Corrigendum: Sexual Behaviour and Uptake of Modern Contraceptives among Adolescents in Public Secondary Schools in Lagos State, Nigeria

Omobola Y. Ojo[1*], Adeyinka Adeniran[2], Esther O. Oluwole[3], Adebisi P. Olutoba[4] and Salahudeen R. Adewole[5]

[1]Department of Community Medicine and Primary Care, Federal Medical Centre, Abeokuta, Ogun, Nigeria; [2]Department of Community Health and Primary Health Care, Lagos State University College of Medicine/Teaching Hospital, Ikeja, Lagos, Nigeria; [3]Department of Community Health and Primary Care, College of Medicine, University of Lagos, Surulere, Lagos, Nigeria; [4]Department of Community Health and Primary Health Care, Lagos State University College of Medicine/Teaching Hospital, Ikeja, Lagos, Nigeria, and [5]Federal Medical Centre, Abeokuta, Ogun, Nigeria.

***Corresponding author:** Dr Omobola Y. Ojo. Email address: vinegbogs2007@gmail.com
https://dx.doi.org/10.4314/ajhs.v35i6.12

Summary

BACKGROUND

Globally, more than 16 million adolescent girls give birth every year with additional 5 million abortions. Adolescent pregnancy has been associated with high maternal mortality rates in Nigeria. Therefore, this study was designed to assess sexual behaviour and contraceptive uptake among secondary school adolescents in an urban area in Nigeria.

MATERIALS AND METHODS

The study was a descriptive cross-sectional study of students from twelve senior secondary schools in 2018. Respondents were interviewed using self-administered structured questionnaires. The questionnaire was pretested and analysis was done using SPSS version 17.0; descriptive data were presented as simple frequencies and percentages. The chi-square test was used for associations and the level of significance was set at p≤5%.

RESULTS

The majority of the respondents (70.3 %) were within the age bracket of 13 to 16 years with a mean age of 15.95±1.43. Generally, there was 100% awareness of the methods of contraceptives by all, with 64.5% aware of condom usage as a method of contraception. The level of knowledge scored fairly (62.4%), and attitude was 48.9% amongst males and females who had responsibility for contraception. Peer pressure of 42.9% was stated as one of the major factors affecting the utilization of modern contraceptives.

CONCLUSION

Awareness of contraception amongst adolescents was high. But with the level of knowledge identified, the government should ensure proper measures to promote sexual behaviour and uptake of contraception among adolescents in Nigeria.

Keywords: *Sexual Behaviour, Contraceptives, Utilisation, Adolescents, Schools*

***[Afr. J.** Health Sci. 2022 35(6):783-797]*

Introduction

The World Health Organization (WHO) has defined an adolescent as a person aged 10 to 19 years.[1] Curtis, however, defines adolescence as years between the onset of puberty and the establishment of social independence.[2] It is a period of transition from

childhood into adulthood as the body matures and the mind becomes more questioning and independent.[3]

Sexual behaviour is any activity between two persons that induces sexual arousal.[4] The two major determinants have been noted to be genetics and the degree of sociocultural regulation exerted on an individual to express sexuality.[5] Sexual behaviour in humans has also been defined as how human's experience and express their sexuality.[6] Associated with the problem of unwanted pregnancies has been the concept of unmet needs of family planning especially for adolescents to exhibit sexual behaviour.[5,6]

Contraception on the other hand has also been defined as the use of a contraceptive method to prevent pregnancy by interfering with ovulation, fertilization, and/or implantation.[7] Yet, the incidence of unplanned pregnancies is still on the high side.[7] Indeed, teenage pregnancy is a global issue and probably the highest in sub-Saharan Africa. Contraceptives help couples plan when and how many children they should have.[8] The modern contraceptive methods have been classified as hormonal or non-hormonal (barrier) methods. They include condoms, pills, sterilization, injections, intra-uterine devices, spermicidal and implants.[8]

Apter in his study observed that prevention of unplanned adolescent pregnancies requires a desire to use contraceptives, the ability to obtain the contraceptive method and the ability to use it. Attempting to miss out on any one of them will result in contraceptive failure.[8,9] Addressing the sexual and reproductive health challenges faced by adolescents in Sub-Saharan Africa is critical given the large contribution adolescent childbearing makes to the high levels of fertility observed in many Sub-Saharan African countries.[10-12]

