

Knowledge, Age at Sexual Debut and Sexual Behaviour of Secondary School Adolescents in Akure, Ondo State, Nigeria

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ABSTRACT

Sexual behaviours of the adolescents have implications for both present and future health and development. The study assessed the knowledge about sex and sexuality issues, and the sexual behaviours of adolescents in Akure metropolis and factors associated with it. The descriptive cross-sectional study was conducted in Akure, Nigeria. Four hundred in-school adolescents in selected secondary schools in the study area were selected using a multi-stage sampling technique. A structured pre-tested interviewer-administered questionnaire was used to collect the data, which was analyzed using SPSS version 23. The results were presented in tables and figures. Mean age of the adolescents was 15.7±3.5 years and 229(59.5%) were females. About 74(18.6%) of the respondents had a boy/girlfriend. Most of the respondents had good knowledge about sex and sexuality related issues, while more than half of them 211(53%) learnt about sex and sexuality related matters from the media. Few 79(19.8%) of the adolescents had engaged in sexual intercourse, and 29(36.8%) of these had their sexual debut before 12 years of age; while 18(22.8%) of them used condom during their first sexual encounter. Association between respondents' class and parents' family type with adolescents' knowledge about sex and sexuality issues were statistically significant (p-value <0.05). Respondents' gender and parents' marital status had statistically significant association with respondents' engagement in sexual intercourse (p-value <0.05). Many of the adolescents had good knowledge about sex and sexuality related issues, while few were already sexually active. Adolescent sexuality education should be given priority attention by the government and other relevant institutions.

Key words: Adolescents, Nigeria, Secondary school, Sexual behaviour, Sexuality.



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INTRODUCTION

Adolescence is the developmental phase between childhood and adulthood, that prepares young people for adult roles and responsibilities, and it is marked by physical, psychosocial and cognitive development, hormonal milieu and emotional changes.^{1,2} The World Health Organization (WHO)³ refers to it as the period of human growth and development that occurs post-childhood and before adulthood, from ages 10 to 19, during which the individual progresses from the initial appearances of secondary sexual characteristics to full sexual maturity and the stage at which psychological and emotional processes develop from those of a child to those of an adult. Adolescent period is a critical stage in the life cycle of man,⁴ and forms a critical bridge between childhood and adulthood and is a window of opportunity for positive, life-shaping development.⁵ The adolescent age group constitutes about one fifth of the Nigeria's population and this makes them significant to the country's socio-political and economic development.^{6,7} However, Adolescent concerns, in particular their healthcare service, has been given only little attention in the Nigeria government health care delivery system.⁸ Family planning services programming and delivery has largely focused on married couples.⁹ Adolescence is characterized by experimentations and adventurous moves and it is during this stage that behavioural patterns such as risky sexual behaviours which have life-long consequences on the life of an adolescent are formed and established.¹⁰ It is thus imperative to ensure good guidance, adequate communication and proper counseling in interacting with them.¹¹ Sexual risk behavior is defined as any behavior that increases a person's risk of unintended pregnancy and/or sexually transmitted infection (STIs) including HIV infection.^{12,13} Sexual risk behaviors in adolescence not only predispose them to adverse health outcomes but have also been shown to be predictors of sexual risk

behaviors later in life. A study on adolescent reproductive health found out that adolescents engage in diverse risky sexual behaviours, with the age of sexual debut continuously decreasing among this age group.¹⁴ According to a UNAIDS report, adolescents in Nigeria initiate sexual intercourse before reaching the age of 16 and also engage in high risk sexual behaviours like unprotected sex and multiple sex partners. The WHO reported adolescent pregnancy as risk factor for increase in maternal and child mortality.¹⁵ Adolescent pregnancy increases the risk of maternal and child mortality.¹⁶

The changes that take place during adolescence and the associated sexual behavioural risks and practices that go with these suggest adolescents need explicit attention to guide and prevent them from adopting harmful sexual practices with negative health implications on their health throughout life.¹⁷ Major outcomes of adolescent sexual behavior include unintended pregnancy, unsafe abortion, pregnancy-related complications, and sexually transmitted infections (STIs) including HIV/AIDS. Adolescent pregnancy increases the risk of maternal and child mortality. Several previous reports of studies in the country revealed adolescents engage in unsafe abortion while others consult quacks and non-professionals for abortion due to fear, stigma and judgmental attitude of the society.¹⁸

