Original Article

Sexual Activity and Contraceptive use among University Female Undergraduates in Makurdi, North-Central Nigeria

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ABSTRACT

High sexual activity with low contraceptive use among young women could give rise to complications such as unwanted pregnancies and sexually transmitted infections. This study was aimed at determining sexual activities and contraceptive usage among female undergraduate students. It was a cross-sectional study using pretested self-administered questionnaires to collect data on socio-demographic variables, sexual activities and contraceptive use. Out of the four hundred and thirty-one (431) students studied, three hundred and four (70.5%) were sexually active. The average age of sexual debut was 19.5 years. One hundred and twenty-seven (41.8%) had more than one sexual partner. Money was the reason for sex in more than one- third (37.4%). Contraceptive awareness and usage among the respondents was 414(96.1%) and 255(85.0%) respectively. The male condom was the commonest 160(52.4%) contraceptives used. Majority 285(65.9%) of the respondents believed contraceptive use could prevent pregnancy and sexually transmitted infections. There was a significant relationship between awareness of contraception and level of study (0.003). Those who were sexually active were more likely to use a contraceptive method (<0.000001) and contraceptive method users were less likely to have an STI (0.000003). The study showed a high level of sexual activity, contraceptive knowledge and usage. Girl child education, provision and promotion of utilization of reproductive health services should be sustained to safeguard the sexual health of young women.

Keywords*: Contraceptives, Reproductive services, Sexual practices, STI, Undergraduates.*

INTRODUCTION

More than 90% of the young men and women in the world reside in less developed countries. Reproductive health issues involving these category of persons have been of great public health concern.[1,2] The adolescence and youth age group which is 10-19 years and 10- 24 years respectively are the most energetic period of human life, typically characterized by hazardous activities including sexual practices.[1,2,3] Beginning at puberty, psychosocial, endocrine and biological changes that occur in their bodies create the tendency for this phenomenon. Most of the female University undergraduate students belong to this age group.

These young people are vulnerable to premarital, often multiple, short term sexual relationships without adequate protection against pregnancy and sexually transmitted diseases.[1, 4, 5] They do not have the needed knowledge on sexuality issues which is required for a healthy lifestyle and reduction in abuse, teenage unwanted pregnancy, unsafe abortion, HIV/AIDS and other sexually transmitted diseases.[4,6,7]

Reports from previous studies in Nigeria suggests increasing sexual activity among female University undergraduates. There is also progressive decrease in age at initiation of sex. [1,7] Some of the reasons for this trend include high poverty level, adoption of western norm/values, lack of parental control, mass media, urbanization and tourism.[1,6,8]

The contraceptive use rate for all methods in Nigeria is 17%. [9] This picture among the general population is not significantly different from reported rates among the young and adolescent female undergraduates in Nigerian Universities. Ahmed *et al* (2017) reported 15.6% in Kano. However, Akinsoji *et al* (2015) reported 34.4% in Ekiti. [1,10]A study done in Uganda reported 36.6 %. [11] Despite the high awareness of modern methods of contraceptives among youths in Nigeria, the rate of utilization is very low.

The low utilization rate of contraceptive is believed to be one of the reasons for high rate of unintended pregnancies contributing to a maternal mortality ratio (MMR) of 545/100, 000 live births that is among the highest in the world. [8] Though there are regional variations of MMR of as low as 165/100,000 live births in south west and as high as 1,549/100,000 live births in north east.[12,13]

It is therefore pertinent to conduct a survey of this nature in institutions of higher learning in order to ascertain the true picture of the situation in order to formulate appropriate policies and recommendations that would promote the sexual health of these young people.[1] This study which is the first in our institution therefore, is aimed at appraising the sexual activities and contraceptive usage among the female undergraduate students of Benue State University, Makurdi, North -Central Nigeria.

MATERIALS AND METHODS

Study setting

This study was conducted at the Benue State University, North-Central Nigeria from September to November, 2018. The institution is a state government owned University with eight faculties and a College of Health sciences.