There are about 1.2 billion adolescents worldwide making up a fifth of the world's population.[14] Eighty per cent of adolescents live in developing countries including Nigeria, therefore making up a significant percentage of the population.[13] The percentage of adolescents in Nigeria has been estimated to be 22.3% of the total population.[13]

Adolescent fertility regulation and pregnancy prevention are one of the most important healthcare issues of the twenty-first century.[14] This is because more than 16 million adolescent girls give birth every year worldwide and an additional 5 million have abortions.[16] Sub-Saharan Africa accounts for 50% of these births.[15,16]

Parents on the other hand are uncomfortable discussing sexuality and contraception with their children, a task that has been left to schools already limited by the current debates on sex education[17,] As the generational gap widens, adolescents are forced to learn about sexual issues from their peers or the mass and social media.[18]

Currently, there are conflicting messages about adolescent sexuality; the promotion of sexual involvement on one extreme and the urging of chastity on the other makes adolescents feel guilty, uncertain or indecisive about contraception.[19]

Globally, previous studies on adolescent sexual behaviour show their premarital sexual encounters are generally unplanned, infrequent and sporadic.[17] These patterns predispose them to an unplanned pregnancy. Unplanned adolescent pregnancy is associated with unsafe abortion a cause of 13% of global maternal mortality.[19] It is more dangerous for adolescents as they tend to seek abortion later in pregnancy and meeting the contraceptive needs of these adolescents could prevent these problems.[20]

In Africa, adolescents account for 23% of the total population.[13] Sub-Saharan Africa has the greatest proportion of adolescent girls who have begun childbearing.[13] In many parts of Sub-Saharan Africa, adolescent sexual and reproductive health (SRH) remains a highly charged moral and religious issue.[21] Studies have shown that while most pregnancies to adolescent girls in sub-Saharan Africa are

unplanned, the use of contraceptives remains low.[9] In Nigeria, the situation is not different. Contraceptive utilization among adolescents remains low and most adolescents aged 15-19 years had had sex before they were 15 years old; some even become sexually active before the age of 12 years. While this is the case, sex education in secondary schools in Nigeria is limited and, in some cases, non-existent. [22]

Addressing adolescent issues, therefore, continues to be a major challenge in Nigeria.[23,24] The lack of sex education in Nigerian schools, poor access to information about sexual and reproductive health, sexual coercion and violence and limited access to reproductive health services for Nigerian adolescents has led to high rates of adolescent pregnancy.

Therefore, this study aimed to assess sexual behaviours, and uptake and identify factors associated with the utilization of contraceptives among public secondary school adolescents in an urban setting, in Nigeria.

Materials and Methods

Study area

Ikeja is the capital city of Lagos state and one of the twenty local government areas in Lagos state, southwestern Nigeria with an estimated population of 411,228 inhabitants and the area comprising members of diverse ethnic affiliations. Ikeja LGA is a cosmopolitan and ultra-urban centre and has the presence of several banks, hotels, recreational spots, and institutions both publicly and privately owned. She hosts several markets which contribute immensely to the economy of the area with 32 primary schools, 13 junior secondary schools and 12 senior secondary schools.[25]

Study design

A descriptive cross-sectional study design was used.

Study population

The study was conducted in schools with day students. The study population comprised senior secondary school students from the twelve secondary schools in Ikeja Local Government Area with a total population of 8,304.[25] Eligible students who gave their consent to participate in the study were included in the study.

Sample size estimation

The sample size was determined using Leslie Fischer's formula for the calculation of sample size in populations of more than 10,000. ($n=z^2pq/d^2$). Where n was the estimated minimum sample size; z=level of significance at 95% confidence level (1.96); *p*= prevalence of modern contraceptive uptake= 0.52. In a previous study in Nigeria by Chima *et al* [26] among a similar population, the level of modern contraceptive uptake (*p*) was 52.0%.[26], d set at a level of precision of 0.05% and $q = 1 - p = 0.48$.

A conversion was made using the formula for the calculation of minimum sample size in populations <10,000 according to Chima *et al*.[26] With the target population of (8,304)[25] and anticipating a response rate of 90%, an adjustment of the sample size estimate was done to cover for non-response rate. Thus, the calculated sample size was 407 students. However, 417 questionnaires were distributed to accommodate incomplete responses.

