

Intervention on Knowledge of Sexuality Education Among Adolescents in Selected Secondary Schools in Abeokuta Ogun State, Nigeria

Stella Awele Oshobor^{a*} Ngozi Anthonia Okafor^b

a,b - Department of Community/Public Health Nursing, Babcock University, *Corresponding author email <oshobor0359@pg.babcock.edu.ng> +234-806-015-1906

Abstract

Previous studies confirmed that lack and poor sexuality education knowledge among adolescents has exposed most adolescents to risky sexual behavior. The objective of this study is to fill the gap of lack and poor sexuality education knowledge by conducting intervention on knowledge of sexuality education while assessing knowledge level and mean score knowledge level among adolescents in selected secondary schools in Abeokuta Ogun state Nigeria. Quasi-experimental two group pre-post design was used and a sample size of 374 was chosen for the study. Adapted UNESCO guidelines was used as sexuality education package, a validated questionnaire was used to collect data and data were analyzed using descriptive and inferential statistics. Mean score knowledge level of sexuality education on risky sexual behavior pre-post was 3.66 and 4.52 for experimental group and 3.41 for the control group pre-posttest. Mean score knowledge of sexuality education on factors associated with risky sexual behavior pre-post was 6.39 and 7.15 for the experimental group and 5.72 for the control group pre-posttest. No significant difference in the mean score knowledge level of sexuality education on risky sexual behavior pretest in experimental and control group(P>0.005) so null hypothesis was accepted. Thus, there was significant difference in the post-test mean score knowledge level of sexuality education on risky sexual behavior for experimental and control group (P<0.005) so the null hypothesis was rejected. In conclusion, sexuality education improves knowledge level of the participants. Hence, comprehensive sexuality education is therefore recommended for adolescents in secondary school to reduce the incidence risky sexual activities among them.

Keywords: Adolescents, Knowledge intervention, Risky sexual activity, Sexuality education

INTRODUCTION

Adolescence is the longest human developmental stage defined as the period of development from 11-21 years (Duh.etal.,2018). This developmental stage encompasses many biological changes; one of the most significant changes being the neurodevelopment changes occurring in the structure and function of the brain(Crone,2021). As the regions of the brain mature asynchronously, the mismatch of mature and immature regions of the brain places adolescents at an increased risk for making unsafe decisions especially during new experiences and when strong emotions are involved(Crone 2021;Duhet al.,2018)

.Unprotected sex is a risky sexual behavior which involve sexual intercourse without the use of a condom, thus involving the risk of sexually transmitted diseases or unwanted pregnancy (Collins dictionary,2019)Globally, there are about 1.2 billion adolescents between age 10-19 years which is about 16% of the global population(WHO, 2019). This age range has

prevalence of risky sexual behavior such as unprotected sex leading to unwanted pregnancy and sexual transmitted diseases (Bang & Celyn, 2022).

Sexuality education teaching, which supposed to normalize these challenges of this youth has been neglected in schools and also by parents. In Africa especially in Nigeria setting, children are expected to obey their parent's instruction without asking questions. It is assumed that the best way to prevent sexual immorality among youth and young adults is by keeping them almost completely if not completely ignorant of sex and sexuality matters sometimes until their marriage night (Musa, 2020). However, some anxious parents might only mention one or some warning about their daughter first menstrual experience, while for boys it is a total "blackout". Hence, those young ones who are brave enough to ask questions are often stigmatized and constantly being watched. The vast majority of students attending secondary schools are in their teens, where gender identity formation and gender experimentation take place. This period of their age has to do with psychological, physical and their social attributes making them vulnerable to unprotected sexual activity. Most parents are not conscious of the fact that adolescents at this stage wants to explore and they can go any length to gather information. According to Musa (2020), the subject of sex and sexuality pops in the media, discussion among other groups in the society and this is a collective consciousness. This is a call of awakening to parents to teach sexuality education to adolescents because adolescents drive in to social media to learn all sorts.

