



Research Article

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Knowledge on Sexual Reproductive Health and Risk Behaviours of Adolescents in Abeokuta South Local Government, Ogun State, Nigeria

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Abstract

This study assessed sexual risk behaviour and knowledge of sexual and reproductive health among adolescents in Abeokuta South Local Government, Ogun State, Nigeria. Multistage sampling technique was used to select 411 adolescents for the study. Data were analyzed using mean, frequency counts, percentages, and chi-square test. The findings show that the source of information on sexual and reproductive health was the mother (90.0%) with majority of respondents having high knowledge on the discourse. Only few of the respondents (18.0%) had ever had sexual intercourse while majority (82.0%) never had sexual intercourse. Of the 18% who had ever had sex, 9% were willing while others were either coerced, forced, or tricked. The mean age of respondents and partners at first sexual intercourse was 15 and 16 years respectively. Sexual risk behaviours among adolescents having multiple sex partners (96.0%) and unprotected sex without condom (95.0%). Respondents have high knowledge on sexual and reproductive health (SRH). However, knowledge of SRH is not associated with respondents gender. There is a significant association ($p < 0.05$) between respondents' gender and their sexual risk behaviour ($p = 0.022$). Adolescents engage in sexual risks behaviours despite their knowledge on SRH. The study has implication for policy.

Keywords: gender, sexual and reproductive health, sexual risk, sexual behaviours, adolescents

1. Introduction

Risk behaviours are not confined to one period of life, adolescence has a special importance because different risks behaviours are to a large extent established in this period. Risk behaviour is a behaviour with undesirable consequences that go hand in hand with a probability of harm or loss (Cairns and Cairns 1994, Reese and Silbereisen 2001, Raithel 2004, Hurrelmann 2007). Although there is no clear consensus in the literature about the definition of or the key elements encompassed in the concept of risk behaviour, it is generally agreed that such behaviours are those that are directly or indirectly associated with health and well-being (Jessor 1998, Hurrelmann and Richter 2006).

Adolescents' sexual risky behavior is a major public health concern. Sexual risk behaviour (SRB) includes premarital sex, early sexual initiation, unprotected sexual intercourse, sex with multiple partners, and unprotected sex (STIs) (Benge, 2002). Sexual initiation is a part of normal behaviour and development which may also be associated with negative outcomes, when it is done at too early an age, or without due attention to the risks involved (Maswikwa et al., 2015). Early initiation of sexual activity could be referred to as sexual intercourse before the age of legal consent (Girma and Paton, 2015). It is estimated that more than three quarters of 1.8 billion of young people are found in developing countries where they often engage in risky sexual behaviour, which can lead to unprotected sex, unwanted pregnancy, sexually transmitted infections including HIV and AIDS, unsafe abortions and other reproductive health problems that are the greatest risk to their well-being (Ayelew et al., 2014; Gebreysus, and Fantahun, 2010). Factors contributing to sexual initiation and risk behaviours include low self-esteem, the expression of love, pleasure, and fun was the reason for sexual initiation, cultural contexts, partners consent, peer pressure (Reuben et al., 2016, (Envuladu et al., 2017; Adegoke, 2014). The awareness of HIV/AIDS is common among adolescents (Olugbenga-Bello et al., 2009). This knowledge of adolescents on sexual and reproductive health could help reduce sexual risk behaviours.

Although, sexual and reproductive health seems to be trending in the society and nations of the world especially with the awareness of HIV, STIs and use of condom for safe sex. However, little is known of the knowledge and sexual risk behaviours among adolescents in secondary school in Abeokuta south of Ogun State, Nigeria.

Based on the research problem stated above this study will therefore attempt to answer the following research questions;

1. What are the personal characteristics of respondents?
2. What are the sexual risks behaviours explored by adolescents?
3. What are the sources of information on sexual and reproductive health?
4. How knowledgeable are adolescents on sexual and reproductive health?

2. Previous Literature

It is a known phenomenon that the Nigerian culture prohibits early sexual practices especially outside of marriage. Thus, premarital sex is a taboo to the society. However, adolescents engage in sexual practices secretly. Different categories have been reported to engage in sexual practices. Adeomi et al., (2014) found that adolescents' mean age for first sexual intercourse was 12.7 years and about 20% of the adolescents had had sexual intercourse before. This is similar to another study by Chukwunonye et al., (2015) revealing the mean age of first sexual intercourse to be 12 years. The findings of these reports vary from other studies like a qualitative analysis of adolescent sexual behavior in Ogun state which indicated that the mean age for first sexual intercourse for boys is 14 years while that of girls is 16 (Omeonu et al., 2014). Also from another study, it was revealed that the mean age for first sexual intercourse among adolescents is 13.7 years for boys and 14.3 for girls (Adegoke, 2014). This shows that mid adolescent age is the age many adolescents engage in sexual practices.