Sampling technique

A multistage sampling technique was used for the study. In the first stage, simple random sampling and stratified sampling methods were used to select respondents according to their relative schools' populations.

The twelve public secondary schools in the Ikeja local government were all selected first and then stratified and a proportionate sampling technique was employed to determine the sample for students in the senior secondary schools. A simple random sampling technique was used to select respondents from the class register (which serves as the sampling frame) from each selected school. This was continued until all the eligible respondents were recruited and the sample size reached.

Data collection technique

Data collection was done by a self-administered structured questionnaire. All questions were written in the English language. Pre-testing was done on 42 students in another public secondary school outside the state by trained research assistants, months before the conduct of this study.

Furthermore, to determine the appropriateness, reliability and validity of the format and wording of the questionnaire as well as the time needed to fill them, the instruments were subjected to experts' review. Corrections were effected to address the objectives specifically before administering the questionnaire to the study participants.

The questionnaire had four sections to obtain data on the socio-demographic characteristics of the respondents; respondents' knowledge of sexual behaviour and contraceptive use; contraceptive utilization among respondents; and perception of contraceptives.

In the assessment of the knowledge, a scoring system was used. Knowledge was scored based on nine questions under the knowledge domain. After summing up all the scores, they were converted to percentages. Knowledge grade was assigned to each respondent based on their total percentage score. Knowledge was graded as poor (0-49.99%) and (50-100.0%) as good knowledge.

Data management and analysis

Descriptive and inferential analysis of the data was done using Statistical Package for Social Sciences (SPSS) Windows version 17.0. Chicago, United States SPSS Inc. Descriptive data was presented as simple frequencies and percentages. A test of statistical significance was carried out using Chi-square tests for proportions and Fischer's exact tests. A *P-value* < 0.05 was considered significant.

Ethical consideration

Ethical approval by the Lagos State University Teaching Hospital ethical committee was given to carry out the study in 2018. Written permission was sought and obtained from the principals of the twelve schools for all the selected participants. Written informed consent was taken from students who were more than 16 years of age and assent was gotten from the parents or legal guardians of participants less than 16 years. The study participants, parents or legal guardians were informed that they had the right to withdraw from the study. Confidentiality was assured by omitting the names of study participants and privacy was maintained while collecting the information.

Results

The mean age of 15.95±1.43 years and 70.3% of the respondents fell within the age bracket of 13 to 16 years. There were 238 (57.1%) males. Table 1, presented in the appendix, also shows that most respondents were in Senior Secondary School 2 (53.2%) with a greater proportion (74.1%) being Christians as well as those who live with their family members (89.7%). Most of them (58.3%) are living in an urban setting.

Awareness of all the different contraceptive methods was at 100% amongst all of the respondents with condom awareness being the highest at 64.5%. The sources of information of respondents were mass and social media (35.7%) followed by health workers (25.4%) with the least being parents (12.2%). Table 2

In Table 3, the majority (64.7%) of the respondents knew about contraceptives. While more than a third (39.1) of respondents believed that the contraceptive method can completely prevent pregnancy. Almost another third (30.2%) did not know. Most respondents (38.8%) didn't know the contraceptive methods suitable for college students, while about 12% chose condoms.

Based on the overall knowledge assessment, 62.4% of respondents have the level of knowledge of contraceptives as being fair while 2.9% have it as good knowledge from the scoring as shown in Figure 1 below.

As shown in Table 4, nearly half of respondents (48.9%) believed that both males and females were responsible for the uptake of contraception while some respondents (34.3%) believed the perception of chastity is important amongst the male and females. A majority (58.1%) of respondents didn't agree with premarital sex.

The majority of respondents (76.0%) had never engaged in sexual intercourse while of those who had engaged in sexual intercourse, 71.4% of them declined to respond to the question of when they had first sexual intercourse. One-fifth (20%) of those that responded to the question had their first sexual experience at age 16 years with more than half of them (55.1%) with the use of contraceptives. Sixty-one per cent of those with contraceptives (61%) used condoms.

