service available for behaviour for the adolescent in your health facility

Participation in this interview is optional; you may choose not to answer any question or even end the interview without losing any benefit

If you agree to participate, I will like to seek your permission to use a tape recorder for the purpose of recalling the discussion. I assure you that your name will not be mentioned anywhere in the research. I will only need your name, address and phone number for communication purposes and to enquire your willingness and consent to be interviewed. With your permission we will use tape recorders for the interview which will be destroyed within 6 months of the completion of the study

There is no risk to you as a result of taking part in this research except for your time that may be taken away from your work in which case the interview will be scheduled at the most convenient time for you. This research may not benefit you directly now but will benefit adolescents in this community.

In case of any question or clarification on any issue, you can contact me on this number
+234 8034517244. I promise to answer every question to the best of my knowledge.

If you agree to participant in the research, I will like you to write your name and signature below

Respondent's declaration:

I have read and understood fully the content of this form and accept to be interviewed, contributing honestly all that I know about the topic to be discussed.

Name: -----

Signature: -----Date: -----

Address -----phone number-----

Witness signature:----- Date: -----

Annex 10: Study proposal

EXPLORING THE INFLUENCING FACTORS TO ADOLESCENT SEXUAL
BEHAVIOUR AND REPRODUCTIVE HEALTH PROBLEMS IN NIGERIA: A CASE
STUDY OF PLATEAU STATE

THESIS PROPOSAL

BY

ESTHER AWAZZI ENVULADU

ICHD 2015/2016

ROYAL TROPICAL INSTITUTE(KIT)

Introduction

Nigeria is a fast growing country, in 2006, it had a total population of 140,431,790 but by 2015, the population had risen to 182,201,962.^{1,2} The total fertility rate is 5.7 children/woman and about 23% of women begun child bearing by the age of 15-19 years.^{2,3} The country ranks 7th in the list of countries by population with a median age of 17.8 years,^{4,5} it has a large population of young people, about one third of the population are between the ages of 10 and 24 and out of which the largest group is between the ages of 10 and 14 years.^{6,7} Based on the last census of 2006, the population of adolescents in Nigeria is about 22%, which is more than one fifth of Nigeria population.⁸

Adolescents constitute an important proportion of the population of Nigeria, they are classified by WHO to be individuals within the ages of 10 to 19 years.⁹ This is a period of development; with physical, physiological and emotional changes occurring as a result of the hormonal release during puberty.¹⁰ It is therefore a delicate stage that presents with challenges especially that of sexual and reproductive health which has drawn both national and international attention.¹¹

Adolescent sexual behaviour is influenced by several factors; however, access to sexual and reproductive health information and services as identified in the ICPD conference held in Cairo in 1994 is important in shaping their experiences and addressing their sexual and reproductive health needs.^{12,13}

Problem Statement

There is already an increasing high rate of sexual activity among adolescents in Nigeria with report showing that about 28.2% of adolescent are sexually active and the age of sexual debut among adolescents decreasing.¹⁴ A recent study showed the age of sexual debut among adolescents to be between the ages of 10-14 years in Nigeria.¹⁵

What is of great concern is that many adolescents in Nigeria lack proper information and skills to delay the onset of sexual activities and negotiate safer sex.¹⁴ The age at first sexual intercourse is therefore an important indicator of the possibility of unintended pregnancy and sexually transmitted infections among adolescents.¹⁴

Unintended pregnancy is usually one of the commonest outcomes of female adolescent sexual activities leaving many of them to resort to induce abortion.¹⁶ This is increasingly seen among young females in Nigeria since abortion is unauthorized and most end up with complications.¹⁶

Common practice among adolescents is lack of condom use during sexual activity, which is linked to the possibility of contracting STIs and HIV.¹⁷ The 17% prevalence of STI among adolescents females in southeast Nigeria and

14% among both sexes were associated to non condom use at sexual intercourse.^{18,19}

Justification

Many factors have been identified to influence the decisions of adolescents on their sexual behaviour, the influencing factors differ according to geographical, cultural, social, ethnic and economic context and understanding the different influencing factors based on the context provides a very significant insight into the sexual and reproductive health problems and gives a direction on programme organization, policy formulation and interventions that will impact on their health.²⁰

It is only when an underlying problem is understood that an appropriate intervention or solution can be proposed to address it. Understanding the influencing factors to adolescent sexual experiences and problems should be done with them and not without them if meaningful progress is to be achieved

General objective

To explore the factors influencing the sexual and reproductive health of adolescents in plateau state in order to inform adolescent health policies and programme

Specific objectives

1. To explore the sexual experiences of adolescents
2. To explore the reasons for adolescent sexual practices
3. To explore the knowledge and attitudes of adolescents on ASRH
4. To explore adolescent sources of information and use of health care services
5. To explore the perception of health care providers and parents of adolescents on adolescent sexual behaviour and barriers to accessing health care
6. To make recommendations on how to improve adolescent sexual and reproductive health needs and services in Plateau state

METHODOLOGY

Study Area

The study area will be plateau state, Nigeria. Plateau state is one of the 36 states in Nigeria, it is divided into 17 Local government Areas (LGAs). Jos North LGA which is an urban LGA will be purposively selected and Bassa LGA will be purposively selected as the rural LGA. Tudun wada ward in Jos north and Bassa ward in Bassa LGA will be selected purposively for the study

Study Design

The study will be a qualitative study involving adolescents ages 18 to 19 years

Study Population

The study population will be adolescents between the ages of 18 and 19 years for the FGD and health care providers in the primary health care facilities situated in the study communities

Sampling Techniques

The researcher will collaborate with Voice for the girl child, a local NGO working with adolescents in Plateau State to identify adolescents who will be willing and will consent to participate in the study. The selection will ensure homogeneity in the group by separating them based on sex and educational status (educated and non educated) for the FGD. Informed written consent will be obtained from adolescents who are 18-19 years before including them in the study.