Study Population

This included female undergraduate students of the Institution from 100 Level to final year in all faculties including the College of Health Sciences to ensure coverage of every part of the University. Bias in selection was avoided by using simple random sampling.

Study design

This was descriptive cross sectional study design. A stratified sampling method was used to obtain study sample from the faculties. An average of sixty students in every faculty was subsequently selected.

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Inclusion and exclusion criteria

The objectives were explained to them and an informed consent, obtained before they filled the questionnaire. Those who did not consent were excluded. Those who accepted were included.

Methodology

Using contraceptive prevalence rate of 35% among female undergraduates in Nigeria as reported by Akinsoji et al (2015)[1], a sample size of 350 was obtained from Fisher's formula. $N=Z^2\ pq/d^2$: N= minimum sample size; Z= standard normal deviate corresponding to level of significance at 95%=1.96, p= 0.35, q=1-p (0.65), and d =level of precision, set at 5%. Provision for attrition rate was made and eventually a total of 431 respondents were studied.

A pre-tested semi-structured self-administered questionnaire was used to collect data on the students' socio-demographic characteristics, age of sexual debut, awareness of sexually transmitted infection, sexual and contraceptive practices, number of sexual partners, etc. The assurance of anonymity and confidentiality was stated as sexual behavior has been identified as a sensitive issue.

Data entry and analysis

SPSS version 25.0 software package was used for data entry and analysis. Chi-square test was used for test of associations and statistical significance was set at p-values <0.05 at 95% confidence interval.

RESULTS

Four hundred and thirty-one (431) respondents completed the questionnaire. As high as 360(83.5%) were single, 62(14.4%) married and 9(2.1%) divorced. Almost one third 133(30.9%) of respondents were in their third year of study in the University. Majority 386(89.6%) were Christians ***(See table 1).*** Three hundred and four (70.5%) students were sexually active as at the time of the study. The average age of sexual debut was 19.5 years. One hundred and twenty-seven (41.8%) had more than one sexual partner, while 177(58.2%) had only one sexual partner ***(See table***

2). When asked the reasons behind the sexual activities among the students, 163(37.8%) of respondents believed it was due to greed for money while 157(36.4%) believed it was due to financial problems, 48(11.1%) believed it was due to peer group pressure, 42(9.7%) said immoral attitude and 21(4.9%) chose to be silent. Contraceptive awareness was 414(96.1%). Among the sexually active respondents (304), 255(85.5%) had used contraceptives before ***(See table 3)*** and most 160 (52.4%) of them used condom. This was followed by oral pills 72(23.7%), withdrawal 40 (13.0%), Injectable 13(4.2%), IUCD 7(2.3%) and others 13(4.2%) ***(See figure 1)***.

Students who were in higher year of study were more likely to be aware of contraception than those in lower years of study, p =0.003 ***(See table 4).***

A high proportion of the students 416 (96.5%) were aware of sexually transmitted infections (STIs). Most 342 (79.3%) of the respondents were aware of Human immunodeficiency virus/Acquired Immunodeficiency Syndrome (HIV/AIDS) as a form of STI, others were; gonorrhea, syphilis and hepatitis B. Sixty-three (20.7%) of the sexually active respondents had a sexually transmitted infection in the past, which also represents 14.6% of all 431 respondents ***(See table 5)***. Two third, 285(65.9%) of respondents believed contraceptive use could prevent pregnancy and STIs. Most of the respondent who admitted that they were sexually active were more likely to have used contraceptive (<0.000001); similarly, those who did not have an STI were more likely to have used a contraceptive method (0.000003***) (See table 6)***.