In fact, globally, for many adolescents, sexual activity may start earlier than permitted by law

(Klettke and Mellor, 2012; Yarrow et al., 2014). In a twelve-year review on adolescent sexual behaviour and practices in Nigeria, it was indicated that adolescents engage in unhealthy sexual behaviours, characterised by early age at sexual initiation, unsafe sex, and multiple sex partners (Aji *et al.*, 2013). In another study on adolescent's sexual behaviours in Nigeria, it was recorded that more than two-thirds of adolescents in the study area were sexually active and they had their first sexual intercourse at an early age (Abdulraheem and Fawole, 2009). However, it was revealed in another study that more male adolescents have had previous sexual exposure than the female adolescents and the method of sexual activity practiced by the respondents was mostly vaginal while some of these adolescent reported having had homosexual experience (Chukwunonye *et al.*, 2015). In the United States of America, 62% of students were reported to have had sex before leaving school (Martinez et al., 2011), and in many instances, young people may initiate sexual activity before the age of 14 years (WHO, 2011). Statistics from the Youth Risk Behaviour Surveillance Survey show that 46.8% of adolescents have had sexual intercourse and that 34% are currently sexually active (Jamal et. al., 2014).

This early sexual initiation predispose adolescents to sexual risk as the use of contraception among them is low which increases the risk of unwanted pregnancy and sexually transmitted infections (Chukwunonye *et et al.*, 2015) and likewise, some engage in unhealthy sexual behaviour like unsafe sex and multiple sex partners (Aji *et al.*, 2013). Many adolescents reported that their first exposure to sex was unplanned; some were drugged, raped, forced, deceived, some did it out of curiosity about sex, and some actually requested sex (Chukwunonye *et al.*, (2015). Okeke *et al.*, 2016 study on the psychological predictors of premarital sexual relationship among in-school adolescents in a western Nigeria city indicated that self-efficacy and low self-esteem are predictors of adolescents' attitudes towards premarital sexual relationship. Adolescents' attitude toward premarital sex is a significant predictor of premarital sexual relationship among adolescents. However, sexual behaviour and initiation is determined by contexts and expression of love, pleasure, and fun. According to Envladu *et al.*, 2017, most in-school adolescents were moved by body language to have sex, which was not so for most female adolescents out of school who were not given the right to decide when to have sex but had to go into sex because they were forced into it or because of what they perceived was societal expectation. Adegoke, 2014, study on attitude towards premarital sex among secondary school adolescents in Ibadan metropolis showed the conditional approval for premarital sex among adolescents and partners. The conditions for premarital sex include agreement, marital responsibility and intimacy of both parties. However, it was established in another study that their strong link between peer pressure and adolescents' premarital sexual behaviour (Badaki and Adeola, 2017).

Moreover, a lot of studies have been reported on adolescent practice of sexual risk behaviour. A study conducted on the sexual behaviours among adolescent in public secondary schools in Osogbo showed that about one-third of adolescents had experienced sexual intercourse and have a relatively high sexual involvement which can be attributed to the gradual loss of moral values in many societies coupled with peer pressure to experiment with sexual intercourse among adolescents (Olugbenga-Bello *et al.*, 2009). Females have higher rates because of the fact that they are exposed to intimacy and relationship earlier in life when compared to boys and many of these relationships could easily become sexual, most especially when they have such contacts with older men as observed in the study. Also from the study, it was found out that there is high level of awareness among adolescents about HIV/AIDS (Bello et al., 2009)

However, Abdulraheem and Fawole, (2009), opined that adolescents high level of awareness about HIV/AIDS did not translate into substantial behaviour change as adolescents do not practice safe sex in general and use of preventive measures is poor. Likewise, another study reported that contraception practice was low among the adolescent while the rate of unwanted pregnancy was 18.0% and about 35.8% of the sexually active adolescents in the study had experienced STI (Chukwunonye *et al.*, 2015).

