NURSE-LED TRAINING PROGRAMME ON KNOWLEDGE ABOUT SEXUAL VIOLENCE AMONG ADOLESCENT FEMALES IN SELECTED SECONDARY SCHOOLS, ABEOKUTA SOUTH LOCAL GOVERNMENT AREA, OGUN STATE

SOBANJO ADEOLA BEATRICE, ASONYE CHRISTIAN CHINEDU, SODIMU JEMINAT OMOTADE, FAROTIMI ADEKUNBI A.

ABSTRACT

Sexual violence is any unwanted sexual act that is perpetrated against someone's willingness by a person known or unknown to the victim. Adolescent girls are at high risk of sexual violence due to their inadequate knowledge about sexual violence. This study aimed to determine the effect of nurse-led training programme on knowledge about sexual violence among adolescent females in secondary schools in Abeokuta South Local Government Area, Ogun State. This study adopted quasi-experimental design with two treatment groups forming the control and intervention groups using 109 adolescent female students from four selected secondary schools using a self-administered questionnaire. A draft of the instrument along with the objectives of the study, research questions were submitted for face and content validation. Cronbach's Alpha Coefficient was used to test for reliability, values of 0.70 and above were accepted and items that scored less were reframed. Descriptive and inferential statistics such as z-test were used to explore relationships between the nurse-led training and knowledge. The study results revealed a statistically significant difference (p>000) between knowledge of adolescent female students, after the intervention. There is therefore need for periodic intervention programmes and awareness/enlightenment campaigns about sexual violence targeted at secondary school students.

KEYWORDS: Adolescent, Knowledge, Nurse-led Intervention, Prevention, Sexual violence

INTRODUCTION

Violence against women and girls is one of the most widely spread and least recognized human rights abuses in the world. Sexual violence is defined as a sexual act committed against a person without a freely given consent, (Centre for Disease Control (CDC), 2014). Sexual violence is a serious offence, yet a discussion on the topic is often avoided. It has been revealed that sexual harassment is a common form of sexual exploitation in Nigerian schools and African school settings. The most common place where sexual abuse occurs or takes place is the school (Akanle & Asebiomo, 2012). Sexual violence may also occur at the hands of people closest to the victims (are givers, peers and intimate partners (UNICEF, 2014). According to CDC (2014), more than half of the population of children in the world are victims of sexual and emotional violence every year. Furthermore, about 120 million girls worldwide (slightly more than 1 in 10) has experienced sexual molestation or other forms of forced sexual acts at some point in their lives. However, girls living in certain parts of the world seem to be at greater risk than others (UNICEF, 2014).

The impact of sexual violence on physical, social and mental health cannot be over emphasized. According to Jewkes, Dunkle, Nduna and Shai (2010), there are higher effects of bio-physical and psychological stresses on the victim of sexual violence, which can be immediate and long term effects. And also results in a wide range of sexual and reproductive health problems. Sexual violence is a crucial problem that can cause severe and long lasting problem on the victims, their family members and the community at large. Sexual violence can also affect the social well being of victims; individuals may be stigmatized by families and others in the society.

Victims of sexual violence tend not to disclose their

Sobanjo Adeola Beatrice, Federal Medical Centre, Idi Aba, Abeokuta, Ogun State, Nigeria.
Asonye Christian Chinedu, Adulth Health, School of Nursing, Babcock University, Ilisan Remo, Ogun State, Nigeria.
Sodimu Jeminat Omotade., School of Nursing Abeokuta, Ogun State, Nigeria.
Farotimi Adekunbi A., Adult Health, School of Nursing, Babcock University, Ilisan Remo, Ogun State, Nigeria.

assaults for fear of shame, rejection among colleagues, stigmatization, humiliation, guilt, fear of not being believed and cultural belief. Also the cultural belief that male child has authority over female child and the idea of blaming the victim and not the perpetrator has increased the prevalence rate (Odu, Falana & Olotu, 2014). This makes it all-important to empower every secondary school girl with the right information which in turn makes them to be knowledgeable about sexual violence and preventive strategies. A study of knowledge of sexual violence among young Igala women in Nigeria showed that young women had average knowledge about forms and causes of sexual violence (Rufus & Olaogun, 2009).