Sexuality education has been said to be an effective education in making adolescents to understand sex and sexuality related activity to make them less vulnerable to unprotected sexual activity and this was confirmed by Ariyo et al(2021)who stated that if a child is taught about what changes to expect as he grows older, he will be psychologically prepared to accept those as normal and take charge of his/her life. A child will be less vulnerable to receiving wrong information that could lead to risky sexual behavior such

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as teenage pregnancies, illegal abortions ,sexually transmitted disease and many others as he or she is growing.

It was also observed that most teenage girls had involved in abortion at one time or the other due to unwanted pregnancy from unprotected sexual involvement because of lack of proper and adequate sexuality education and this was confirmed in a study among secondary school students in Ogun State in Ijebu north local government that 67% of the respondents lack sexuality education and few studies have shown that adolescents in secondary school students engaged in various sexual practices with their consequences which are pre-marital sex, multiple sex partners, transactional sex, teenage pregnancy and abortion due to lack of appropriate and timely information about sexuality education from parents and from the school environment (Obiak,2017).

Majority of the adolescents who are between the age range of 13-20 years involve in unprotected sexual activity and undefined relationship between opposite sex of their age range because of the gap of sexuality education which has not been thoroughly taught among adolescents in school couple with parents who always shy away from giving sexuality education to their growing adolescents at home.

Although, there has been efforts by the government to incorporate curriculum-based sexuality education into the school curriculum to enhance the knowledge of pupils in schools and improve health program in the state. Review of curriculum and implementation of sexuality education is still pending as at the time of this study in Ogun State. The resultant effects of poor and lack of sexuality education as shown from previous studies which has also been observed by the researcher led to this study. This study specifically:

1. Assessed the pre and post mean score knowledge level of sexuality education on risky sexual behavior in experimental and control group

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2. Assessed the pre and post mean score knowledge level of sexuality education on factors associated with risky sexual behavior in experimental and control group

Research questions

1. What is the pre and post intervention mean score knowledge level of sexuality education on risky sexual behavior in experimental and control group?

2. What is the pre and post intervention mean score knowledge level of sexuality education on factors associated with risky sexual behavior in experimental and control group?

Hypothesis

 H_01 : There is no significance difference between the pre-post mean score knowledge level of sexuality education on risky sexual behavior of experimental group and control group.

METHODOLOGY

A quasi-experimental two group pre-post design was used to assess the knowledge of adolescents on sexuality education and its variables in selected secondary schools. Mean score was used to assess the level of knowledge of the adolescents on sexuality education and its variables in selected secondary schools among adolescents in Abeokuta South Local Government Ogun State. The research setting was public secondary schools selected in Abeokuta South Local Government of Ogun State Nigeria. A Premier Local Government which is a Local Government that has it's headquarter at Ake. The LGA comprises of 14 Political wards and 15 wards for the purpose of election and it consist of about 20 public secondary schools both mixed and single. The three selected secondary schools used for the study chosen from three different wards were among some of the oldest mixed secondary schools in each of the wards they were selected from which was needed for the study. The target population for the study were adolescents of senior secondary schools (SS1-SS3) who were willing to participate and those that were absent from school were excluded.

The table below is the distribution of students in selected secondary schools.

S/N	Class	Rev .Kuti		Nawarudeen		Egba		Total
		В	G	B	G	B	G	
1	SS1	250	340	200	300	256	350	1696
2	SS2	200	329	250	350	280	400	1809
3	SS3	220	250	150	250	240	385	1495
	TOTAL	679	919	600	900	776	1135	5000

 Table 1: Distribution of students in selected public secondary schools in Abeokuta south