Most (55.1%) of them gave parental disapproval as a reason during their first sexual intercourse, while about a third (30.6%) were ashamed. About one-third of them had had unintended pregnancy with their partner with most of them (83.3%) having had it once. Almost all (94.4%) used condoms in the latest unintended pregnancy, while half (50%) had had a medical abortion done as a way of dealing with their unwanted pregnancy. About more than a fifth (18.4%) of sexually active respondents sometimes used contraceptives regularly while fewer did so always (14.3%) with most (42.9%) responding that peer pressure influenced the choice for usage of contraceptives. Table 5

In Table 6, a statistically significant association was found between the age of respondents and the utilisation of contraception. (p=0.001)

Discussion

This study assessed sexual behaviour and use of modern contraceptives among adolescents in public secondary schools in Ikeja, Lagos state in Nigeria.

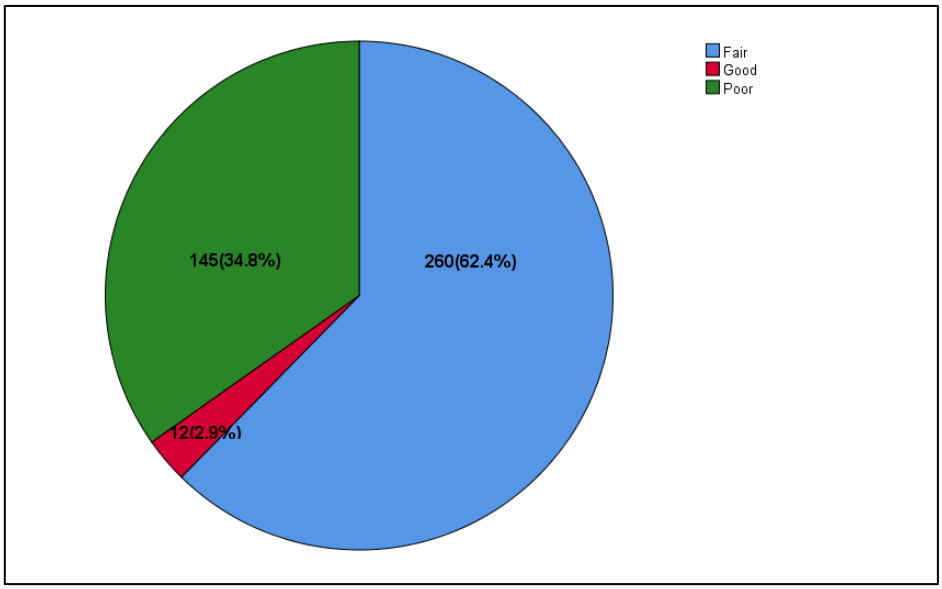

Figure 1:
Overall knowledge of Contraceptives

There were more male respondents (57.1%) than females (42.9%) and were found within the age bracket of 13 to 16 years. The age range was similar to what was found in another study with 8-19 years olds .[27] This age range fell within 10-19 years of age for adolescents as defined by WHO.[1] This age range posited that adolescents who are in a transition period in life may want to explore

sexually and engage in sporadic and unplanned actions.[26, 27,28]

Awareness of contraceptive methods was 100% with 64.5% among the respondents being aware of the condom as a method of contraception, however, respondents below 50% were aware of other contraceptive methods. Possibly, this high level of awareness was ascribed to the mass campaign on contraception and sexual education training given in schools.

These findings were in line with what was found in another study as regards awareness of contraceptive methods.[27] The source of information on contraception is also key to relaying the correct information to students, particularly the young ones. Most sources of information of respondents were mass and social media (35.7%) followed by health workers (25.4%) with sources from parents (12.2%). This finding was similar to what was obtained from studies in Tanzania and Botswana.[29,30] One of the objectives of this study as reinstated was to justifiably direct efforts toward disseminating information through reliable sources so that this set of age groups will not be misled with incorrect information. Furthermore, the majority of the respondents were aware of contracting HIV/AIDS through sexual intercourse (51.6%) and another quite appreciable proportion was aware of contracting other sexually transmitted diseases such as syphilis (18.9%) and gonorrhoea (7.4%). Surprisingly, the percentage of awareness of condoms as a method of contraception in this study was consistence with previous reports in which the main contraceptive options for adolescents were condoms followed by hormonal contraception.[8,9] However, except for male and female sterilization; all methods that are physiologically safe for adults were also mentioned to be physiologically safe for adolescents.[31]