Young people are at the beginning of their sexual and reproductive lives. Physiologically, the changes in reproductive organs that occur in the life of adolescents often serve as a motivating force in their quest to experiment with sex. Some naturally explore and take risks in many aspects of their lives, including sexual relationships. Those who have sex may change partners frequently and have more than one partner in the same time period or engage in unprotected sex. These risky sexual activities make this group disproportionately affected by reproductive morbidities such as Sexually

Transmitted Infections (STI) including Human Immuno-deficiency Virus (HIV) infection and Acquired Immune Deficiency Syndrome (AIDS), unwanted pregnancies and their complications.

Many of the health-related behaviours that arise during adolescence have implications for both present and future health and development. This study seeks to address the issue of adolescent sexual behavior. The study will also help to make meaningful contributions through appropriate recommendations and suggestive public health interventions that can be put in place to curtail the trend. It will aid parents, guardians and caregivers in assisting adolescents to improve their sexual behavior through proper control, and the government in formulating and implementing policies to reduce the consequences of these sexual behaviours in the community; which include teenage pregnancies, unwanted pregnancies, unsafe abortion and the scourge of sexually transmitted infections. The aim of the study was therefore to assess the knowledge about sex and sexuality and the sexual behaviour of the adolescents in Akure metropolis and factors associated with it.

MATERIALS AND METHODS

The study was conducted in Akure, a metropolitan and the capital city of Ondo State, South-Western Nigeria. It has a projected population for year 2020 of approximately 534,263 out of which about 122,881 (23%) would be adolescents (age 10-19), based on the 2006 census. This include both in-school and out-of-school adolescents in the study site. Majority of the dwellers in the community are of the Yoruba ethnic group. There are 5 public institutions of higher learning, 72 public primary schools and 27 public secondary schools in Akure South Local Government Area (LGA). The LGA is administratively divided into 11 political wards.

A descriptive cross sectional study was adopted. The study population comprised of in-school adolescents in selected secondary schools in the study area. The

minimum sample size was determined using the Leslie Fischer's formulae for unknown population or population greater than 10,000¹⁹ ($N = Z^2pq/d^2$) and accounting for a 10% non-response. A total of 400 adolescents were sampled. A multi-stage sampling of participants from each school based on the number of eligible students available in each school and in proportion to the required sample size, was carried out.

In the first stage, a simple random selection of five secondary schools in the study population was carried out. The 5 secondary schools selected were major public secondary schools spread across the main geographical axis of Akure town, and so captured adolescents over a wide area of the communities that made up the town. It included both the girls-only, boys-only and mixed-gender schools and served as the sampling frame from which the sample size was selected. In the second stage, the desired sample size was then selected from the 5 schools using stratified random sampling method. The stratum consisted of the different classes in each arm (Junior Secondary Class, JSS3, Senior Secondary, SS1, Senior Secondary, SS2 and Senior Secondary, SS3) of each school.

The total number of eligible students (i.e. adolescents within 12-16 years age group) in each school and in each of the classes that made up the 3 arms considered in the study was determined from the school records provided by the school authorities. Number of participants to be selected from each school and each class were proportionally allocated to each based on their respective population size.

Then by simple random sampling using a random number generator application, the number of participants allocated to each class was selected and the questionnaire administered accordingly.

A structured pre-tested interviewer-administered questionnaire was used to collect the data which was developed after extensive literature review. The instrument was reviewed by experts in the field of public health and community medicine to ensure face and content validity. The study instrument was pre-tested on a

similar population outside the enumeration area selected for the study. Appropriate amendments were made on the questionnaire after the pre-test where necessary. Research assistants previously engaged in a similar study were recruited and trained on the use of the instrument, purpose of the study and maintenance of ethical standards.

Data was analyzed using the Statistical Package for the Social Sciences (SPSS) software, version 23. The data generated was analyzed using descriptive and inferential statistics. The descriptive statistics of frequency counts, simple percentage, mean, and standard deviation was used to answer all research questions raised while inferential statistics of t-test and Regression analysis was used to test all the hypotheses raised and same was tested at 0.05 level of significance. Questions on knowledge were assigned scores, 1 for appropriate answer, and 0 for inappropriate answer. These were added together to generate knowledge scores. Respondents with score below the mean score were classified as having poor knowledge, while mean score and above were classified as having good knowledge.