Sexual and reproductive health is very crucial in predicting the sexual behaviour of individuals which is a major health concern that has a focus of global attention. Also, limited knowledge of

sexual and reproductive could result into undesired consequences due to their curiosity nature which makes them to involve in some behaviours that place them at risk (Kebede *et al.*, 2018). A study conducted on the factors influencing sexual behaviour among female adolescents in Onitsha, Nigeria revealed that wrong knowledge of fertile period was significantly associated with sexual behaviour of the adolescents (Udigwe *et al.*, 2014). Also, the study showed that adolescents with more knowledge of HIV/STI had reduced sexual activity (Udigwe *et al.*, 2014).

Evidence from a study conducted on knowledge and attitudes on sexual and reproductive health issues among Sendafa High School and preparatory students revealed that about 81.5% of the respondents knew about sexual transmitted infections (Neme and Olana, 2019). Also, from the study, about 82.9% of the respondents are aware of contraceptive methods out of which 88.8% knew about condoms (Neme and Olana, 2019). It was also revealed from the study that about 51.9% of the respondent received information on sexual and reproductive issues from school followed by media, and peers (Neme and Olana, 2019).

Another study on sexual and reproductive health knowledge and behaviour among adolescents living with HIV in Zambia revealed that the most common family planning methods that the adolescents are aware of are condoms, followed by oral pills and injectables (Ndongmo *et al.*, 2017). Similarly, a study conducted on the knowledge and attitudes of menstruation on hygiene, contraception and sexual transmitted disease among school girls in India showed that the respondents know the physical changes during puberty and most of them know the mode of transmission of sexually transmitted diseases (Upadhyay *et al.*, 2018). Findings from a study conducted on the knowledge and attitude about reproductive health and family planning among young adults in Yemen revealed that the mean score for the knowledge of family planning method is low (Masood and Alsonini 2017).

Evidence from another study conducted among Malaysian adolescents revealed that the adolescents has little knowledge that a woman can get pregnant if she has sexual intercourse two weeks before menstruation (Awang *et al.*, 2019). Also, study conducted on awareness about reproductive health, contraceptive methods, STDs including HIV/AIDS and HPV vaccine among adolescent girls in Punjab showed that 62% of the girls were aware of condoms, 15% about oral pills, 7.5% about safe period and only about 3% are aware of intrauterine device (Grover *et al.*, 2017). Also, more than half of the respondents are aware that HIV/AIDS is STD but have low knowledge on other STDs such as gonorrhoea, syphilis, hepatitis, and chlamydia and their knowledge of symptoms of STI was found to be poor (Grover *et al.*, 2017). However, another study conducted in Nicaragua revealed that 68% of the respondents were aware of signs and symptoms of STI (Bergström *et al.*, 2018). The study also revealed that respondents revealed the mode of transmission to be infected blood/needle, unsafe sex, and infected mother to child (Grover *et al.*, 2017). Another study conducted on knowledge and quality of adolescents' reproductive health communication between parents and their adolescents in Ibadan revealed that respondents' knowledge of reproductive health is high (Titiloye and Ajuwon, 2017).

3. Methodology

The study was carried out in selected public secondary schools in Abeokuta South Local Government Area of Ogun State, an area selected because of the perceived rate of risky sexual behaviours among adolescents in this local government. The population of this study comprised adolescents between the range of 12-19 in senior secondary school. The sample size was selected using the multi-stage sampling technique involving purposive and random selection of 411 respondents. A pilot study was carried out using 10% of the calculated sample size. Split- half test of reliability was carried out and Cronbach's Alpha degree of internal consistency was used to determine the reliability of the research instrument. The instrument was considered reliable at a reliability coefficient of 0.791. The research instrument for the study consisted an adapted questionnaire consisting of Adolescent sexual risk behaviour using HIV Risk-taking Behaviour Scale (HRBS) by Darke *et al.*(1991) and Adolescent Sexual

and Reproductive Health Toolkit, and National Youth Risk Behaviour Survey. Data were self-administered by respondents. The demographic characteristics of respondents such as sex, age, ethnic group, religion, who they live with, parent education, and parent occupation were analyzed using descriptive statistics such as frequency distribution, tables, percentages and means.

Table 1: Index Categories for Sexual Risk Behaviour

Categories	Score Range
Low Sexual Risk Behaviour	0-4
Moderate Sexual Risk Behaviour	5-9
High Sexual Risk Behaviour	10-14

3.1 Ethical Consideration

Permission to conduct the study was obtained from the Ministry of Education through the Zonal Education Office of Abeokuta South Local Government, Ogun State. Informed consents were also obtained from the respondents. Respondents who do not give their consent were excluded from the study.

