



ASSESSMENT OF SEXUAL KNOWLEDGE, PERCEPTION AND PRACTICES AMONG SECONDARY SCHOOL ADOLESCENTS IN RURAL COMMUNITY, NIGERIA

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ABSTRACT

Background: Adolescence is characterized by experimentation into sexual activities. When adolescents leave home to reside in boarding secondary schools, peer pressure can result in voluntary and involuntary sexual activity even when they don't know about its immediate and long term health effects. This survey aimed at assessing background sexuality knowledge, perception and practices of adolescents in boarding secondary schools in a rural community, in Plateau State.

Methods: A cross-sectional study of 1019 secondary school students sampled using proportionate sampling technique from three rural schools in Plateau State. Data obtained from them using self-administered questionnaires, were analyzed using EPI INFO version 3.5.3 and STATA 13. Chi square test and Multiple Logistic Regression were the statistical tests used and the p-value was set at $p \leq 0.05$.

Results: Majority of the students (57.7%) had good sexuality knowledge although 89.1% of them felt confident to refuse a sexual advance. There was a significant relationship between their sex and level of confidence. A high proportion of respondents (40.5%) were sexually active and there was an association between their sex and age of onset, and whether first sexual act was voluntary or not. The odds of an adolescent being sexually active are six times as likely if aged between 19-21 years; and seven times as likely, if lacking self-confidence.

Conclusion: A high proportion of the students had good sexuality knowledge and was sexually active. There is need for proper sexuality education and life skills trainings from reliable sources for school-aged adolescents.

Key Words: Adolescence, Knowledge, Sexual activity

INTRODUCTION

In 2015, about 85% young people, lived in developing countries.¹ In Nigeria, about 32% of her population was made up of young people, aged between 10 and 24 years.^{1,2} Adolescence is the span of time between childhood and adulthood i.e. 10 to 19 years of age. It is associated with the attainment

of menarche and onset of 'wet dreams'.¹ The age at which this occurs in Nigerian adolescents is between 12-14 years of age.¹ Adolescence is often characterized by curiosity and experimentation into adult social activities which include sexual activities, alcohol consumption and cigarette smoking. Often, adolescents in Nigeria, do not have

prior knowledge of the consequences of these activities and in some instances are forced into doing them.² These sexual activities have both immediate and long lasting health effects on the lives of these adolescents and their families which include loss of concentration on their academic pursuits, unplanned pregnancies and contagion with Sexually Transmitted Infections (STIs), including HIV/AIDS.^{2,3} It is therefore important for adolescents to be given the right information about their sexuality early enough to enable them make informed choices about sexual practices, before they are faced with tough decisions about sexual practices.

Peer pressure sets in as adolescents seek to achieve a balance between opinions of their friends and people of the same age group with them; most of which are often conflicting to opinions of theirs, family members, teachers and religious leaders. Both of these opinions tend to significantly influence their sexual knowledge, perception and behaviors, right into adult life. There are however, many social factors around their personality and environment they are exposed to, which play vital role in their sexual perception and practice that may be beyond their control.⁴ These include the family setting, parents' social status and hormonal changes associated with puberty.^{3,4}

A study done in Port Harcourt among undergraduates showed that for those who were sexually active, their first sexual intercourse was between the ages of 5 and 19 years; during their primary or secondary school level of education.² Furthermore, when adolescents leave the supervision of parents and have to reside in boarding houses for secondary education, there is an increase in the chances of experimenting in risky sexual behavior. This study therefore set out to assess the sexual knowledge,

perception and activities among adolescents in boarding secondary schools in a rural community in Plateau State of Nigeria.