This study observed that 2.9% of the respondents had a good knowledge of contraception using the scoring system; this finding was in contrast to what was found among secondary school students in Dar es Salaam which showed 75% of students with good knowledge of contraception.[32] In this study, more than 62.4% of respondents had a fair knowledge of contraception while 34.8% had poor knowledge of contraception. Another study done in Nigeria showed that a lack of knowledge on modern contraceptives was found amongst 13-19 years of age with only 5% of the girls reported to use oral contraceptives as a known family planning method.[33] It is not surprising to find out that most of the respondents in this study know what contraception is being used for considering the interaction of peers in schools, and homes and the influence of social media. Furthermore, most (64.7%) of the respondents understood contraception. Most respondents (38.8%) don't know the contraceptive methods suitable for college students, while about 12% chose male condoms and 5.8% chose female condoms. Earlier researchers had observed that prevention of unplanned adolescent pregnancies requires a desire to use contraceptives; a good contraceptive method, ability to obtain the contraceptive method and ability to use it, with any attempt to miss out on any one of it will result in contraceptive failure.[8] The negative societal and health personnel's attitude to young people visiting family planning clinics is a major negative influence on adolescents' utilization of contraceptives. It was further observed that most students would rather prefer to procure contraception from chemists rather than from health facilities due to stigma, discrimination and prolonged waiting hours.[9,33] There is a need for more clarity considering the very low percentage of the respondents with good knowledge of contraception and the different methods chosen by the students.

Some of the respondents 48.9%, believed that both males and females were responsible for the use of contraception while most respondents (34.3%) believed chastity was important for both males and females.

The majority of respondents (76.0%) had never engaged in sexual intercourse while a good number of those who had engaged in sexual intercourse (11.8%) had their first sexual experience at age 16 years (20%) with more than half of them (55.1%) using contraceptives at first intercourse. This was similar to the study done in Nepal where the use of contraceptives at first sexual intercourse was found in half of the young people.[34] Most of the sexually active respondents (42.9%) gave peer influence as a factor influencing their choice of usage of contraceptive and this is in contrast to findings among the Nepalese youths that stated that the use of a modern method of contraception was associated with religion.[34]

Previous studies reported conflicting messages about adolescent sexuality; the promotion of sexual involvement on one extreme and urging of chastity on the other makes adolescents feel guilty, uncertain or indecisive about contraception.[18,19] Globally, previous studies on adolescent sexual behaviour show their premarital sexual encounters are generally unplanned, infrequent and sporadic.[17] This pattern predisposes them to an unplanned pregnancy. Unplanned adolescent pregnancy is associated with unsafe abortion a cause of 13% of global maternal mortality.[19] This is more dangerous for adolescents as they tend to seek abortion later in pregnancy.[20] Meeting the contraceptive needs of these adolescents could prevent this problem. According to previous studies, by the age of 15 years, most adolescent girls have had their first sexual experience.[22] Attributed factors to this may be due to the abridged relationships between adolescents and their caregivers in which they scout for wanting to be independent. This predisposes them to unplanned pregnancies and STIs. Though many adolescent girls in Nigeria wish to avoid pregnancy but are not using contraceptives to make this possible; as a result, 47% of births from these adolescents are unplanned.[33] Adolescents' unplanned pregnancies are one of the leading causes of school drop-out among Nigerian adolescent girls[33] and this is associated with high Maternal Mortality Rates (MMR) from pregnancy and delivery complications adding to the MMR in Nigeria.[33] This is prompted by the unmet need for contraception among this sub-population. There is, therefore, a need to focus on adolescent modern contraceptive utilization in Nigeria.

This study observed a non-significant difference in the association between overall knowledge of contraceptives and socio-demographic status, awareness, and attitudes of the respondents as well as utilization of contraceptives by the respondents.

Conclusion

The awareness of contraception among adolescents in public secondary schools is high but despite this, the utilization is low. The identified factors affecting their use of contraception need to be further explored and addressed holistically. All these findings are a driver of change and call for urgent intervention by all the stakeholders to put in place sexual health services that would promote sexual behaviour and the use of contraception among secondary school students in the state.

Acknowledgement

We thank our respondents who contributed to the study and their various schools' management for their permission.

Competing Interest

The authors declare there is no competing interest.

Source of funding

Funding was done by the authors.