4. Results

4.1 Demographic Characteristics of Respondents

Table 2 shows the demographic characteristics of respondents. 50.4% of the total sample size were females while 49.6% were males. The mean age of the respondents was 15.98 with more than one-third (39.7%) within the age range of 12-15 years while 43.8% of the respondents were within the range of 16-17 years and 16.5% within the age range of 18-19 years old. About half (50.9%) of the respondents were from SSS2 class while the rest (49.1%) were from SSS1 class. Majority (92%) of the respondents were from the Yoruba ethnic group while 5.4 % were from the Igbo ethnic group, 1% from the Hausa ethnic group and 1.7% were from Edo ethnic group. More than two-third (66.4%) of the respondent were Christians while about one-third (32.8) were Muslims, and very few (0.7%) practice traditional religion. Majority (95.6%) of the respondents said religion is very important to them while few (4.1%) said religion is important and very few (0.2 %) said religion is not important to them.

More than two-third (69.1%) of the respondents live with their parents. 18.2% were living with only their mother while 4.6% were living with only their father. Just 1% of the respondents were living with siblings while about 7% of the respondents were living with guardians and relatives.

Table 2: Demographic Characteristics of Respondents (N=411)

Variables	Frequency	Percentage	Mean/S.D
Sex			
Male	204	49.6	
Female	207	50.4	
Total	411	100	
Age			
12-15 years	163	39.7	
16-17 years	180	43.8	15.98 (1.53)
18-19 years	68	16.5	
Total	411	100	
Class			
SSS1	202	49.1	
SSS2	209	50.9	
Total	411	100	

Variables	Frequency	Percentage	Mean/S.D
Ethnic			
Yoruba	378	92.0	
Igbo	22	5.3	
Hausa	4	1.0	
Edo	7	1.7	
Religion			
Christianity	273	66.4	
Islam	135	32.8	
Traditional	3	0.7	
Total	411	100	
Importance of Religion			
Very important	393	95.6	
Important	17	4.1	
Not important	1	0.2	
Total	411	100	
Live with			
Both parent	284	69.1	
Mother only	75	18.2	
Father only	19	4.6	
Siblings	4	1.0	
Relatives	14	3.4	
Guardians	15	3.6	
Total	411	100	

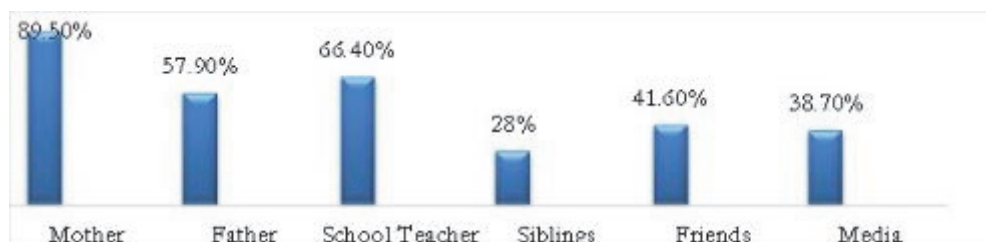


Figure 1: Respondents' sources of Sexual and reproductive health information

4.2 Respondents' Sexual Risk Behaviour

Table 4 shows the respondents' sexual risk behavior. About 18% of the respondents has ever had sex and they had their first sex within the ages of 16-19 years, 13-15 years, and 9-12 years (8%, 7.8%, and 2.2% respectively) with a mean age of 15.09 and the ages of their partner at first sex falling between the ages of 20-25 years, 16-19 years, 13-15 years, and 9-12 years (1.2%, 5.1%, 5.1%, and 2% respectively) with a mean age of 15.51 while about 4.6% of them reported that they do not know the age of their partner at first sex. When asked about their experience at first sex, 9.5% of the respondents said they were willing, 6.8% said they were persuaded while others said they were coerced (5.6%) and forced (3.9%).

Also, some of the respondents reported that they engage in some sexual risk behaviours. 11.2% of them said they have ever received anything such as money, food or gift in exchange for sex while some others reported that they have ever taken drug (5.6%) and alcohol (9.7%) prior to sex, and about 6.1% of the respondent reported that they have sex with same sex. Respondents also reported that they had sex in the past three months (11.4%) with 10.9% of them having more than one sex

partner within the last three months and 18% of them used condom at their last sexual intercourse. Lastly, some of the respondents reported that they had sex when being forced, hurted or threatened (6.6%) while just 5.1% of them reported forced sex. The index of respondents' sexual risk behaviour is shown in the figure 4 below.