 L/GA

The sample size for the study was 374 which were determined using Slovin's formula (1960) to achieve certain confidence interval. A multistage sampling technique was used in selecting the target samples .In the first stage, three wards were selected out of the 15 wards using purposive sampling technique based on the wards where the research setting needed for the study (public secondary school) can be found. In the second stage, school was selected from each of the three selected wards using purposive sampling technique based on the most populated mixed public secondary school needed for the study. The three schools were purposely grouped into experimental and control group because they have equal chance to be selected as either experimental or control meeting the criteria of most populated schools. In the third stage number of respondents from each school was determined by adopting the formula below

$\frac{Number of SSS1 - 3 (in each school)}{Total number of SSS1 - 3 (in all the schools)} \times Sample size (n)$

The last stage was using a stratified simple random sampling technique to select participants from SS1-SS3 class.

Sexuality education was conducted among the experimental group within the period of three weeks using sexuality education package adapted from UNESCO guidelines. Post test data was collected two weeks after in both experimental and control group. Participants were retained by assigning a number to each participant. Also, sexuality education was taught among the control group selected for the study after collecting the post test data.

A structured pretested questionnaire was used to obtain relevant data on the variables of this study. The questionnaire was subjected to face and content validity which was scrutinized to measure the set variables and the reliability of the instrument was achieved using 10% (37.4, approximately 37) of the sample size among the students in SS1-SS3 in a different secondary

school selected for the study. Cronbach Alpha measurement of reliability done on forty four items with a coefficient of 0.902 which implied that the instrument is reliable. Permission was sought from the head of each school used for the study and this helps to minimize attrition and ensured 100% collection rate. The purpose of the study was explained to the participants. The researcher granted the confidentiality of the participants as anonymous. Data gathered were analyzed using descriptive and inferential statistics such as frequency counts, percentages, tables, mean scores standard deviation were used to analyze demographic data of participants and the research questions. Chi-square analysis was used in analyzing the hypotheses of the study at the level of significance set at *p-value of 0.005*.

Ethical approval was given Babcock University Health Research Ethics Committee and a letter of introduction for permission to collect data was submitted to the research setting. Participants were informed about the study and consent was sought before the study commenced. Participation of the study was voluntary. The researcher ensured anonymity, beneficence and nonmaleficence.

RESULT

Socio-Demographic of the Participants

Table 2: Socio-Demographic of the Participants

Variable		Experimental group	Controlgroup	Total
		(N=230)	(N=144)	(N=374)
Age (in years)	12-14	9 (3.9)	5 (3.5)	14 (3.7)
	15-17	173 (75.2)	116 (80.6)	289 (77.3)
	18-20	48 (20.9)	23 (16.0)	71 (19.0)
Gender	Male	113 (49.1)	73 (50.7)	186 (49.7)
	Female	117 (50.9)	71 (49.3)	188 (50.3)
Class	SSS1	89 (38.7)	40 (27.8)	129 (34.5)
	SSS2	84 (36.5)	43 (29.9)	127 (34.0)
	SSS3	57 (24.8)	61 (42.4)	118 (31.6)
Religion	Islamic	121 (52.6)	39 (27.1)	160 (42.8)
	Christianity	109 (47.4)	103 (71.5)	212 (56.7)
	Others	0 (0.0)	2 (1.4)	2 (0.5)
Ethnic group	Yoruba	221 (96.1)	135 (93.8)	356 (95.2)
Lunic group	Hausa	1 (0.4	2 (1.4)	3 (0.8)
	Igbo	6 (2.6)	2 (1.4) 7 (4.9)	3 (0.8) 13 (3.5)
	Others	2 (0.9)	0 (0.0)	13(3.3) 2(0.5)
Family type	Monogamy	167 (72.6)	113 (78.5)	2 (0.3) 280 (74.9)
ranniy type	Polygamy	63 (27.4)	31 (21.5)	280 (74.9) 94 (25.1)
	Folyganiy	03 (27.4)	51 (21.5)	94 (23.1)
Do you live together with your parents?	Yes	186 (80.9)	129 (89.6)	315 (84.2)
	No	44 (19.1)	15 (10.4)	59 (15.8)
Educational status of father	Primary	24 (10.4)	15 (10.4)	39 (10.4)
	Secondary	136 (59.1)	58 (40.3)	194 (51.9)
	University	68 (29.6)	69 (47.9)	137 (36.6)
	Others	2 (0.9)	2 (1.4)	4 (1.1)
Educational status of mother	Primary	31 (13.5)	15 (10.4)	46 (12.3)
	Secondary	138 (60.0)	61 (42.4)	199 (53.2)
	University	47 (20.4)	68 (47.2)	115 (30.7)
	Others	14 (6.1)	0 (0.0)	14 (3.7)