Table 1: Socio demographic characteristics of respondents

Variable	Frequency (N=431)	Percentage (%)
Age range (years)		
15-19	44	10.2
20-24	249	57.8
25-29	100	23.2
30-34	28	6.5
≥35	10	2.3
Marital status		
Single	360	83.5
Married	62	14.4
Divorced	9	2.1
Year of study		
100	42	9.7
200	93	21.6
300	133	30.9
400	130	30.2
500-600	33	7.7
Religion		
Christianity	386	89.6
Islam	31	7.2
Traditional	6	1.4
Others	8	1.8

Table 2: The age of sexual debut and number of sexual partners among the respondents

Variable	Frequency (N=304)	Percentage (%)
Age (years)		
≤14	8	2.6
15-19	151	49.8
20-24	119	39.1
25-29	21	6.9
30-34	4	1.3
≥35	1	0.3
Number of sexual partners		
1	177	58.2
≥2	127	48.2

**Sexually exposed respondents*

Table 3: Awareness and Use of contraceptives among respondents

Variables	Frequency	Percentage (%)
Ever heard of contraceptive		
Yes	414	96.1
No	17	03.9
Total	**431**	**100.0**
Ever used contraceptives		
Yes	255	85.0
No	49	15.0
Total	**304***	**100**

****Sexually exposed respondents***

Table 4: Association between year of study of respondent and contraceptive usage

Variable	Contraceptive Awareness		Total	X^2	p-value
Year	**yes**	**No**			
100	36	6	42	16.044	0.003
200	89	4	93		
300	129	4	133		
400	129	1	130		
500-600	31	2	33		
Total	**414**	**17**	**431**		

Table 5: Awareness and experience of sexually transmitted Disease among respondents

Variable	Frequency (431)	Percentage (100%)
Ever heard of STD		
Yes	416	96.5
No	15	3.5
Ever had a STD		
Yes	63	14.6
No	368	85.4

Table 6: Association between sexual exposure, previous STD and Contraceptive use

Variable	Contraceptive use		Total	Chi-Square (x^2)	P Value
	Yes	No			
Sexual Exposure					
Yes	255	49	304	97.11	<0.000001
No	45	82	127		
Had STD before					
Yes	60	3	63	21.52	0.000003
No	240	128	368		
Total	**300**	**131**	**431**		

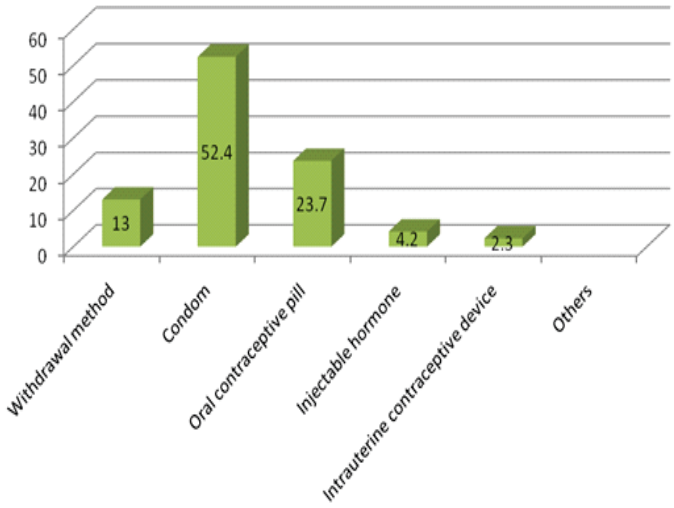

Fig 1: Types of contraceptives used by sexually active respondents (n=304)

DISCUSSION

Those who were sexually active were as many as 70.5%. This is higher than the report of 64.8% in Tanzania. [5] as well as, the reported 60.8% in Ekiti and 52.0% in Port-Harcourt, both in Southern Nigeria.[1,14] This observation may not be unconnected with the negative impact of social media, westernization of the African culture, access to pornographic materials and increased liberty while in school. [5]

The average age at initiation of sex was 19.5 years. Studies in different parts of the world have demonstrated similar findings. Reports of 17.3, 17.6 and 18.8 years have been documented in South Africa, Ireland and Albania respectively; while 15% was reported in Ogbomosho south western Nigeria. [1, 15] Age at which sexual debut occurs is decreasing all over the world especially in Africa. [16, 17] Monetary gains has become an increasingly common determinant of this social behavior as was demonstrated in this study. This can be attributed to the high rate of poverty and lack of women empowerment in our continent. Peer pressure, immoral activities and sex for grades are other reasons. [18, 19] It will be of benefit to encourage parents to engage their children through useful sexuality discussion to empower them against sexual exploitation, and risky sexual behaviours. [20]