Similarly, a study on the perception of rape amongst secondary school students attending a series of School debates organized by the Medical Women's Association of Nigeria, in Port Harcourt in 2009, revealed that the respondents had a fair general knowledge about rape, but the perception of age at risk and actions to take in case of rape is poor (Eke, Ofori, Petronilla, & Tabansi, 2011). Onasoga, Afolayan, Rejuaro and Onwordi (2019) carried out a descriptive cross-sectional study assessing the knowledge of causes and strategies employed in preventing sexual violence among undergraduate students in the Niger Delta region of Nigeria. The study results revealed that the respondents had poor knowledge on where to report cases of sexual violence on campus despite the better knowledge on the causes of sexual violence and strategies to curb it.

The WHO reported in 2010 that it is important to achieve change at the education level and target societal-level factors in the primary prevention of intimate partner and sexual violence (Kimberly, Marlene, Hartim & Joav, 2014). The United Nation Population Fund (UNFPA) (2015), stressed the need for comprehensive sexual education because many adolescent females lack the knowledge about their sexual and reproductive health leaving them vulnerable to coercion, sexually transmitted infections and unintended pregnancy. Effective prevention programmes and sexual assault preventive intervention programmes (SAPIs) targeting female adults and children may help deter sexual violence (O'Donohue & Yeater, 2015).

Health professionals are in a better position to create awareness of sexual violence as a public health issue and to promote both the prevention and response to sexual assault within and outside hospital settings. Therefore gathering data on knowledge of adolescents and providing health information through training programme that would reduce the occurrence of sexual violence is vital. A training programme will equip those that are susceptible to this type of abuse on how to prevent the occurrence and it will reduce the possibilities of sexual violence. It is in the light of the above problem that the researchers became interested in planning a health education programme to determine the effect of a nurse-led training programme on knowledge about sexual violence among adolescent female students in Abeokuta South Local Government Area of Ogun State.

Hypotheses

$H0_1$: There is no significant difference in the pretest and posttest mean knowledge score of participants about causes of sexual violence between the experimental group and control group.

$H0_2$: There is no significant difference in the pretest and posttest mean knowledge score of participant about prevention of sexual violence between the experimental group and control group.

METHODOLOGY

Research Design

This study adopted a pretest, posttest quasi-experimental design with experimental group and control group involving female adolescents in selected public secondary schools in Abeokuta South Local Government Area, Ogun State. This design compared participants before and after implementing the intervention. The students were divided into two groups (experimental and control).

Population

The population comprises of 109 female adolescent students in the selected secondary schools in Abeokuta South Local Government Area of Ogun State. Participants were selected using multi-stage sampling technique. Four public secondary schools were selected randomly and participants were in senior secondary school from ages 12-19.

Sample size and sampling Technique

The sample size for this study was determined by using Conchran's formula from a population of 8,314 participants because the population is more than 1,000

The formula for Conchran, 1963

$$no = \frac{z^2 pq}{e^2}$$

z = confidence level of 95% and precision = 10% (0.1)
e= desired population for this study
Degree of variability (p) is assume to be 50% = 0.5
q =1- p = 0.5
Confidence level (z) of 95% = 1.96 in Z score table.
N = Total population = 8,314
no = Representative sample size

$$no = \frac{(1.96)^2 (0.5) (0.5)}{(0.1)^2}$$

$$= \frac{3.8416 \times 0.25}{0.01} \qquad = \frac{0.9604}{0.01} \qquad = 96$$

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}$$

$$= \frac{96}{1 + \frac{(96 - 1)}{8314}} \qquad n=99.$$

10% of finite sample size was used as attrition and was added to finite sample size.
= [10/100 x sample size (n)] + n
= [0.1 x 99] + 99
= 9.9 + 99
= 108.9
= 109.

The population of senior secondary school female students (x) that represented each school grade was determined by the formula.