Findings from a study done among 714 junior secondary school students in a rural setting showed that over half of the studied subjects scored above average when their reproductive knowledge was assessed. It further showed that their sources of information were the social media and their schools.⁵ Other researchers who compared the risky sexual activities between urban and rural adolescents found out that those living in rural areas were more likely to be sexually active (64.9% and 44.1% respectively; $p < 0.001$) and to have multiple sexual partners (29.5% and 20.4% respectively; $p = 0.04$) than those living in urban settings.⁶

METHODOLOGY

The study was carried out in Gindiri community, Mangu Local Government Area (LGA) of Plateau State. Plateau State is located in the Central zone of Nigeria. Mangu LGA has quite a number of Government and Mission owned secondary and tertiary institutions located within its small land mass. The indigenous populations are mainly Mwanghavul and Pyem by tribes and are mainly traders. The educational institutions (some over 60 years old) and the enormous farming and trading activities within the LGA, there are also other Nigerians residing in the community.

Most of the boarding secondary schools in Mangu are Mission schools and had an average student population of eight hundred at the time of the study. They are mostly co-educational in nature although a few have separate schools for boys and girls. The schools selected are not located in the township and the students come from all over Plateau State with a few from neighboring States. The study population consisted of both senior and junior secondary school

students in three privately owned schools in a rural community of Plateau state, North-Central Nigeria. Only schools whose Principal or Vice Principal gave a verbal, informed permission for the study were included into the study. Only students aged 10-19 years who gave verbal and written informed consent, were included into the study.

The study design was a descriptive cross-sectional study and the minimum sample size (for each school) was determined using the minimum sample size formula.⁷ Therefore, the minimum number of students sampled from each school was 239. The sampling technique applied to sample the students was the multistage sampling technique. From a list of 14 rural LGAs in Plateau state, Mangu was sampled using Simple Random sampling technique by balloting. From a list of the 15 boarding secondary schools in Mangu LGA, three were selected using Simple Random sampling technique by balloting. Proportionate sampling technique was used to sample the students recruited into the study because each of the schools had different numbers of students with the junior classes having more students than the senior classes. A total of 1019 students from the six classes in each school of the three selected schools were studied. Self-administered questionnaires were used to collect data from the students. Data were analyzed using EPI INFO version 3.5.3 and Stata 13. The relationships between knowledge, perception, sexual activity and sex or age of respondents, were assessed using Chi-square test. Multiple logistic regressions were also done to assess the predictors to being sexually active. A p-value of ≤ 0.05 was considered statistically significant.

Written and verbal informed consents were obtained from participants while the school administrators stood in as guardians to give verbal informed

consent for the students to participate in the study. To ensure confidentiality each student who agreed to participate had no personal identification and was required to drop completed questionnaires privately at a designated location.

RESULTS

A total of 1200 questionnaires were distributed but only 1019 were returned fully and properly filled in, giving a response rate of 84.9%. Table 1 shows that a little more than half (57.7%) of the students have good knowledge on sexuality. The relationship between their sex and level of knowledge on sexuality was statistically significant ($p= 0.000\dots$). The commonest (31.7%) source of information on sexuality was their family members.

Table 1: Graded Knowledge scores and major source of Sexuality information (n=1019)

Variable	Male	Female	Freq	%	X ²	P-value
Level of knowledge						
Good	279	309	588	57.7	19.43	0.000...
Fair	218	179	397	39.0		
Poor	6	28	34	3.3		
Major source of information						
Family member	169	154	323	31.7	33.05	0.0001
Friends	151	129	280	27.5		
Science teacher	145	130	275	26.9		
Others	38	103	141	13.9		

*Others = Room mate, Fellowship, neighbour

In Table 2, 89.1% of the students felt they could refuse a sexual advance if they were not interested, and 42.9% felt strongly confident to do so. Only 36.4% perceived they were under any form of sexual pressure at the time of the study. There was a statistically significant relationship between their sex and level of confidence ($p= 0.000\dots$).