References

1. Adolescence**:** A period needing special attention. Health for the World's adolescents report. World Health Organisation, Geneva 2017. Journal of Adolescent Health 2017;60: 758-759.
2. **Curtis AC.** Definition of adolescence. *J Adolesc family health* 2015; 7:1-6.
3. **Imaledo J, Peter-Kio O, Asuquo E**. Pattern of Risky Sexual Behavior and

Associated factors among undergraduate students of the University of Port Harcourt, River State Nigeria. *Pan Afr Med J* 2012; 12:1-8.

4. **Newcomb MD, Huba GJ, Bentler PM.** Determinants of sexual and dating behaviours among adolescents**. J Pers Soc Psychol** 1986;50: 428–438.
5. **Sweya MN, Msuya SE, Mahande MJ, Manongi R** Contraceptive knowledge, sexual behavior World Health Organisation. Unsafe abortion: Global and regional estimates on the incidence of unsafe abortion and associated mortality in 2003. Geneva: WHO; 2007 and factors associated with contraceptive use among female undergraduate university students in Kilimanjaro region in Tanzania. *Adolesc Health Med Ther*. 2016;7: 109–115.
6. **Martinez G, Abma JC.** Sexual activity, contraceptive use, and childbearing of teenagers aged 15-19 in the United States. *NCHS Data Brief*. 2015; 209:1–8.
7. **Csapo E;** 2002. Contraception. Retrieved from Encyclopedia of Nursing and allied health: http//: www.healthline.com/galecontent/contraception_4
8. **Apter D**. Adolescent contraception. *Endocr Dev2012*;22: 287-301.
9. **Cleland J, Ali M, Shah I.** Trends in protective behavior among single vs. married young women in Sub Saharan Africa. *Reprod health matters* 2006;14: 17-22.
10. **Godia P, Olenja J, Lavussa LJ, et al.** Sexual reproductive health service provision to young people in Kenya; health service providers' experiences. *BMC Health Service Research* 2013;13: 476.
11. **Glasier S**. Sexual and reproductive health: a matter of life and death. *Lancet* 2006;368: 1595-1607.
12. **United Nations Fund for Population Activities**. Sexual and reproductive health for all: reducing poverty, advancing development and protecting human rights. New York: *UNFPA;* 2010;2: 12-18.
13. **United Nations International Children's Emergency Fund.** Progress for children: a report card for adolescents. New York: *UNICEF* 2012.
14. **World Health Organisation**. Contraception: Issues in adolescent health & development. Geneva: *WHO; 2016*.
15. **World Health Organisation**. (2014). Maternal, newborn, child and adolescent health. Retrieved from adolescent pregnancy. Geneva, World Health Organisation; 2014. Available from: http://www.who.int/maternal_child_adolescent/topics/maternal/adolescent_pregnancy/en/
16. **International Planned Parenthood Federation**. Effective strategies in sexual and reproductive health. N*ew York:* IPPF/WHR, 2012.
17. **Oindo M.** (2002). Contraception and sexuality among youths in Kisumu Kenya. *Afr Health Sci* 2002;2: 33-39.
18. **Brown J, Tucker C, Ladin K**. Mass media as a sexual super peer for early maturing girls. *J Adolesc Health2005*;36: 420-427.
19. **Blanc A.** Monitoring contraceptive continuation links to fertility outcomes and quality of care. *Studies in family planning* 2009;33: 127-140.
20. **Nyalali K, Maternowska C, Brown H, et al**. Unintended pregnancy among teenagers in Arusha and Zanzibar, Tanzania. A situation analysis. *Marie Stopes International* 2013.
21. **Woods J, Shew M, Tu W, et al**. Patterns of oral contraceptives, pill taking and condom use among adolescent's contraceptive pill users. *J adolesc health* 2006;39: 381-387.
22. **Otoide V, Orosangeb F, Okonofua F**. Why Nigerian adolescents seek abortion rather than contraception: Evidence from focused group discussions. *Int family planning persp2001*;27: 77-81.
23. **Onyango M.** Improving reproductive health programmes in Africa. Nairobi: Centre for the study of adolescents 2003; 2:5.