Ethical approval for the conduct of the research was obtained from Ondo State Research Ethics review board. Approval was sought from School Heads, School Guardian Counselors, and Class Teachers before commencement of the data collection. Written informed consent was obtained from the participants' parents, and assent from the adolescents less than 18 years of age before questionnaire administration. The purpose, content and implications or benefits of the research were explained to the participants, and their consent sought and obtained. Participants were also informed that participation is voluntary and are free to decline participation or withdraw from the study at any time without reprisal or loss of benefit. The questionnaires were filled in anonymity to gain the confidence of the students, bearing in mind the sensitivity of the topic and to ensure that the participants gave accurate information in completing the questionnaire.

RESULTS

Four hundred (400) questionnaires were administered and three hundred and ninety-eight (398) were retrieved, giving a response rate of 99.5%. Table 1 showed the Socio-demographic characteristics of respondents. Mean age of the adolescents was 15.7 ± 3.5 years. Majority of the respondents were female 229 (59.5%) and a greater percentage of the respondents 251 (63.1%) were in Senior Secondary 3 Class. About 74 (18.6%) of the respondents had a boy/girlfriend. About two-third of the respondents were from urban area and 289 (72.6%) of the respondents' parents were married, and more than two third 312 (78.4%) of the parents had a monogamous family.

Table 2 showed the adolescents' knowledge about sex and sexuality related issues. More than half of the respondents 211 (53.0%) learnt about sex and sexuality related matters from magazine, television or internet while 176 (44.2%) claimed friends as where they learnt about sex related matters. Higher proportions 383 (96.2%) of the respondents had heard about HIV/AIDS and sexually transmitted disease and 282 (70.9%) knew that gonorrhoea can be contracted through sexual intercourse. Two hundred and thirteen (53.5%) said it's true that a woman can get pregnant on the first time she has sexual intercourse. Majority of the respondents 377 (94.7%) claimed that unprotected sexual contact is capable of causing sexually transmitted diseases. As shown in figure 1, 355 (89.0%) of the respondents had good knowledge about sex and sexuality related issue while 43 (11.0%) had poor knowledge.

Few 79 (19.8%) of the adolescents had engaged in sexual intercourse and 29 (36.8%) of the sexually active experienced sex before the age of 12 years; while 18 (22.8%) of them used condom the first time they had sex. Few 37 (46.8%) of the respondents reported that their sexual intercourse experience was too early, while 22 (27.8%) of them had more than one sexual partner. Only 86 (21.6%) of the respondents said that it is good

for a young boy/girl to have sex before marriage while 133(33.4%) agreed that condoms are an effective method of preventing pregnancy (Table 3).

Table 4 showed the association between adolescents' socio-demographic characteristics and knowledge about sex and sexuality issue. It revealed that respondents in the upper class (SS3) all have a good knowledge about sex and sexuality issue compare to those of lower classes while more of the respondents from monogamous family type have a good knowledge about sex and sexuality issue compared to those from polygamous family type; and these associations were found to be statistically significant, with p-value <0.05.

Table 5 showed the association between respondents' socio-demographic characteristics and ever having sexual intercourse. A greater proportion of respondents in the male gender group (29.1%), compare to those of their female gender (12.7%) reported having had sexual intercourse in the past. Also, a greater proportion of respondents whose parents are married or separated (24.6% and 16.1% respectively) reported of having had sexual intercourse in the past, compared to their counterparts of single, divorced parents and widowed parents (0.0%, 5.3% and 5.0% respectively) and these associations were statistically significant , with p-value <0.05.

Table 6 showed the association between respondents' socio-demographic characteristics and number of sexual partners. It shows that male respondents of older age group, in upper class, and whose parents are married reported having more sexual partners than their female respondents of lower age group and class and of the other types of parents' marital status; and these associations were statistically significantly, with p-value <0.05..