Table 2: Perception of respondents towards sexual peer pressure (n=1019)

Variable	Males	Females	Freq	%	X ²	P-value
Can you say “no” to Sexual advance if not interested?						
Yes	443	465	908	89.1	1.09	0.2949
No	60	51	111	10.9		
Level of Confidence of saying “no”						
Strongly confident	288	149	437	42.9	89.26	0.000...
Confident	185	286	471	46.2		
Not confident	13	32	45	4.4		
Strongly not confident	17	49	66	6.5		
Perception of being Under sexual pressure						
Yes	149	222	371	36.4	19.76	0.000...
No	354	294	648	63.6		

In table 3, the students' sexual practices were shown to be high as 40.5% of them had started engaging in sexual activities. Their first sexual partner was either a neighbor (38.0%) or a relation (29.5%) and there was a statistically significant association between their sex and the age of sexual onset, and whether first sexual act was voluntary or not.

Table 3: Sexual practices of Respondents

Variable	Males	Females	Freq	%	X ²	p-value
Participation in Sexual activities (ever) (n= 1019)						
Yes	298	124	422	41.4	30.17	0.000 ...
No	205	392	597	58.6		
Age of onset of sexual activity (n= 422)						
1-5	11	21	32	7.6	25.01	0.000...
6-10	89	137	226	53.6		
11-15	87	48	135	32.0		
16-20	17	12	29	6.8		
Mean = 9.41+3.32						
First sexual partner (n=422)						
Neighbor	87	56	143	33.9	17.67	0.0014
Relative	54	74	128	30.3		
Friend/Classmate	33	59	92	21.8		
School senior	16	19	35	8.3		
Others	14	10	24	5.7		
First sexual act (n=422)						
Voluntary	66	142	208	49.3	43.31	0.000...
Involuntary	138	76	214	50.7		
First Sexual Partner (n=422)						
Opposite			382	90.5		
Same F-F			26	6.2		
Same M-M			14	3.3		

In Table 4 the odds of an adolescent being sexually active are six times as much if aged 19-21 years and seven times as likely if he or she lacks self confidence in ability to refuse sexual advances.

Table 4: Multiple Logistics table showing predictors of being sexually active

Variable	Odds Ratio	95% CI	P value
Age			
10-12	1	1	1
13-15	2.6430	2.3614 - 3.1883	0.0384
16-18	3.7194	3.1750 - 4.3695	0.0295
19-21	6.1992	5.0975 - 7.3716	0.0017
Sex			
Female	1	1	1
Male	1.4857	1.1000 - 1.2844	0.0000
Info source			
Family member	1	1	1
Friends	1.4134	1.0961 - 1.3365	0.0062
Science teacher	0.5138	0.4551 - 0.6022	0.0141
Others	0.7236	0.2994 - 0.5966	0.0475
Ability to say no			
Strongly confident	1	1	1
Confident	1.6318	1.5092 - 1.8746	0.0344
Not confident	2.2740	2.0224 - 2.5524	0.0319
Strongly not confident	7.5923	6.0145 - 9.5797	0.0000

DISCUSSION

A greater proportion of the students got their information about sexuality from family members. This is different from the findings of a study in the USA where most of the students got information from their science teachers.⁸ This finding calls for in-depth sexuality education in schools to complement the efforts of family members. It also suggests that the family which is the primary source of socialization in Nigeria is giving some information about sexuality which is good. Good as it may be, the quality of information is likely to be insufficient or sometimes wrong. Studies have shown that adolescents usually access multiple sources of information regarding their sexuality and reproductive health.⁸⁻¹⁰

In this study, slightly more than half (57.7%) of the respondents had good knowledge about sexuality. This can be attributed to the fact that they are in-school adolescents and have a variety of sources of

information available to them. It is a positive finding, since knowledge tends to have an influence on practices. This finding is however different from a similar study in Malaysia where the researchers found low knowledge among the adolescents studied.¹¹ We also found that a higher proportion of females had higher knowledge than males and there was a statistically significant association between sex of respondents and their level of knowledge on sexuality. A similar association was also found by researchers in Myanmar who studied youths aged 10-24 years.¹² In Nigeria, females usually bear the brunt of the consequences of unprotected pre-marital sexual activities and are therefore more likely to be informed about sexuality issues by family parents and other family members.