Table 2: shows the socio-demographics of the participants in experimental and control group. Majority of the participants from the experimental group (75.2%) and control (80.6%) were within 15-17 years respectively. Half of the participants (50.9%) and (50.7%) were females both in the experimental group and control group. Also, majority of participants from the experimental group (38.7%) were in SSS1 and majority of the participants (42.4%) from the control group were in SSS3. Most of the participants (52.6%) in the experimental group practiced Islam and while most (71.5%) in control group were Christians. Yoruba (96.1%) was the tribe of majority of the participants in experimental and (93.8%) in control group Majority of the participants (72.6%) in experimental group and (78.5%) in the control group were from the monogamous family. Also, majority of those in experimental group (80.9%) and control group (89.6%) live together with their parents. The educational status of the father showed average (59.1%) who had secondary education among participants from experimental group while (47.9%) from the control group said their father had university education. The educational status of the mother showed that majority (60.0%) had secondary education among participants from experimental group while majority (47.2%) from the control group said their mother had university education.

Table 3: Participants' Sexual Activity

Variable		Experimental school (N=230)	Control school (N=144)	Total (N=374)
Are you in a steady relationship with an opposite sex	Yes	124 (53.9)	42 (29.2)	166 (44.4)
	No	106 (46.1)	102 (70.8)	208 (55.6)
Duration of exposure*	Low duration (Less than a year)	76 (61.3)	14 (33.3)	90 (54.2)
	Average duration (1-5 years)	35 (28.2)	13 (31.0)	48 (28.9)
	High duration (5 years and above)	13 (10.5)	15 (35.7)	28 (16.9)
Do you have sex with your partner?*	Yes	6 (4.8)	10 (23.8)	16 (9.6)
your purmor.	No	118 (95.2)	32 (76.2)	150 (90.4)
Do you have sex with your partner using condom?**	Yes	4 (66.7)	6 (60.0)	10 (62.5)
	No	2 (33.3)	4 (40.0)	6 (37.5)

*= number of those who have a relationship partner; **those who have had sex with their partner

Table 3 shows that average (53.9%) of the participants in experimental group said they were in intimate or steady relationship with opposite sex while majority (70.8%) of those in control group said they were not in a relationship with opposite sex. The duration of exposure to intimate or steady relationship among those who are in a relationship with the opposite sex showed that majority of respondents in experimental group (61.3%) had a low duration of exposure while majority (35.7%) of those from the control group had a high duration of exposure. Majority of the participants (95.2%) in experimental group and those in control group (76.2%) said they have not had sex with opposite sex while majority of the participants in experimental group (60.7%) and control school (60.0%) who have had sex with opposite partners used condom.

Answering Research Questions

Research question 1: What is the Pre-Post Mean Score Knowledge of sexuality education on Risky Sexual behavior of experimental and control group?