Table 1: Socio- demographic characteristics of respondents (N=398)

Variables	Frequency (n)	Percentage (%)
Age(years)		
10-13	97	24.4
14-16	230	57.8
16-19	71	17.8
Mean age	15.7±3.5years	
Gender		
Male	169	42.5
Female	229	57.5
Educational level		
JSS3	40	6.9
SSS1	107	23.1
SSS2	92	10.1
SSS3	159	39.9
Religion		
Catholic	121	30.4
Protestants	251	63.1
Muslim	18	4.5
Traditional	8	2.0
Current relationship status		
Have a boy/girl friend	74	18.6
In a relationship	8	2.0
Living with my partner	32	8.0
Not applicable	284	71.4
Location		
Urban	261	65.6
Rural	137	34.4
Parent's T type of Job		
Self employed	276	69.3
Civil servant	78	19.6
Public servant	44	11.1
Parent's Marital Status		
Single parent	19	4.8
Divorced	19	4.8
Married	289	72.6
Widow	40	10.1
Separated	31	7.8
Family type		
Monogamy	312	78.4
Polygamy	86	21.6

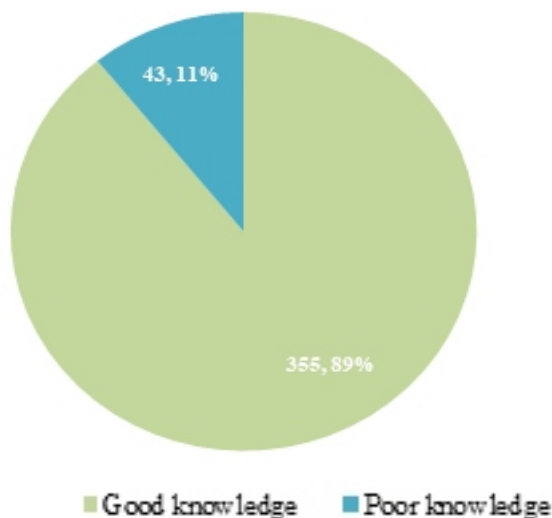


Figure 1: Overall respondents' knowledge on sex and sexuality related issue

Table 2: Adolescents knowledge about sex and sexuality related issues (N=398)

Variables	Frequency (n)	Percentage (%)
*From whom or where have you learnt about sex and sexually related matters		
Mother	103	25.9
Father	11	2.8
Siblings	124	31.2
Friends	176	44.2
Teacher	20	5.0
Church	61	15.3
Magazine, Television/ Internet	211	53.0
Ever heard about HIV/AIDS and sexually transmitted disease		
Yes	383	96.2
No	15	3.8
Apart from HIV/AIDS, any other diseases that one can contract by sexual intercourse		
Gonorrhoea	282	70.9
Syphilis	62	15.6
Hepatitis	20	5.0
Herpes Simplex	34	8.5
A woman can get pregnant on the very first time that she has sexual intercourse		
Yes	213	53.5
No	185	46.5
A woman is most likely to get pregnant if she has sexual intercourse half way between her period		
Yes	352	88.4
No	46	11.6
Oral sex is acceptable in our society		
Yes	52	13.1
No	346	86.9
Anal sex is good to be encouraged in totality		
Yes	22	5.5
No	376	94.5
Unprotected sexual contact is capable of causing sexually transmitted diseases		

Table 3: Adolescent practices of risky sexual behaviors (N=398)

Variables	Freq(n)	Percent (%)
Ever had sexual intercourse	n=398	
Yes	79	19.8
No	319	80.2
How old were you the first time you had sexual intercourse	n=79	
<12	29	36.8
13-14	19	24.1
≥15	31	39.2
Would you say it was planned or unexpected	n=79	
Planned	32	40.5
Unexpected	47	59.5
The first time, was any contraceptive method use	n=79	
No	55	69.6
Condom	18	22.8
Pills	6	7.6
*The first time you had sexual intercourse, which of the following was true	n=79	
I forced my partner to have sex with me	42	53.2
We were both willing to have sex	61	77.2
Looking back now to the first time you had sexual intercourse, do you think it was the right time	n=79	
early	37	46.8
No, too late	33	41.8
Yes, about right	9	11.4
How many people have you had sexual intercourse with	n=79	
1	1	1.3
2	13	16.5
≥3	65	82.3
Can you suggest to your boy/girlfriend that he/ she use a condom	n=79	
Yes	35	44.3
No	44	55.7
Do you engaged in sex for money or gifts		
Yes	53	13.3
No	345	86.7