The health care providers in the primary health care facility located in the community where the study will be conducted will be recruited by a purposive sampling technique to participate in the IDI. They will be nurses or community health officers working in the primary Health care facilities, which are found in almost all the communities. The head of the PHC will be purposively selected for the study but where he/she declines or is not available, the next in rank or the nurse in charge of the family planning unit will be selected for the study

The research team will still work with the local NGO (Voice for the girl child) who have been working in the community to identify parents of adolescents who will be approached to give their consent for the study and only those who consent will be included in the study for in-depth interview

The choice of the location of the study areas was purposive to capture the view of adolescent in the urban and rural areas. This is also to enable a reflection of the different diversity, which may characterize the sexual behaviour and SRH problems, and needs of adolescent

Data Analysis

The data processing will begin right from the time of data collection by ensuring all relevant questions have been asked and information gotten. At the close of every day after the FGD and the IDI, the team will meet together to share notes, compare notes and tape recording. The information from the FGD and the IDI will be categorized according to the themes and coding will be assigned to the responses.

The information will be summarized based on similar responses in a matrix form and triangulated to cross check for internal consistency and reliability.

The information will be transcribed and entered into Nvivo statistical software for analysis and the results will be presented in text form addressing each of the specific objectives.

Quality Assurance and Study Limitations

Training: All the research assistants will be trained for three days on adolescent sexual and reproductive health problems, the FGD guide and the IDI guide. The training will include role-play on FDG and IDI using the instrument to familiarize with the data collection and correct any mistakes. The training will include data collection in Hausa Language to establish that the research assistants understand the content.

Translation of instruments: The FGD and IDI guide will be translated to Hausa and back translated to English maintaining the standard and content of the guide. This is because some of the adolescents who are out of school may not understand or speak English well but Hausa is a common Language that is spoken in these communities.

Pre-testing: The instruments will be pre-tested in another community before data collection, this will enable the researcher detect any ambiguity and areas that need clarification. The pre-testing will also assist in detecting the competence of the research assistants in data collection. After the pre-testing, areas of ambiguity, clarification and sensitive issues will be addressed

Expected Limitations of the study design

The research topic is a sensitive issue therefore some adolescents may not open up freely to give details of the information. The researchers will try to make the environment a friendly one and assure them of confidentiality. Also, the probing will be that of both positive and negative experience and the lead facilitator for each group will be an adolescent of the same sex to allow freedom of expression

Dissemination of results

Please outline what plans you have for dissemination of results.

Guidance notes:

Where possible a mechanism should be in place to inform study participants of the outcomes of the study.

It is important that important study findings are made known to local services / policy makers before they are discussed (e.g. at international scientific meetings)

The findings of this study will be for the purpose of master's Thesis as a criteria for obtaining my master's degree but it is hoped that with the approval of KIT and my thesis advisor, the findings will be published in a

peer review journal and the report shared with the Government of Nigeria to inform strategy and intervention changes in the area of ASRH in the country

Ethical considerations

Ethical approval will be sought for from KIT Ethical committee board and the Jos University Teaching Hospital Ethical committee. Permission will be obtained from the LGA and the village head of the respective communities in addition to written informed consent from the individual participants before commencement of the study

The study will be conducted in the communities, a community youth hall or empty primary school class room will be used for the FGD will health facilities or the most convenient placed agreed by the health care worker and the parents that will provide adequate privacy will be used for the IDI

The discussion may remind some participants of some hurtful events like unplanned sexual activities or forceful sexual act that resulted in pregnancy and abortion. In such circumstances the discussion will be suspended for a period and the individual will be excused from the discussion while a counselor will be made available to offer counseling to the participants. Where it is beyond the counselor to handle, the participant will be referred to the Jos University Teaching Hospital guardian and counseling department for further counseling and management.

The researcher is collaborating with the Voice for the girl child, a local NGO that is working in the state with adolescents to facilitate the research, if any participant reports an abuse, the local NGO will take up the case and report to the legal Aid counsel for appropriate action. This will be done with the permission of the participants and is included in the consent form

Confidentiality will be assured and no names will be mentioned. The responses will be coded to ensure protection and elimination of stigma to the participants, their families and community. The adolescents who will assist in the conduct of the research will be at about the same class with the participants. The study will be conducted in a private place decided by the participants to ensure maximum privacy

In the study we aim having a discussion with both males and females, this mean the research assistants will be both males and females, including adolescent male and female as facilitators who will co-facilitate with the researcher

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