Level	Category	Pre-test		Post-test		
		Experimental (%)	Control (%)	Experimental (%)	Control (%)	
Low	0-2	45 (19.6)	38 (26.4)	15 (6.5)	38 (26.4)	
Average	3	123 (53.5)	79 (54.9)	81 (35.2)	79 (54.9)	
High	4-6	62 (27.0)	27 (18.8)	134 (58.3)	27 (18.8)	
Total		230 (100.0)	144 (100.0)	230 (100.0)	144 (100.0)	
Mean		3.66	3.41	4.52	3.41	
Standard deviation		1.25	1.31	1.29	1.31	

Table 4: Mean Score Knowledge Level of sexuality education on Risky sexual behaviorof Experimental and Control group at Pre-Posttest

Table 4 presents the pre and posttest mean score of participants in the experimental and control groups on the knowledge of sexuality education on risky sexual behavior. At the pretest stage, a total of 45 (19.6%) had low knowledge, 123 (53.5%) had average knowledge and 62 (27.0%) had high knowledge among the experimental group with a mean knowledge score of 3.66 while in the control group at the pre-test stage, a total of 38 (26.4%) had low knowledge score, 79 (54.9%) had average knowledge while 27 (18.8%) had high knowledge score of 3.41.

At the post-test stage, a total of 15 (6.5%) had low knowledge, 81 (35.2%) had average knowledge and 134 (58.3%) had high knowledge among the experimental group with a mean knowledge score of 4.52 while in the control group at the post-test stage, a total of 38 (26.4%) had low knowledge score, 79 (54.9%) had average knowledge while 27 (18.8%) had high knowledge score with a mean knowledge score of 3.41.At the pre and posttest of control group, the mean score level of knowledge remain same as they were not expose to sexuality education intervention prior to the post test data collection.

Research question 2: What is the Pre-Post Mean Score Knowledge of sexuality education on Factors Associated with Risky sexual behavior of experimental and control group?

Level	Category	Pre-te	est	Post-test		
		Experimental (%)	Control (%)	Experimental (%)	Control (%)	
Low	0-4	19 (8.3)	22 (15.3)	5 (2.2)	22 (15.3)	
Average	5	88 (38.3)	70 (48.6)	70 (30.4)	70 (48.6)	
High	6-9	123 (53.5)	52 (36.1)	155 (67.4)	52 (36.1)	
Total		230 (100.0)	144 (100.0)	230 (100.0)	144 (100.0)	
Mean		6.39	5.72	7.15	5.72	
Standard deviation		1.96	1.86	1.75	1.86	

Table 5: Mean Score Knowledge Level of sexuality education on Factors Associatedwith Risky sexual behavior of Experimental and Control group at Pre-Posttest

Table 5 presents the pre and post mean score knowledge of sexuality education on factors associated with risky sexual behavior of experimental and control group. At the pre-test stage, a total of 19 (8.3%) had low knowledge, 88 (38.3%) had average knowledge and 123 (53.5%) had high knowledge among the experimental group with a mean score knowledge score of 6.39 while in the control group at the pre-test stage, a total of 22 (15.3%) had low knowledge score, 70 (48.6%) had average knowledge while 52 (36.1%) had high knowledge score with a mean score knowledge of 5.72.

At the post-test stage, a total of 5 (2.2%) had low knowledge, 70 (30.4%) had average knowledge and 155 (67.4%) had high knowledge among the experimental group with a mean knowledge score of 7.15 while in the control group at the post-test stage, a total of 22 (15.3%) had low knowledge score, 70 (48.6%) had average knowledge while 52 (36.1%) had high knowledge score with a mean score knowledge of 5.72. At the pre and posttest of control group, the mean score level of knowledge remain same as they were not expose to sexuality education intervention prior to the post test data collection.

Test of Hypothesis

 $H_{01:}$ There is no significant difference between pre and post intervention mean score knowledge of sexuality education on risky sexual behavior of experimental and control group.

Experimental	230	266				
		3.66	1.25	372	1.822	0.069
Control	144	3.41	1.31			
Experimental	230	4.52	1.29	372	8.065	0.000
Control	144	3.41	1.31			
	Experimental	Experimental 230	Experimental 230 4.52	Experimental 230 4.52 1.29	Experimental 230 4.52 1.29 372	Experimental 230 4.52 1.29 372 8.065

Table 6: Independent t-test to show the difference between pre and post intervention mean score knowledge of sexuality education on risky sexual behavior of experimental and control group.