Table 3: Respondents' Age at First Sexual intercourse (N=411)

VARIABLES	F (%)	MEAN (SD)
Ever had sex		
Yes	74 (18)	
No	337 (82)	
Age at first sex		
9-12	9 (2.2)	
13-15	32 (7.8)	15.09 (2.42)
16-19	33 (8)	
Age of partner at first sex		
9-12	8 (1.9)	
13-15	21 (5.1)	
16-19	21 (5.1)	15.51 (3.64)
20-25	5 (1.2)	
Don't know	19 (4.6)	

Table 4: Respondents Sexual Experience and Risk Behaviour (N=411)

VARIABLES	RESPONSE	F (%)
Experience at first sex		
Willing	Yes No	39 (9.5) 372 (90.5)
Persuaded/tricked	Yes No	20 (4.9) 391 (95.1)
Forced	Yes No	11 (2.7) 400 (97.3)
Coerced	Yes No	4 (1) 407 (99)
Sexual Risk		
Sex trade	Yes No	35 (8.5) 376 (91.5)
Drug usage before sex	Yes No	25 (6.1) 386 (93.9)
Taking alcoholic drink before sex	Yes No	21 (5.1) 390 (94.9)
Having sex with same person	Yes No	17 (4.1) 394 (95.9)
Had sex in the past three months	Yes No	25 (6.1) 386 (93.9)
Use of condom at the last sexual intercourse	Yes No	22 (5.4) 389 (94.6)
Had sex when being forced, hurted, or threatened	Yes No	30 (7.3) 381 (92.7)
Report forced sex	Yes No	16 (3.9) 395 (96.1)

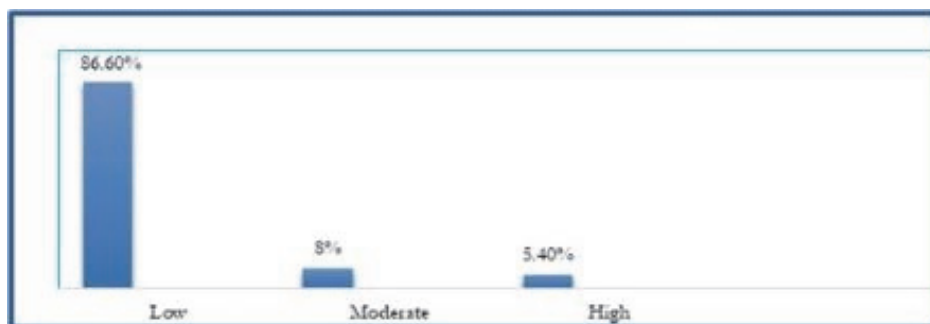


Figure 2: Respondents' Sexual Risk Behaviour Index

Table 5: Respondents Knowledge on Sexual and Reproductive Health

VARIABLES	RESPONSE	FREQUENCY (%)	PERCENTAGE
Physical changes in girls during puberty			
Growth of pubic hair	Yes	338	82.2
	No	73	17.8
Breast development	Yes	368	89.5
	No	43	10.5
Starting of mensuration	Yes	381	92.7
	No	30	7.3
Smooth voice	Yes	267	65
	No	144	35
Physical changes in boys during puberty			
Growth of pubic hair	Yes	334	81.3
	No	77	18.7
Growth of muscles	Yes	358	87.1
	No	53	12.9
Experiencing wet dream	Yes	324	78.8
	No	87	21.2
Strong voice	Yes	371	90.3
	No	40	9.7
Information received regarding puberty			
About hygiene	Yes	318	77.4
	No	93	22.6
Avoiding sexual intercourse	Yes	342	83.2
	No	69	16.8
You can be pregnant or impregnate someone	Yes	171	41.6
	No	240	58.4
You are ready to get married	Yes	159	38.7
	No	252	61.3
Contraception			
A girl could get pregnant after the first mensuration	Yes	192	46.7
	No	219	53.3
A boy could impregnate a girl after experiencing wet dream	Yes	226	55
	No	185	45
A missed period means the girl is pregnant (even with no intercourse)	Yes	106	25.8
	No	305	74.2
A girl is likely to get pregnant 14 days before mensuration	Yes	110	26.8
	No	301	73.2