* Multiple responses

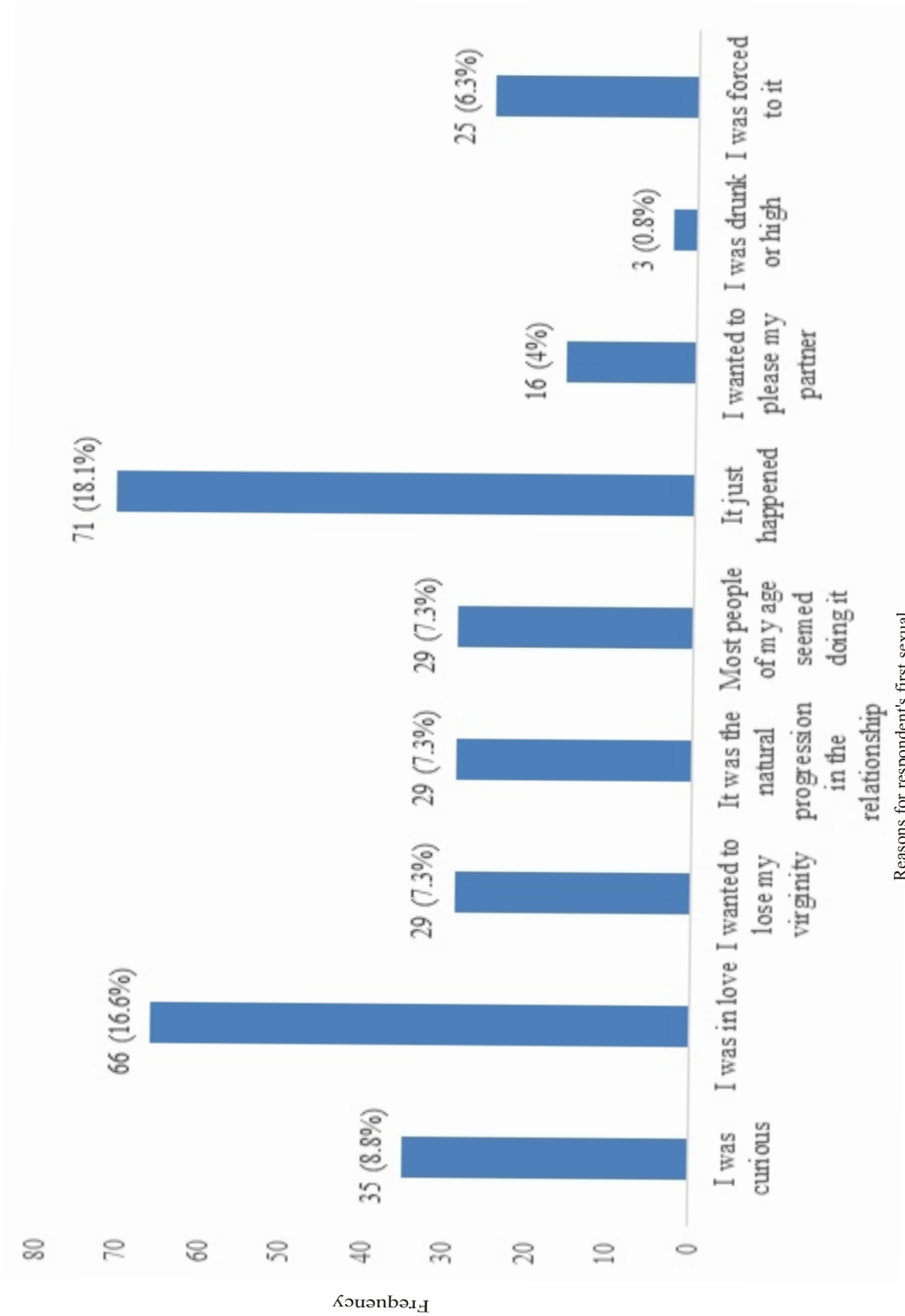


Figure 2: Reasons for respondent's first sexual intercourse

Table 4: Association between adolescents' socio-demographic characteristics and Adolescents Knowledge about sex and sexuality issue