24. **Bankole A, Malarcher S.** Removing barriers to adolescents' access to contraceptives information and services. *Studies in* FP2010;41: 261-274.
25. National Population Commission Federal Republic of Nigeria Abuja Nigeria. *Nigeria Demographic and Health Survey*. NPC, Abuja: 2008.
26. **Chima UC, Lawoyin TO, Ilika AL, Nnebue CC.** Contraceptive knowledge and practice among senior secondary schools students in military barracks in Nigeria. *Niger J Clin Pract* 2016;19: 182-189.
27. **Mehra D, Agardh A, Petterson KO, Östergren P.** Glob Health Action. 2012 5:18599Non-use of contraception: determinants among Ugandan university students 2018. *Glob Health Action*. 2012 5:18599
28. **Emmanuel M, Andrea S, John E.** Contraceptive practices in Nigeria. *Afr J Repro Health* 2010;10: 9-22.
29. **Sweya MN, Msuya SE, Mahande MJ, Manongi R**. Contraceptive knowledge, sexual behavior, and factors associated with contraceptive use among female undergraduate university students in Kilimanjaro region in Tanzania 2018. Adolesc *Health Med Ther*. 2016 3:109–115.
30. **Hoque ME, Ntsipe T, M Mokgatle-Nthabu.** Awareness and practices of contraceptive use among university students in Botswana 2018. *Sahara* J. 2013 10:83–88.
31. **Sujita KK, Ananya C, and Abhishek PS. J** Hum Reprod Sci. 2015; 892):70-74.
32. **Nkata H, Teixeira R, Barros H**. A scoping review on sexual and reproductive health behaviors among Tanzania Adolescents. *Public Health Review*. 2019; 40: 4-6.
33. **Orji E, Esimai O.** Sexual behaviour and contraceptive use among secondary school students in Ilesha, South West Nigeria. *J Obstet Gynaecol*. 2005; 25(3):269-272.
34. **Tamang L, Raynes-Greenow C, McGeechan K, Black K.** Factors associated with contraceptive use among sexually active Nepalese youths in the Kathmandu valley. *Contraception& Reproductive Medicine* 2017; 2: 13.

Appendix 1

Table 1:
Socio-Demographics and Characteristics of Respondents

Variable	Frequency (n=417)	Percentage
Gender		
Male	238	57.1
Female	179	42.9
Age (Years)		
Less than 13	1	0.2
13 - 16	293	70.3
17 Above	123	29.5
Mean ±SD	15.95±1.43	
Class		
SSS1	191	45.8
SSS2	222	53.2
SSS3	4	1.0
Resident		
Rural	100	23.9
Urban	243	58.3
Semi-Urban	50	12.0
No Response	24	5.8
Live with family members		
Yes	374	89.7
No	39	9.4
No Response	4	1.0
Religion		
Islam	106	25.4
Christianity	309	74.1
Traditional	2	0.5

Table 2:
Awareness of Modern Contraceptives and Sexually Transmitted Diseases

Variable	Frequency (n=417)	Percentage
Are you Aware of Method of Contraceptives?	417	100%
Different methods (multiple responses)		
Pills	151	36.2
Condoms	269	64.5
Injections	65	15.6
Implants	29	7.0
Intrauterine devices	21	5.0
Vasectomy	12	2.9
Tubal ligation	11	2.6
Others	1	0.2
Source of Information on Contraceptives (multiple responses)		
Mass and Social Media	149	35.7
Health worker	106	25.4
Peers	60	14.4
Parents	51	12.2
Teacher	68	16.3
Books and Magazine	62	14.9
Others specify	2	0
Type of sexually transmitted diseases you are aware of?		
Syphilis	79	18.9
AIDS	215	51.6
Non-gonococcal urethritis	8	1.9
Gonorrhoea	31	7.4
Condyloma acuminatum	2	0.5
Genital herpes	1	0.2
Hepatitis B	3	0.7
None of the above	2	0.5
Don't know at all	10	2.4
No Response	66	15.8

Table 3:
Knowledge of Modern Contraceptives

Variable	Frequency (n=417)	Percentage
Understand the term Contraceptive as a drug that prevents a woman from becoming pregnant	270	64.7
Understand the term contraceptive as a medicine used to do family planning.	100	24.0
Something to protect someone from pregnancy.	234	56.1
Understand that contraceptive methods can completely prevent pregnancy.		
Yes	163	39.1
No	103	24.7
Don't know	126	30.2
No Response.	25	6
Mentioning contraceptive methods suitable for college students.		
Rhythm method	14	3.3
Intrauterine device	20	4.8
Oral contraceptive pills	30	7.2
Norplant	7	1.7
Withdrawal	39	9.4
Male condom	50	12.0
Female condom	24	5.8
Contraceptive vaginal ring	24	5.8
Don't know at all	162	38.8
No Response	47	11.3