Sexuality knowledge is termed to be vital as it generally affects perception about sex, type and frequency of sexual practices among adolescents.¹¹

It is also important for adolescents to get the right kind of information from the right source and at the right time before they get interested in sexual activities and exposed to peer pressure. In this study, sexuality knowledge was found to be fairly high and practice generally low. A similar study done in Taiwan found that adolescents with higher sexuality knowledge scores, were less likely to be sexually active.¹³ This could be explained by the fact that given the right information about the risks involved in sexual practices, responsible youths, make informed choices and most times delay or refuse indulging in risky sexual behavior.

Less than half (41.1%) of studied adolescents had ever been engaged in sexual activity. This finding is much lower than that of a similar study in a township area of Plateau state where over 80% of the adolescents studied had ever had sex.¹⁴ This difference can be explained by the fact that this study was done in a rural area, where social activities are minimal and regulated by cultural and religious values. Furthermore, the schools studied are owned by faith based organizations where moral and religious values are taught repeatedly to the students. Another study in an urban slum in the same State had a sexual practice prevalence of 67%.⁴ Urban slums and rural areas have many social/cultural factors in common which could explain the similarity in prevalence with this. The controlled and supervised environment of a boarding school, however, could be a factor responsible for the lower prevalence of sexual activity in this study.

This study found a statistically significant association between the sex of the respondents and their onset of sexual activity with more females

being sexually active at an earlier age than males. This can have dire consequences for their future reproductive health as it increases the risk of STIs. Researchers have also found a statistically significant association between early onset of sexual activity and poor academic performance among unmarried female youth.^{12,15,16}

A study among adolescents in Tanzania showed that less than 10% of the first sexual contacts were involuntary.¹⁷ However, in this study there was an almost equal proportion of voluntary and involuntary first sexual contacts, 50.7% and 49.3% respectively. This high proportion of involuntary sexual debut can be explained by the fact that the perpetrator was most likely a neighbor or family member (about 60%) which is likely to be unacceptable to the child/adolescent for moral reasons. It can also be explained by the fact that the sexual activities that occurred when the respondent was a child (before 10 years) was likely to be considered “involuntary” by the adolescent. These involuntary sexual activities are more likely to be associated with bruises in the sexual organs, increased risk of STIs.

Same-sex sexual activity (not restricted to coitus only but including fondling of genitals) was found to be higher among female respondents than their male counterparts. When combined, 9.5% of the sexually active adolescents engaged in it. A study among a cohort of adolescents in USA showed a lower prevalence of 2.3%.¹⁸ The lower finding in the USA study can be because of the younger ages of the studied adolescents there, compared to this study. The finding of same-sex sexual practices in this study is unexpected as generally speaking, it goes against the accepted cultural norms and values of Africans and Nigerians. It also brings to fore the

need to provide safer home and school environments for adolescents where they can learn the core values of their people.

The predictors of being sexually active in this study included being male, aged 19-21 and lacking self-confidence to resist sexual advances when approached. A study done in Nairobi Kenya also found lack of self esteem as a predictor to sexual debut in studied adolescents.¹⁹ This suggests that the studied adolescents need to be taught life skills early in their adolescent lives, to postponed onset of sexual activities.

CONCLUSION

The study shows that barely half of the study population had a good knowledge about sexuality with high proportion of sexual activity, increasing their risk of contracting STIs, unplanned pregnancies, disruption of academics, etc. Also, a high proportion of the adolescents perceived that they lacked the skills required to refuse or postponed sexual advances. It is therefore recommended that parents and guardians need to give proper sexuality education to their children and wards. It is also important for schools to plan sexuality seminars for their students, where reproductive health experts can professionally equip the students to face the increasing sexual pressures of their generation.

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