Result in Table 6 above indicates the independent t-test result showing the difference in the pre and post intervention mean score knowledge of sexuality education on risky sexual behavior of experimental and control group. At the pre-test stage, no significant difference was recorded among the control and the experimental group with a *P-value of* 0.069(P>0.005)recorded, hence, the null hypothesis was accepted for the pre-test mean score knowledge of the experimental and the control group as the *P-value* greater than the alpha (α) *P-value of* 0.005. Furthermore, a significant difference was recorded in the post-test mean score knowledge of sexuality education on risky sexual behavior of experimental and control group with a *P-value of* 0.000(P<0.005) which is less than the alpha (α) *P-value of* 0.005.Hence, the earlier set hypothesis is rejected and the alternate hypothesis (H₁) is accepted post intervention. This result shows that there is a significant difference in the mean score knowledge of sexuality education on risky sexual behavior of experimental and control group post test but no significant difference in the pretest of experimental and control group.

DISCUSSION

Participants Sexual Activity

Two third of the participants 33.3% in the experimental group had sex without using condom while slightly less than average of the participants 40.0% had sex without using condom in the control group. This result can be related to exposure of adolescents to pornography and social media and this conforms to the study of Musa (2020), which revealed that through

internet, media and direct interaction with foreigners and visitors some young population have become exposed to pornography making them vulnerable to unprotected sexual activity or risky sexual behavior.

Research Question 1: Pre-Post Intervention Mean Score Knowledge of sexuality education on Risky Sexual Behavior of experimental and control group

It has been indicated from previous studies that adolescents are the most vulnerable age group to risky sexual behavior such as sexual transmitted infection including HIV and unwanted pregnancy with complications from unsafe abortion which is prevalence among female teenagers. Also forms of risky sexual behavior such as oral sex (peno-oral, oro-vaginal and oro-anal) had been identified among adolescents .Therefore, it is important to impart knowledge of sexuality education among adolescents which is an educational intervention to improve knowledge thereby reducing risky sexual behavior. This study showed that there was little difference in the mean score knowledge level of sexuality education on risky sexual behavior of experimental group compared to control group at the pretest. 3.66 and 3.41 were revealed as the mean score knowledge for both groups respectively. The mean score knowledge level of sexuality education on risky sexual behavior of experimental and control group pretest indicated a fore knowledge of sexuality education on risky sexual behavior among the adolescents. It was observed that there was much difference in the mean score knowledge of experimental group compared to control group at the post test. 4.52 and 3.41 were recorded respectively for both groups respectively and this indicated that sexuality education improves level of knowledge.

However, the mean score knowledge of sexuality education on risky sexual behavior of experimental and control group pretest indicated a fore knowledge of sexuality education on risky sexual behavior among the adolescents which is in line with Valera (2022)- that there is no boundaries when it comes to communication and relationships since the world has become a global village to learn and be influenced with pattern of behavior. Also, it corroborates with the study of (Orukwowu 2021,Uyi 2022,Ketol et al.;2020, Ezeoke& Ezeaki 2020), which revealed that majority of adolescents had knowledge of sexuality education on risky sexual behavior.

Mean score knowledge level also increases from 3.66 to 4.52 in the experimental group at pre-posttest. These results indicated that sexuality education improves knowledge posttest. The increase in the mean score knowledge of sexuality education on risky sexual behavior of the experimental group preposttest as it was revealed in this study can be related to the findings of (Anupama,2021) that adolescents always have the willingness to learn, to explore

and to know more about self and sexuality at their developmental stage hence ,making them to comprehend details of information especially at this stage when their sexuality is brought into sharper focus.