VARIABLES	RESPONSE	FREQUENCY (%)	PERCENTAGE
Ever heard of contraceptives	Yes	391	95.1
	No	20	4.9
Contraceptives Known			
Oral pills	Yes	159	38.7
	No	252	61.3
Injections	Yes	211	51.3
	No	200	48.7
Condoms	Yes	374	91
	No	37	9
Ever heard of STI(S)	Yes	410	99.8
	No	1	0.2
Types of STI(S) Known			
Chlamydia	Yes	92	22.4
	No	319	77.6
Gonorrhoea	Yes	281	68.4
	No	130	31.6
Herpes	Yes	109	26.5
	No	302	73.5
Syphilis	Yes	215	52.3
	No	196	47.7
HIV/AIDS	Yes	397	96.6
	No	14	3.4
Mode of HIV transmission			
Through unprotected sexual intercourse	Yes	377	91.7
	No	34	8.3
From infected mother to her baby	Yes	287	69.8
	No	124	30.2
Transfusion of infected (unscreened) blood	Yes	310	75.4
	No	101	24.6
Use of contaminated sharp objects	Yes	349	84.9
	No	62	15.1
Abstinence from sex	Yes	314	76.4
	No	97	23.6
Old sharing sharp objects	Yes	368	89.5
	No	43	10.5
Insisting on screened blood	Yes	286	69.5
	No	125	30.5
Avoid sharing toothbrush	Yes	250	60.8
	No	161	39.2
Avoid unprotected sex	Yes	333	81
	No	78	19
Symptoms of STI			
Burning sensation when urinating	Yes	265	64.5
	No	146	35.5
Irritating discharge	Yes	201	48.9
	No	210	51.1
Blisters and sores on genitals may occur	Yes	196	47.7
	No	215	52.3
Infection of reproductive organs	Yes	265	64.5
	No	146	35.5

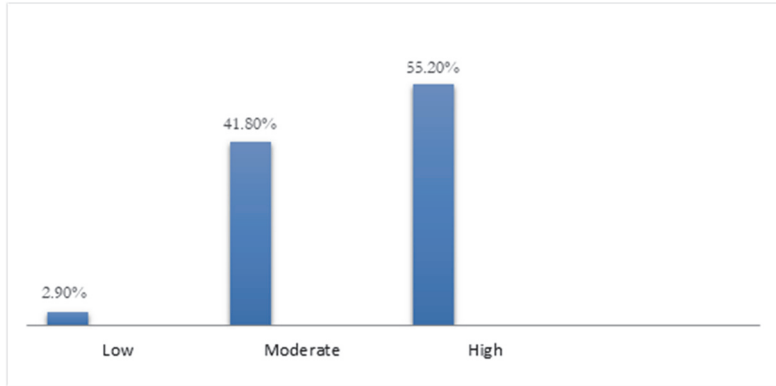


Figure 3: Knowledge of Sexual and Reproductive Health

4.3 Sex and Sexual Risk Behaviour

Table 5 showed that there is a significant association ($p=0.022$) between respondents' sex and sexual risk behaviour. About 86.6% of the respondents had low sexual risk behaviour out of which 42.1% of them were males and 44.5% of them were females. Also, 8.8% of the respondents have moderate sexual risk behaviour out of which 5.8% were males and 2.2% were females. 3.2% of the 5.4% of respondents who have high sexual risk behaviour were males while just 2.2% of them were females. This shows that the male respondents have high sexual risk behaviour compared to the female respondents and this difference is statistically significant.

Table 6: Test of Association on Sex and Knowledge of Sexual and Reproductive Health, and Sexual Risk Behaviour

	SEX		Total	p-value
	Male	Female		
Knowledge of SRH				
Low	7(1.7%)	5(1.2%)	12(2.9%)	
Moderate	91(22.1%)	81(19.7%)	172(41.8%)	0.685
High	112(27.3%)	115(28%)	227(55.3%)	
Total	210(51.1%)	201(48.9%)	411(100%)	
Sexual Risk Behaviour				
Low	173(42.1%)	183(44.5)	356(86.6%)	
Moderate	24(5.8%)	9(2.2%)	33(8.0%)	0.022
High	13(3.2%)	9(2.2%)	22(5.4%)	
Total	210(51.1%)	201(48.9%)	411(100%)	