X = School population ÷ Total population × Sample size

Table 1: Selection of Participants in Selected Public Secondary Schools

Serial Number	Name of School	Class Grade	Population	Sample size
1.	Abeokuta Grammar School	S.S.S.1	1144	15
		S.S.S. 2	839	11
		S.S.S. 3	763	10
		Total	**2746**	**36**
2.	Mac Job Grammar School	S.S.S. 1	686	9
		S.S.S. 2	305	4
		S.S.S. 3	153	2
		Total	**1144**	**15**
3.	Reverend Kuti Memorial Grammar School	S.S.S. 1	915	12
		S.S.S. 2	534	7
		S.S.S. 3	458	6
		Total	**1907**	**25**
4.	Asero High School	S.S.S. 1	1068	14
		S.S.S. 2	839	11
		S.S.S. 3	610	8
		Total	**2517**	**33**

Source: Selected Schools Register

The multi-stage sampling technique was employed to select the sample for this study. The procedure involved the following stages:

Stage One- Selection of words that have secondary schools using simple random sampling technique. These include wards 2, 7, 9 and 14. (See table 2).

Stage Two- Selection of one school from each wards using simple random sampling technique. Three schools were used as the experimental group (Mac Job Grammar School, Abeokuta Grammar School and Reverend Kuti Memorial Grammar School) and one school as the control group (Asero High School).

Stage Three - Selection of participants that were willing to participate using the convenience sampling technique See Table 3.

Table 2: List of Selected Wards and Schools in Abeokuta South Local Government

Serial Number	Wards	Name of schools
1.	Ward 2	Asero High School
2.	Ward 7	Abeokuta Grammar School
3.	Ward 9	Reverend Kuti Memorial grammar School
4.	Ward 14	Mac Job Grammar School

Source: Ogun State Ministry of Education

Table 3: Selection of Participants in Selected Public Secondary Schools

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Source: Selected Schools Register

Design of Intervention

In preparation for the study, the State Ministry of Education was visited to get information about the population of students and intention to carry out a study in the selected school. The schools were visited to see the selected school principals, and the school health nurse. Training of research assistant was done. The training was held for three weeks. The administration of pretest questionnaire was done on the first week to both experimental and control group, followed by training session of experimental group on second week and administration of post-test questionnaire on the third week to both groups.

Table 4: Time Line Activities

Week 1 Date: 8/5/2018 9/5/2018 10/5/2018	Week 2 Date: 15/5/2018 16/5/2018 17/5/2018	Week 3 Date: 22/5/2018 23/5/2018 24/5/2018
Administration of pretest questionnaire to experimental and control group	Training session for experimental group	Administration of posttest questionnaire to both experimental and control group.

Instrumentation

The instrument that was used in this study is the questionnaire. The questionnaire was generated with the specific objectives of the study in view. The questionnaire was sectionalized as follows: the first part consists of the Socio Demographic data of the respondents, the second section help to elicit responses on participants' knowledge about meaning, types, causes, impact and prevention of sexual violence.

Validity and Reliability of Instrument

The face and content validity of the instrument was established through the judgment of research supervisors/ methodologist, and modified based on the inputs. The reliability of the instruments was ascertained by administering the questionnaire once to about 20 adolescent female in Anglican High School Abeokuta and Cronbach's Alpha Coefficient was used to establish reliability with a value of 0.76.

Ethical Consideration

In line with adhering to the ethical guidelines that guides the conduct of research, ethical approval was obtained from Babcock University Health Research Ethics Committee (BUHREC), Ogun State Ministry of Education, Science, and Technology, and the principals of the various schools chosen for this study. A detailed explanation of the purpose of the study was given to all the eligible participants. Verbal informed consent was sought and obtained from each of the participants. They were informed that they have the right to withdraw from the study at any time without penalty. Participants' identities were protected, and all information retrieved was held with strict confidentiality.

METHOD OF DATA COLLECTION

Pre-Intervention

Pre-intervention visits were made to the experimental and control group. The experimental group comprised of adolescent female students in Abeokuta grammar School, Reverend Kuti memorial Grammar School, and Mac Job Grammar School, the control group are students in Asero high school. These schools are located in Ogun State. A letter of introduction was obtained from the School of Nursing, Babcock University, Ilisan-Remo, Ogun State. The selected schools were visited to obtain the number of classes and number of adolescent females in senior secondary school. The researcher explained the purpose and nature of the study to the principals of selected school and permission was also obtained.