Research Question 2: Pre-Post Intervention Mean Score Knowledge of sexuality education on Factors Associated with Risky Sexual Activity of experimental and control group

On the factors associated with risky sexual behavior, previous studies identified various factors common to adolescents such as early sexual debut, lack of parental guidance, transactional sex, alcohol intake, exposure to pornography and multiple sexual partner which has make them vulnerable to risky sexual behavior. Therefore, it is important for adolescent to be knowledgeable on factors associated with risky sexual behavior to prevent or reduce prevalence of risky sexual behavior among them. From this study, the mean score knowledge in the experimental group increased compared to control group 6.39 and 5.72. Although, there was increase in the mean score knowledge of experimental group compared to control group pretest but the mean score for both groups indicated a good knowledge of factors associated with risky sexual behavior.

However, a good knowledge of factors associated with risky sexual behavior in both experimental and control groups pretest indicated that there was fore knowledge of factors associated with risky sexual behavior among adolescents. These findings is not in isolation but similar findings was found from the findings of Nathan (2022), which revealed that majority of the adolescents and youth had various knowledge of sexuality education on factors associated with risky sexual behavior.

There was also increase in the mean score knowledge in the experimental group compared to control group at the post test.7.15 and 5.72 were recorded respectively. These findings indicated that sexuality education improves the knowledge of the adolescents in the experimental group posttest. There was also an increase in the mean score knowledge of participants on factors associated with risky sexual behavior in favor of the experimental group from 6.39-7.15 pre-posttest. This is in line with the study of Zhenchao et al.; (2023) on effect of sexuality education on sexual knowledge, sexual attitude and sexual behavior among youth which revealed that sexuality education even on internet improves sexual knowledge post intervention.

Discussion on Hypothesis

H_{01:} Difference between pre and post intervention mean score knowledge of sexuality education on risky sexual behavior of experimental and control group

This study showed both no significant and significant difference between pre and post intervention mean score knowledge of sexuality education on RSB of experimental and control group.(*P*-value = 0.062 and 0.000)*P* is greater than the alpha (α) *P*-value of 0.005 at the pretest of experimental and control group. Hence, the null hypothesis (H_0) is accepted and the alternative hypothesis (H_1) is rejected. Also at the post test of experimental and control group P is less than the (α) P-value of 0.0005. Hence, the null hypothesis is rejected while the alternate hypothesis is accepted. This result shows that there was no significant difference observed at the pretest phase and it is an indication that there is a pre knowledge of sexuality education on risky sexual behavior among the participants of experimental and control group. Furthermore, there was an effect of sexuality education on knowledge of RSB in favor of the experimental group at the post test phase which indicated that sexuality education imparts and increase knowledge on risky sexual behavior among adolescents. Hence, this result is in line with a study by Villalobos et al. (2021) among teachers and adolescents students which indicated that sex education given to the teacher first improved their knowledge on unprotected sex and safe sexual health behavior. It equally improved the knowledge of the students on unprotected sex and safe sexual activity when taught by the teachers which delay sexual debut among students in the intervention group compare to the students in the control

CONCLUSION

This study achieved its specific objective of assessing the mean score knowledge of sexuality education level on risky sexual behavior among adolescents and on factors associated with risky sexual behavior by conducting intervention on knowledge of sexuality education This study has shown that:

i) Pre-intervention knowledge mean score of adolescents on risky sexual behavior in the experimental group was low (3.66) compared to post-intervention knowledge mean score (4.52) while the knowledge mean for control group revealed 3.41at pre-posttest.

ii) Pre-intervention knowledge mean score of adolescent on factors associated with risky sexual behavior of the experimental group was low (6.39) compared to post intervention knowledge mean score(7.15.) while the knowledge mean score for control group revealed (5.72) at pre-posttest.

iii) There was no significant difference between pre interventions mean score knowledge on risky sexual behavior of experimental group and control group but there was a significant

difference between post interventions mean score knowledge of sexuality education on risky sexual behavior.