P values < 0.05 are significant at 5%, SRH: Sexual and Reproductive Health

5. Discussion and Conclusion

Responses of respondents to puberty statements showed that they are knowledgeable about the physical changes in boys and girls during puberty. This corroborates the findings of Upadhyay *et al.*, (2018) which found out that adolescents know the physical changes that occur during puberty. However, it was revealed from the study that adolescents have poor knowledge as to when a woman is likely to get pregnant as very few of the respondents agreed that a woman can get pregnant two weeks before the start of menstruation. This supports the findings of Awang *et al.*, (2019) where it was

revealed that adolescents have little knowledge that a woman can get pregnant if she has sexual intercourse two weeks before menstruation. Reports also showed that most of respondents are aware of contraceptives with most of them knowing condoms followed by injectables and then the oral pills. This is also similar to the findings of Neme and Olana, (2019); and Ndongmo *et al.*, (2017) which revealed that the most common family planning methods that the adolescents are aware of are condoms, followed by oral pills and injectables. It however negates the findings of Masood & Alsonini (2017) in which they found out that the mean score for the knowledge of family planning method is low. Evidence from the study showed that most of the respondents are aware of STIs with most of them being aware of HIV/AIDS followed by gonorrhoea and syphilis while just few of them know about herpes and chlamydia. This somehow differs from the findings of Grover *et al.*, (2017) where it was found out that half of the respondents who are adolescents are aware that HIV/AIDS is STD but have low knowledge on other STDs such as gonorrhoea, syphilis, hepatitis, and chlamydia. It was also revealed from the study that respondents have knowledge about the mode of transmission of HIV/AIDS and the methods of preventing it. This is similar to the findings of Grover *et al.*, (2017) where it was found out that respondents reported the modes of transmission to be infected blood/needle, unsafe sex, and infected mother to child. Respondents reports of the symptoms of STIs revealed that almost two-third of the respondents are aware of burning sensation when urinating and infection of the reproductive organs while less than half of the respondents are aware of irritating discharge and sore on the genitals. This is similar to the findings of Bergström *et al.*, (2018) which found out that more than two-third of the respondents were aware of signs and symptoms of STI but it however differs from the findings of Grover *et al.*, (2017) where it was found out that the knowledge of symptoms of STIs is poor among the respondents. Overall, respondents have high knowledge of sexual and reproductive health.

Findings on the sexual risk behaviour of respondents showed that about 18% of the respondents has ever had sex with the mean age of age at first sex to be 15.09. This depicts early sex as it below the age of consent for this study. This corroborates the findings of Bhatasara *et al.*, (2013) where it was found out that a significant proportion of adolescents in sub-Saharan Africa have been observed to be sexually active by their mid-teens and also similar to the findings of Yowhanes *et al.*, (2016) where a mean age of age at first sex was reported to be 15.9. However, it differs from findings of Adeomi *et al.*, (2014) and Chukwunonye *et al.*, (2015) where the mean age at first sex were found to be 12.6 and 12 respectively. This difference may be due to the difference in the location of study. Report findings showed the experience at first sex of those who had already had sex. Some said they were willing, persuaded, forced or coerced. This corroborates the findings of Chukwunonye *et al.*, (2015) that reported that most of the adolescents in their study said that their first exposure to sex was unplanned; some were drugged, raped, forced, deceived, some did it out of curiosity about sex, and some actually requested sex. The study revealed that most of the respondents had low sexual risk behaviour, while very few of them had high sexual risk behaviour. Also, the sexual risk behaviour of the male respondent is significantly different ($p=0.022$) from the female respondent as the male respondents engage in sexual risk behaviour more than the female respondent. The study also revealed that there is significant association between parent-adolescent sexual communication, knowledge of sexual and reproductive health, and adolescent sexual risk behaviour.

The study concluded that respondents have high knowledge of sexual and reproductive health but have low sexual risk behaviour. However, there is no significant association between respondents' knowledge of sexual and reproductive health and their sexual risk behaviour.

References

- Abdulraheem, I. S., & Fawole, O. I. (2009). Young people's sexual risk behaviors in Nigeria. *Journal of Adolescent Research*, 24(4), 505-527.
- Adegoke, A. A. (2014). Attitude towards premarital sex among secondary school adolescents in Ibadan metropolis, Nigeria. *African Journal For The Psychological Studies Of Social Issues*, 17(3), 2-10.