During the pre-intervention visit, the participants were informed about the commencement and time table of training.

Implementation Phase

The participants were exposed to three modules. Each module was held once a week in each school selected as experimental group and lasted for three weeks. Energizers such as songs and jokes were used intermittently to keep the trainee alert while there was reward informs of claps for every contributions that was made.

1st week: The researcher met the experimental group as scheduled. The researcher introduced herself to the participants. The objectives of the training programme and nature of the study was communicated to them. They were encouraged to be present throughout the training modules. Written consent to participate in the study was obtained from each participant. Pre-test questionnaire was administered. For the experimental group, participant on arrival registered and were given a name tag and training materials. The programme commenced around 11a.m with the introduction of trainer (principal investigator) and the research assistants. The participants were asked to introduce themselves and were orientated on their roles and responsibilities as trainees. This was followed by formulation of ground rules to guide the conduct of training during the process. Two committees were formed among the trainees. These are the evaluation and welfare committees.

The modules for the training programme and presentation preceded using varieties of teaching methods and facilitated by means of training aids. Methods of teaching that were employed included lectures, participatory teaching, question and answers. Training materials used include posters, pamphlets, pictures and leaflets. The trainees were provided with brief introduction on sexual violence and the training for this module lasted 60minutes.

2nd week: Participants arrived at the scheduled time. Recap on previous lecture was done. They were

exposed to contents of module two which consisted of forms, causes, complications and ways to reduce risk of exposure to sexual violence. There was recapitulation to round up the presentation for each lesson that was delivered. This session lasted 60minutes.

Evaluation Phase

3rd week: The participants arrived at the scheduled time. Revision of modules one and two were done for the experimental group. All participants were given the posttest questionnaire to complete and they were collected immediately. The questionnaire used at the pre intervention phase was used at the end of the training programme. The data generated at the pre and post tests were then analyzed.

METHOD OF DATA ANALYSIS

The data generated from the study were analyzed, coded and entered into the computer using descriptive (frequency counts, percentages, tables, mean scores and standard deviation) and inferential statistics of z-test was used to test the two hypotheses generated at 0.05 level of significance. The statistical package for social science (SPSS) version 21 was used as the analytical tool.

The knowledge about meaning of sexual violence comprises of 9 items and every correct answer was given 1mark while wrong answers were scored as 0 then the scores were grouped into three phases; low knowledge 0-4, moderate knowledge 5-7 and high knowledge 8-9.

The knowledge about cause of sexual violence comprises of 7 items and every correct answer was given 1mark while wrong answers were scored as 0 then the scores were grouped into three phases; low knowledge 0-2, moderate knowledge 3-5 and high knowledge 6-7.

The knowledge about impact of sexual violence comprises of 4items and every correct answer was given 1mark while wrong answers were scored as 0 then the scores were grouped into three phases; low knowledge 0-1, moderate knowledge 2-3 and high knowledge 4.

The knowledge about prevention of sexual violence comprises of 12 questions and every correct answer was given 1mark while wrong answers were scored as 0 then the scores were grouped into three phases; low knowledge 0-4, moderate knowledge 5-9 and high knowledge 10-12.