Variable	Knowledge about sex and sexuality issue		X ²	P-value
	Good Knowledge	Poor Knowledge		
Age(years)				
<13	84(86.6)	13(13.4)	0.899	0.638
14-16	207(90.0)	23(10.0)		
>16	64(90.1)	7(9.9)		
Sex				
Male	147(87.0)	22(13.0)	1.494	0.222
Female	208(90.8)	21(9.2)		
What class are you				
JSS3	138(86.8)	21(13.2)	26.078	*<0.001
SSS1	105(98.1)	2(1.9)		
SSS2	72(78.3)	20(21.7)		
SSS3	40(100.0)	0(0.0)		
Location				
Urban	231(88.5)	30(11.5)	0.375	0.540
Rural	124(90.5)	13(9.5)		
Family type				
Monogamy	285(91.3)	27(8.7)	6.927	*0.008
Polygamy	70(81.4)	16(18.6)		

**Statistically significant <0.05*

Table 5: Association between respondents' socio-demographic characteristics and ever having sexual intercourse

Variables	Ever had sexual intercourse		X ²	df	P-value
	Yes	No			
Age(years)					
<13	18(18.6)	79(81.4)	0.925	2	0.630
14-16	44(19.1)	186(80.9)			
>16	17(23.9)	54(76.1)			
Sex					
Male	50(29.6)	119(70.4)	17.502	1	*<0.001
Female	29(12.7)	200(87.3)			
What class are you					
JSS3	40(25.2)	119(74.8)	6.287	3	0.098
SSS1	18(16.8)	89(83.2)			
SSS2	12(13.0)	80(87.0)			
SSS3	9(22.5)	31(77.5)			
Location					
Urban	57(21.8)	204(78.2)	1.887	1	0.106
Rural	22(16.1)	115(83.9)			
Family type					
Monogamy	63(20.2)	249(79.8)	0.107	1	0.438
Polygamy	16(18.6)	70(81.4)			
Parents' Marital Status					
Single parent	0(0.0)	19(100.0)	17.104	4	*0.002
Divorced	1(5.3)	18(94.7)			
Married	71(24.6)	218(75.4)			
Widow	2(5.0)	38(95.0)			
Separated	5(16.1)	26(83.9)			

*Statistically significant <0.05

Table 6: Association between respondents' socio -demographic characteristics and number of sexual partners

Variables	Number of partners			Statistics
	1	2	≥3	
Age (years)				X ² =47.829
10-13	1(5.6)	12(66.7)	5(27.8)	Pvalue=*<0.001
14-16	0(0.0)	0(0.0)	44(100.0)	
16-19	0(0.0)	1(5.9)	16(94.1)	
Gender				X ² =23.112
Male	0(0.0)	1(2.0)	49(98.0)	Pvalue=*<0.001
Female	1(3.4)	12(41.4)	16(55.2)	
What class are you				
JSS3	1(2.5)	12(30.0)	27(67.5)	X ² =12.782
SSS1	0(0.0)	0(0.0)	19(100.0)	Pvalue=*<0.047
SSS2	0(0.0)	0(0.0)	11(100.0)	
SSS3	0(0.0)	1(11.1)	8(88.9)	
Location				X ² =3.658
Urban	1(1.8)	12(21.1)	44(77.2)	Pvalue=0.161
Rural	0(0.0)	1(4.5)	21(95.5)	
Family type				X ² =51.530
Monogamy	1(1.5)	3(4.4)	64(94.1)	Pvalue=*<0.001
Polygamy	0(0.0)	10(90.9)	1(9.1)	
Parents' Marital Status				
Divorced	0(0.0)	0(0.0)	4(100.0)	X ² =1.612
Married	1(1.4)	12(17.4)	56(81.2)	Pvalue=0.952
Widow	0(0.0)	0(0.0)	2(100.0)	
Separated	0(0.0)	1(25.0)	3(75.0)	

*Statistically significant <0.05

DISCUSSION

Most of the respondents had good knowledge about sex and sexuality related issues. This may be due to their living in urban area where about two-third of the respondents are from, and where they would have more access to information disseminated through various media. This is highlighted by the findings that more than half of the respondents (53%) learnt about sex and sexuality related matters from magazine, television or the internet. Also, their class/level in school was significantly associated with their knowledge on sex and other sexual related matters. Since a greater percentage of the respondents (63.1%) were in Senior Secondary 3 Class, their academic level would have conferred to them more exposure to health education in the course of their studies. This high level of knowledge is expected to translate into good attitude and good behavioral practices towards sex and sexuality related issues. These our findings are however in contrast with a study by Diclemente et al which found that adolescents have limited knowledge about human sexual and reproduction health, and know little about the natural processes of puberty, sexual health, pregnancy or reproduction²⁰.