About 41.8% of sexually exposed respondent had two or more sexual partner which is similar to the reports of multiple sexual partners among these group of people in several other studies. [1,21,22] In some studies this risky sexual behavior is found to be associated with smoking, alcohol abuse and illicit drugs intake. [14, 23] However evidence is beginning to show that the trend is changing gradually. Multiple sexual partnering (MSP) appears to be on the decline not only in Nigeria but also in Europe and America.[24] It is most likely that various campaigns aimed at promoting a healthy sexual lifestyle devoid of STDs such as HIV/AIDS could have made a positive impact in this direction.

The knowledge and ever use of contraceptive was also high. It is important to mention that high contraceptive usage observed in the study may have been as a result of the high level of education. Those who knew at least one method of contraception were 96.1%. The male condom and oral contraceptive pills were the most popular 52.4% and 23.7%, respectively (see Figure 1). This is usually the common finding in studies of contraceptive awareness among young people in our universities.[5,7,8,16,25]

The popularity of the male condom may not be unconnected with its social marketing in; media, newspapers, radio and hospital facilities for the prevention of both STDs and unwanted pregnancy. [26, 27] Its availability and accessibility at shops, pharmacies, schools, hotels, restaurants and Universities makes it easier for usage. [28] On the other hand, several studies reported lack of consistency in usage of contraceptives among these young people which they attributed to some level of misconceptions, cost, fear of side effects, poor access to contraception and spontaneity of sexual activities. [29-31] It is hoped that, the ongoing research work on modern methods of contraceptives will eventually address the issue of side effects and other concerns. Similarly, with continuous education and administration of the methods by experts, some of the myths about contraceptive usage will be eliminated.

The study find a high proportion of the respondents (96.5%) who were aware of STIs which is similar to other reports. [22] When asked to identify a preventive method for STIs, majority of them chose abstinence, others chose condom

and surprisingly some believed that oral contraceptive would prevent against STIs. There is every need for health workers to sustain campaigns, workshops and conferences targeting not only schools of advance learning but primary and secondary institutions so as to disseminate information on reproductive health.

Statistically, our study found that those who were in higher levels of study were more aware of contraceptive (x^2=16.044, p=0.003). This finding is similar to that of other researchers. [32] This is so probably due to the fact that, the higher the students progress academically in school, the more enlightened and knowledgeable they become hence increasing their chances of knowing much about contraception.[32]. Thus, the role of education in the fight against risky sexual behaviours is clearly demonstrated in this study.

Similarly, the study has demonstrated condom usage was protective against STDs (x^2=27.696, p <0.001). This is a boost to the health education campaigns aimed at the prevention of STDs. [32] Efforts to sustain availability, accessibility and affordability of the commodity should be enhanced. However, encouraging abstinence, faithfulness of partners to each other and good moral standards generally needs to be sustained.

CONCLUSION

The study showed sexual activity, contraceptive knowledge and usage was high. There was an association between contraceptive awareness and academic level as well as usage and protection against STD. Girl child education, provision and promotion of utilization of reproductive health services should be sustained to safeguard the sexual health of young women.

Recommendations

1. More advocacies in provision and enhancement of utilization of sexual and reproductive health services among the youths in tertiary institutions of learning.
2. Every university should have a youth friendly center equipped and manned by well-trained reproductive health expert including trained counsellors with the requisite competence in provision of sex education. And access to services should be unrestricted.
3. Sex education curriculum should be incorporated and taught in our schools.

Limitation of the study: Although contraceptive usage was high; the current, correct and consistent use of the contraceptive methods was not tested for. This may have accounted for the very high contraceptive use rate. Again, the impression of STDs was from history volunteered by the students and not confirmed by laboratory test by the researchers themselves hence this could be a subjective assessment.

Acknowledgment

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Ethical Consideration: The ethics committee of the Benue State University Teaching Hospital gave approval for the study.

Conflict of Interest: The authors have no conflict of interest to declare.

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