RESULTS

Table 5: Demographic Characteristics of the Participants

Variables	Frequency (Experimental group)	Percentage (%)	Frequency (control group)	Percentage (%)
Age (years)				
12 – 15	54	71.1	23	69.7
16 – 19	22	28.9	10	30.3
Total	**76**	**100.0**	**33**	**100.0**
Mean	**14.65**		**14.71**	
Religion				
Christianity	52	68.4	22	66.7
Islam	22	28.9	9	27.3
Traditional	2	2.6	2	6.1
Total	**76**	**100.0**	**33**	**100.0**
Ethnicity				
Yoruba	60	78.9	19	57.6
Igbo	11	14.5	10	30.3
Hausa	4	5.3	4	12.1
Others	1	1.3	0	0.0
Total	**76**	**100.0**	**33**	**100.0**
Mothers Occupation				
Civil Servant	23	30.3	13	39.4
Business	24	31.6	8	24.2
Trader	27	35.5	12	36.4
Unemployed	2	2.6	0	0.0
Total	**76**	**100.0**	**33**	**100.0**
Living Apartment				
Flat	37	48.7	22	66.7
Self-Contained	21	27.6	7	21.2
Single Room	18	23.7	4	12.1
Total	**76**	**100.0**	**33**	**100.0**
Does your parent live together?				
Yes				
No	70	92.1	19	57.6
Total	6	7.9	14	42.4
	76	**100.0**	**33**	**100.0**

Source: Researcher's Field Report, 2018

Table 5 showed the frequencies and percentages of the Participants' demographic data. The Experimental group has more participants (N=76) than the control group (N=33), the difference in the number of participants may have stemmed from the fact that the experimental group comprises three schools and the control group has only one school. In the experimental group 54(71.1%) were between 12-15years while 23 (69.7%) in the control group fell in the same age group. There is little difference in the mean age of the experimental group (14.65) and the control group (14.71). Religion of participants showed that there are more Christians in both experimental group (68.4%) and the control group (66.7%) than Muslims.

The ethnicity of the participants showed that there are more Yoruba in both experimental groups (78.9%) and a control group (57.6%) than other tribes. This may be due to the geographical location of the study area. Living apartment of the participants revealed that more participants in the control group lived in a flat (66.7%) compared with 48.7% respondents in the experimental group, while more respondent live in self- contain and single room than participants in the control group. This indicates that participants in the control group may be financially better than participants in the experimental group. The result also showed that 92.1% of the participants in the experimental group lived with their parents and 57.6% of the respondents in the control group lived with their parents while 42.4% do not live with their parents.

Table 6: Descriptive Statistics Showing Pre and Post Intervention Knowledge of Participants about Meaning of Sexual Violence.

Knowledge about meaning of Sexual Violence	Pre-Intervention				Post-Intervention n= 109			
	Experimental Group		Control Group		Experimental Group		Control Group	
	Frequency	Percent (%)	Frequency	Percent (%)	Frequency	Percent (%)	Frequency	Percent (%)
High Knowledge (8-9)	28	36.8	10	30.3	42	55.3	9	27.3
Moderate Knowledge (5-7)	24	31.6	13	39.4	27	35.5	15	45.4
Low Knowledge (0-4)	24	31.6	10	30.3	7	9.2	9	27.3
Total	**76**	**100.0**	**33**	**100.0**	**76**	**100.0**	**33**	**100.0**
Mean ± SD	**6.20 ± 2.19**		**5.87 ± 2.19**		**7.33 ± 1.74**		**5.82±2.14**	

Table 6 shows that in the experimental group 42 participants (55.3%) had higher knowledge compared to 9 participants (27.3%) in the control group. This shows that the training has an effect on participant knowledge about the meaning of sexual violence.

Table 7: Descriptive Statistics Showing Pre and Post Intervention Knowledge of Participants about Impact of Sexual Violence.

Knowledge about impact of Sexual Violence	Pre-Intervention				Post-Intervention			n= 109
	Experimental Group		Control Group		Experimental Group		Control Group	
	Freq	Percent (%)	Freq	Percent (%)	Freq	Percent (%)	Freq	Percent (%)
High Knowledge (4)	27	35.5	6	18.2	54	71	6	18.2
Moderate Knowledge (2-3)	37	48.7	21	63.6	17	22.4	21	63.6
Low Knowledge (0-1)	12	15.8	6	18.2	5	6.6	6	18.2
Total	**76**	**100.0**	**33**	**100.0**	**76**	**100.0**	**33**	**100.0**
Mean±S.D	**2.78 ± 1.24**		**2.55 ± 1.00**		**3.49 ± 1.00**		**2.55±1.00**	

Table 7 shows that in the experimental group 54 participants (71.0%) had higher knowledge compared to 6 participants (18.2%) in the control group. This shows that the training has an effect on participant knowledge about the impact of sexual violence.