- Adeomi, A. A., Adeoye, O. A., Adefisoye Adewole, O. I., & Temitayo-Uboh, A. (2014). Sexual risk behaviours among adolescents attending secondary schools in a Southwestern State in Nigeria. *Journal of Behavioral Health, 3*(3), 176-180.
- Aji, J., Aji, M. O., Ifeadike, C. O., Emelumadu, O. F., Ubajaka, C., Nwabueze, S. A., ... & Azuike, E. C. (2013). Adolescent sexual behaviour and practices in Nigeria: a twelve year review. *Afrimedical Journal, 4*(1), 10-16.
- Awang, H., Low, W. Y., Tong, W. T., Tan, L. Y., Cheah, W. L., Lasimbang, H. B., & Hassan, H. M. (2019). Differentials in sexual and reproductive health knowledge among east Malaysian adolescents. *Journal of biosocial science, 51*(2), 282-291.
- Badaki, O. L., & Adeola, M. F. (2017). Influence of Peer Pressure as a Determinant of Premarital Sexual Behaviour among Senior Secondary School Students in Kaduna State, Nigeria.
- Bergström, A., Ugarte Guevara, W. J., & Eustachio Colombo, P. (2018). Knowledge about Sexual and Reproductive Health among School Enrolled Adolescents in Tololar, Nicaragua, A Cross-Sectional Study. *Journal of Public Health International, 1*(2), 27-38.
- Chukwunonye, A. E., Chisom, I. I., Achunam, N. S., Fidelia, E. O., Seyifumi, B. J., Dabeluchukwu, A. E., ... & Ifeoma, C. N. (2015). Sexual Behaviour among Senior Secondary School Students in Nnewi North and NnewiSouth Local Government Areas of Anambra State, South-Eastern Nigeria. *European Journal of Preventive Medicine, 3*(2), 26-33.
- Envuladu, E. A., Anke, V. D. K., Zwanikken, P., & Zoakah, A. I. (2017). Sexual and reproductive health challenges of adolescent males and females in some communities of Plateau State Nigeria. *International Journal of Psychology and Behavioral Sciences, 7*(2), 55-60.
- Grover, S., Garg, N., Rupali, R., & Kaur, B. (2017). Awareness about reproductive health, contraceptive methods, STDs including HIV/AIDS, and HPV vaccine, among adolescent girls in district Faridkot in Punjab. *Int J Reprod Contrac Obstet Gynecol, 6*(2003), 2320-1770.
- Kebede, A., Molla, B., & Gerensea, H. (2018). Assessment of risky sexual behavior and practice among Aksum University students, Shire Campus, Shire Town, Tigray, Ethiopia, 2017. *BMC research notes, 11*(1), 88.
- Masood, M. S., & Alsonini, N. A. (2017). Knowledge and attitude about reproductive health and family planning among young adults in Yemen. *International Journal of Population Research, 2017*.
- Ndongmo, T. N., Ndongmo, C. B., & Michelo, C. (2017). Sexual and reproductive health knowledge and behavior among adolescents living with HIV in Zambia: a case study. *The Pan African Medical Journal, 26*.
- Neme, D., & Olana, M. D. (2019). Knowledge and Attitudes on Sexual and Reproductive Health Issues Among Sendafa High School and Preparatory Students. *Science, 7*(5), 134-139.
- Okeke, S. R., Okeke, O., & Deborah, O. (2016). Psychological predictors of premarital sexual relationship among in-school adolescents in a Western Nigerian City. *Universal Journal of Public Health, 4*(4), 196-202.
- Olugbenga-Bello, A. I., Adebimpe, W. O., & Abodunrin, O. L. (2009). Sexual risk behaviour among in-school adolescents in Public Secondary schools in a Southwestern City in Nigeria. *International Journal of Health Research, 2*(3), 243-251.
- Omeonu, P. E., Babalola, D. A., & Agbede, O. C. (2014). Qualitative analysis of adolescents' sexual behaviour in Ogun State, Nigeria: Implication for HIV/AIDS Policy. *Religion, 207*(193), 51-75.
- Titiloye, M. A., & Ajuwon, A. J. (2017). Knowledge and quality of adolescents reproductive health communication between parents and their adolescents children in Ibadan, Nigeria. *Journal of public health in Africa, 8*(1).
- Udigwe, I. B., Adogu, P. O., Nwabueze, A. S., Adinma, E. D., Ubajaka, C. F., & Onwasigwe, C. (2014). Factors influencing sexual behavior among female adolescents in Onitsha, Nigeria. *Open Journal of Obstetrics and Gynecology, 4*(16), 987.
- Upadhyay, C., Nayak, B., & Desai, G. (2018). Knowledge and attitude of menstruation hygiene, contraception and sexual transmitted disease among school girls of Lunawada, Mahisagar, Gujarat, India. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology, 7*(4), 1543-1547.