Table 4:

Attitude to Modern Contraceptives

Variable	Frequency (n=417)	Percentage
Who is responsible for uptake of contraception?	45	10.8
Man	145	34.8
Woman	204	48.9
Both of them have responsibility	23	5.5
No Response		
Perception about "Chastity"		
Important for females but not important for male	42	10.1
Important for males but not important for female	94	22.5
It is important for both males and female	143	34.3
It is not important for both males and female	46	11.0
No Response	92	22.1
Attitude towards premarital sexual intercourse		
Don't agree with premarital sex	242	58.0
If I have a boyfriend/girlfriend, I can accept	36	8.6
If I am ready to get married to him/her, I can accept	60	14.4
If I have emotions for him/her, I can accept	10	2.4
No Response	69	16.5

Table 5:
Respondent's Contraceptive Utilization

Variable	Frequency (n=417)	Percentage
Ever engaged in sexual intercourse		
Yes	49	11.8
No	317	76.0
No Response	51	12.2
Age of sexual intercourse	n=49	
16	10	20.0
17	2	4.1
18	2	4.1
No Response	35	71.4
Used contraceptive at first intercourse	n=49	
Yes	27	55.1
No	22	44.9
Contraceptive ever used	n=49	
Pills	3	6.1
Condoms	30	61.0
Injections	3	6.1
Implants	2	4.1
Intrauterine devices	1	2.0
Vasectomy	1	2.0
Tubal ligation	1	0.2
Others specify (Local Ring)	2	4.1
Reason for not using contraceptives	n=49	
Parental disapproval	27	55.1
Partners Disapproval	12	24.5
Expensive	10	20.4
Scarce	11	22.5
Ashamed	16	32.7
Not knowing where to get it	11	22.5
Not knowing how to use it	15	30.6
Unplanned sex	10	20.4
Side effects	9	18.4
Religious opposition	10	20.4
Others(undisclosed)	2	4.1
Had unintended pregnancy with partner	n=49	
Yes	18	36.7
No	31	63.3
Number of unintended pregnancies	n=18	
Once	15	83.3
Twice	2	11.1
Thrice	1	5.6
Method of contraception used in the latest unintended pregnancy (multiple responses)	n=18	
Condom	17	94.4
Oral contraception pills	7	38.9
Rhythm method	4	22.2
Withdrawal method	4	22.2
Vaginal	2	11.1
Douching	3	16.7
Intrauterine device	1	5.6
No method	11	61.1

Table 5 (continued):

Variable	Frequency (n=417)	Percentage
How latest unintended pregnancy was dealt with	n=18	
Surgical abortion	3	16.7
Medical abortion	9	50.0
Preparing to give birth to a child	3	16.7
Didn't know how to deal with it	3	16.7
Regular use of contraceptives during intercourse	n=49	
Always	7	14.3
Often	7	14.3
Sometimes	9	18.4
Occasionally	8	16.3
Never	17	34.7
Choice for usage of contraceptives influenced by	n=49	
Cultural Norms	9	18.4
Religious norms	15	30.6
Peer pressure	21	42.9
Accessibility	9	18.4
Affordability	5	10.2
Gender	11	22.5

Table 6:
Association between Contraception's Utilisation and Socio-Demographic Characteristics

	Contraception's Utilisations			
	Yes (n=27)	**No (n=39)**	**X^2**	**P value**
Age(years)				
<13	0(0.0)	0(0.0)	22.055	0.001
13-16	9(33.30)	24(61.54)		
17 and Above	18(66.70)	15(38.46)		
Gender				
Male	15(55.56)	25(64.11)	0.875	0.646
Female	12(44.44)	14(35.89)		
Class				
SSS 1	9(33.33)	17(43.59)	5.318	0.256
SSS 2	17(62.96)	21(53.85)		
SSS 3	1(3.71)	1(2.56)		
Settlement				
Rural	9(33.33)	10(25.64)	7.915	0.244
Urban	14(51.85)	27(69.24)		
Semi-Urban	4(14.82)	2(5.12)		
Religion				
Islam	5(18.52)	9(23.08)	7.915	0.131
Christianity	21(71.78)	30(76.92)		
Traditional	1(3.70)	0(0.0)		
*p< 0.05				