Table 8: Descriptive Statistics Showing Pre and Post Intervention Knowledge of Participants about Prevention of Sexual Violence.

Knowledge about prevention of Sexual Violence	Pre-Intervention				n= 109 Post-Intervention			
	Experimental Group		Control Group		Experimental Group		Control Group	
	Freq	Percent (%)	Freq	Percent (%)	Freq	Percent (%)	Freq	Percent (%)
High Knowledge (10-12)	31	40.8	15	18.2	58	76.3	14	42.4
Moderate Knowledge (5-9)	28	36.8	5	63.6	18	23.7	5	15.2
Low Knowledge (0-4)	17	22.4	13	18.2	0	0.0	14	42.4
Total	**76**	**100.0**	**33**	**100.0**	**76**	**100.0**	**33**	**100.0**
Mean ± S.D	**7.30 ± 3.10**		**6.61 ± 3.81**		**10.49 ± 1.84**		**6.58±3.85**	

Table 8 shows that less than average (40.8%) initially had higher knowledge while after the intervention above three quarters (76.3%) had higher knowledge about prevention of sexual violence compared to 14 (42.4%) participants in control group that have a higher knowledge post intervention.

Table 9: Z-test Showing Difference between the Mean Knowledge Score of Participant about Causes of Sexual Violence in Experimental group and Control group

Variable	N	Mean	Standard Deviation	Z-Value	P-Value	Remarks
Experimental	76	3.49	0.999	4.512	0.000	Significant
Control	33	2.55	1.00			

Table 9 shows that Z-value =4.512, P-Value=0.000 and since P value of 0.000 is less than α value of 0.05, there is significant difference in the mean knowledge score of participants in the experimental group and control group on causes of sexual violence.

Table 10: Z-test Showing Difference between the Mean Knowledge Score of Participant about Prevention of Sexual Violence in Experimental group and Control group

Variable	N	Mean	Standard Deviation	Z-Value	P-Value	Remarks
Experimental	76	10.49	1.84	7.197	0.000	Significant
Control	33	6.58	3.85			

The result in Table 10 shows that Z-value =7.197, P-Value=0.000 and since P value of 0.000 is less than α value of 0.05, there is significant difference in the mean knowledge score of participants in the experimental group and control group on prevention of sexual violence

DISCUSSION

The study shows that there is considerable increase in the number of participants with high knowledge (55.3%) about the meaning of sexual violence post intervention in the experimental group. This shows that the intervention is effective. This result supports the findings of Brenick et al. (2014) which reported that third grade students in the United States who participated in sexual violence safety skill training were compared with the control group and findings revealed that participants in the intervention group had greater increase in safety knowledge. This also agrees with the finding of Sudha et al., (2010), in a study conducted in India on effectiveness of the planned teaching program about knowledge of sexual violence among adolescent girls. They observed that during post-test 100% of the adolescent girls had good knowledge. These findings shows that the importance of training and retraining cannot be overemphasized for instance, Hilton et. al, (2014) in their study among rural eleventh grade Canadian students that participated in an hour programme indicated that the results increased their knowledge of sexual abuse concepts and resources and maintained the increase after six weeks. The result is also consistent with Wright et al, (2012) who revealed in their study that high students who attended sexual violence prevention educational program in three Virginia high schools were better able to define rape and demonstrated an increased knowledge of risk reduction strategies as well as available community resources.

Furthermore, the study results also revealed that there was increased knowledge among the participants of the experimental group 54 (71%) post intervention. This finding is supported by Adeib et al, (2015) study on the knowledge and attitude of women towards rape and child sexual abuse and reported that the higher the exposure to sexual violence prevention teaching the more likely the participant knowledge about the effects of sexual violence increases. Also the mean and SD of the experimental group for post intervention increases 3.49± 1.00. This finding is also consistent with a study conducted by Sudha et al, (2010) on effectiveness of planned teaching programme about knowledge of

sexual violence and its impact among adolescent girls in India revealed the pre-test knowledge scores of adolescent with good knowledge as low 13.95% whereas in the post-test 100% of the adolescent girls had good knowledge. There are some factors that are responsible for reduction in the score of participants. Green et al, (2008) in the precede model, which is the framework for the study, categorized the factors into predisposing, enabling and reinforcing. Predisposing factors include level of knowledge about the meaning and impact of sexual violence. The enabling factors include the accessibility to educational material like handouts, skills acquired about prevention of sexual violence such as self-defense skills and by stander intervention. Reinforcing factors refer to influences that the significant others have on adolescent. There were differences in the level of knowledge of participants about impact of sexual violence in the control group post intervention; this may be as a result of their inquisitiveness.