Based on the findings, experimental group exhibited an overall increase of mean score knowledge in the post test in all the variables. In the control group there was no increase in the mean score knowledge in the post test in all the variables. Also a significant difference with p value < 0.005 was recorded between post intervention mean-score knowledge of both experimental and control group. It is therefore concluded that teaching comprehensive sexuality education improves level of knowledge of the participants. However, this study revealed that comprehensive or adequate sexuality education will improve knowledge and in turn reduce the prevalence of risky sexual behavior among adolescents.

RECOMMENDATIONS

The current study recommends the following:

- i) To ensure consistent early sexuality education among adolescents to reduce risky sexual behavior among adolesents, school curriculum should be reviewed by the ministry of education to introduce comprehensive sexuality education into school curriculum and to expose students all through theirs stay in secondary school from junior to senior secondary class.
- ii) Sexuality education policy brief should be made consistent quarterly by the government in collaboration with Ministry of Education to disseminate among adolescents and youths in schools, to make it assessable for every adolescents and youth, to improve their knowledge on sexuality education.
- iii) Introduction of jingles or skit play in creating awareness to adolescents and parents about safe sexual behavior through media (radio or television) by the Federal Ministry of Health and State Ministry of Health to foster adolescent knowledge on sexuality education and parents knowledge on the need of a role to play to inform their adolescents about sex education at early stage.

REFERENCES

Anupama H (2022). Understanding Adolescent Sexuality. A Developmental

SAGE journals vol4(4).http//.org/10.1177/26318 3182211075.

Ariyo A.M *et al* (2020) Sexual communication between Parents and Adolescents and perception of secondary school students. *Mediterrean Journal of social sciences.ISSN2039-2117*.http//doi.org/10.36941/miss-2020-0046.

Bang& Celyn (2022) Risky sexual behavior and associated factors among sexually experienced adolescents. *Journal of Reproductive health 19*. Article number:127(2022).

Constantine, N. A. *et al* (2018) Short-term effects of a rights-based sexuality education curriculum for high-school student: A cluster-randomized trial. *BMC Public Health*, *15*(*1*)293 Crone, E A. & Dahl. E. (2021). Understanding adolescence as a period of social–affective engagement and goal flexibility.*Nature Reviews Neuroscience*, *13*(9636.doi10.1038/nrn3313. Collins dictionary(2019).Retrieved from https://www.collinsdictionary.com.

Duh,E.*et al.*(2018)Brown med(eds)A student-run curriculum and its impact on sexual health knowledge. *Family Medicine*,49(10), 785–788.

Kemigisha E *et al*,(2019)Evaluation of a school based comprehensive sexuality education *program.BMC Public Health19,Article number:1393(2019).*

Musa A.(2022) Sex education in Nigeria: Attitude of secondary school adolescents and the role of parents and stakeholders, *Open Journals of Educational Development 1; 1-30* Mellanzi W.C *et al* (2023)The effect of educational intervention on shaping safe sexual behavior based on problem-based pedagogy in the field of sex education and reproductive health: clinical trial among adolescents in Tanzania *Health Psychology and Behavioral Medicine10* (1)262-290 doi//10.1080 21642850.2022.2046474.

Moran&Taylor (2022) Out group Social behavior among children &adolescents in conflict settings. *Current opinion in psychology journal vol44*,http//doi.org/10.1016 pg 69-73 202108.030.

Nathan S F *et al* (2022) Reasons for having unprotected sex among adolescents and young adults assessing reproductive health services *Women health issue journal National Library of Medicine USA.gov*/doi.org/10.1016//J.whi.202211006.

Valerie F (2022) Why the World a Global village Community Culture Society Technology.

Villalobos et al (2021) Outcome if a comprehensive sexuality education imitative for

Adolescents.BMC Public Health journal 21,Article number;1439(2021).

Zhenchao H et al.;(2023) Effects of sexuality education on sexual knowledge, attitude and behaviors of youth. *Journal of Adolescents Health* 607-615,2023.