Very few of the respondents learnt about sex and sexuality from their father and about one quarter of them learnt about it from their mother. This finding can be attributed to the possibility of inadequate information on sexual matters on the part of the parents of the respondents, or the unwillingness of parents in this environment to discuss such sensitive issues with their children, though our study did not elicit this finding. Nonetheless, this highlights again the need for parents and caregivers of the adolescents to rise up to the responsibility of providing correct, adequate and timely sexual health information to their children or wards within the context of the family.

Another finding on this matter is that almost half of the adolescents sought for sex information from their friends who were already sexually active. Other studies

have also reported that many adolescents sought sexual information from their peers who are sexually experienced than them.^{21,22} The implication of this is that they are predisposed to receiving inadequate information, and also succumb to peer-pressure towards early sexual debut and risky sexual behaviors. Almost all the respondents had heard about HIV/AIDS and sexually transmitted diseases; and a high proportion identified Gonorrhoea as also a sexually transmitted disease. Majority of the respondents (94.7%) knew that unprotected sexual contact is capable of causing sexually transmitted diseases. This knowledge of STI is expected to serve as a deterrent to risky sexual practices among the adolescents.

Few of the adolescents had experienced sexual intercourse as one out of every five of the adolescents in the study population had ever had sexual intercourse and the age at sexual debut for 40% of the sexual active adolescents was more than 15 years. This is similar to the study by Oakley et al where they found that over 16% of teenage females reported first sexual intercourse by age 15 while among young women of ages 20 to 24, nearly half (49.4%) reported first sex by age 18. Also, among teenage males, 8.3% reported first sex by age 15 while among those ages 20 to 24, 36.3% reported first sexual intercourse by age 18.²³ Our finding can be attributed to the fact that many adolescents have seen sex as an instrument of socialization and experimentation, and moreover, about 18% of the adolescents studied presently had a boy/girlfriend, predisposing them to sexual experimentation.

In our study, we found that four out of every five sexually active adolescent has had three or more sexual partners. This finding corroborate the Youth Risk Behaviour Survey 2011 study based on global scale, which reported that 47% of all high school students reported having had sexual intercourse and 15% of high school students reported having already had four or

more sexual partners.²⁴ Having multiple sexual partners could predispose the adolescents to sexually transmitted infections. The male adolescents' of older age group, in upper class, and whose parents are married reported having more sexual partners than their counterparts who are females, of lower age group and class and of the other types of parents' marital status; and these associations were statistically significantly, with p -value <0.05 . Sexual risk behavior among the adolescents included poor use of safety method during their first sexual intercourse, as majority of them did not use any contraceptives method. Two-thirds of the adolescents did not agree that condoms are an effective method of preventing pregnancy, and only about half agreed that there is need to use condom during sex. This finding is different from the findings in a study by Kemigisha et al in Uganda where it was reported that 9.6% of sexually active young adolescents reported using a condom as safe method the last time they had sex.²⁵ Our finding could be due to the poor access adolescents in our communities have to sexual health services, which is not unconnected to the prevailing societal and cultural attitude to adolescent sexuality.

Limitations

The findings of this study should be considered in light of some limitations, including the possibility of respondents not volunteering complete information due to the sensitive nature of this topic. We addressed this by re-assuring the respondents of confidentiality, and ensuring anonymity during data collection process. Also the study cannot be generalized as it only involved educationally exposed adolescents in urban centres leaving out out-of-school adolescents in both urban and rural settings with obvious constraints and limited access to information.

CONCLUSION

The study concluded that majority of the adolescents

had good knowledge about sex and sexuality related issues with many of them getting the information about sex and sexuality from their friends and more than half of them learnt about sexuality through magazine, television and internet facilities. Few of the adolescents were already sexually active, with the age at sexual debut at more than 15 years. Despite the high knowledge, some of the adolescents still engaged in risky sexual behavior.

Recommendation

It is recommended therefore that in line with the national policy on school health education, a comprehensive school health education program with critical consideration for adolescents' sexuality should be given priority attention by both the government and other relevant institutions.

Conflict of Interest

The authors have no conflict of interest to declare.

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