Also the study showed that less than average (40.8%) initially had high knowledge while after the intervention above three quarter (76.3%) had high knowledge about prevention of sexual violence compared to 14 (42.4%) participants in the control group that has high knowledge post intervention. This revealed that there is a considerable increase in the knowledge of adolescent females about prevention of sexual violence in the experimental group. This finding agrees with Brenick et al, (2014) who reported that third grade student in the United States who participated in sexual violence, safety skill training had greater increase in safety knowledge post intervention compared with participants in control group. Also it corroborates with Hilton et al, (2014) that there was increase knowledge among rural and urban students who participated in an intervention programme on how to prevent themselves against sexual violence.

Hypothesis 0_1: There is no significant difference in the pretest and posttest mean knowledge score of participants about causes of sexual violence between experimental group and control group.

The study result shows that there is significant difference in the mean knowledge of respondents in the

experimental group and control group with a P-value = 0.000. Hence, the null hypothesis is rejected. This finding supports a report in the Sexual assault Prevention Programme for Secondary Schools in Australia, the result of various prevention programmes carried out in different secondary schools showed that there is significant difference in the knowledge of the participant prior intervention and their knowledge after intervention (CASA House SAPPSS, 2008, p. 15 - 25). It also agrees with the report of Brenick et al (2014) who compared participants and found that participants in intervention group had greater increase in knowledge about causes of sexual violence.

Hypothesis 0_2: There is no significant difference in the pretest and posttest mean knowledge score of participant about prevention of sexual violence between the experimental group and control group.

The hypothesis testing result shows that there is a significant difference in the mean knowledge score of respondents in the experimental group and control group on the prevention of sexual violence with a P-value = 0.000. Hence, the null hypothesis is rejected. This is in line with studies by (Wright et al., 2010); Sarnquist et al., 2014), and Hollander et al., 2014) that reported an increase in the level of awareness, learning of new skills and strategies about prevention of sexual violence by the participant after an intervention program. In a review of 70 studies (1981 - 2017) evaluating prevention programs conducted in the United States, Canada, New Zealand and the United Kingdom by Del Campo and Faveo (2020), the study results show the effectiveness of intervention program geared towards sexual violence prevention.

CONCLUSION

The aim of the study is to determine the effect of a nurse-led training program on knowledge about sexual violence among adolescent female students in Abeokuta South Local Government Area of Ogun State. And conclusively, there is a statistically significant difference between the students' knowledge of causes and the prevention of sexual violence between the experimental and control groups. Therefore, improving students' knowledge via a training program will have a favourable effect on the prevention of sexual violence in secondary schools.

RECOMMENDATIONS

Based on the findings from the study, the following recommendations were made:

1.   Formation of school clubs for peer counselling and education on sexual violence, and where life training skills that support equality and respect are emphasized.

2.   There should be mentoring, peer programs and training for parents to promote healthy family relationships.

3.   Governments and stakeholders should periodically organize school-based sexual violence prevention programs to create awareness among school students across Nigeria on sexual violence and empower them with safety skills.

4.   The civil society organizations (CSOs), through the media, should escalate public enlightenment to tackle societal norms that promote sexual violence and raise awareness of its detrimental impacts on the victims and society.

5.   There should be public education and enlightenment at schools, churches, mosques, cultural/social gatherings, and through the media to help demystify the cultural belief that male child has authority over the female child and the idea of blaming the victim and not the perpetrator.

CONFLICT OF INTEREST

The author declared no conflict of interest.

REFERENCES

Abeid, M., Muganyizi, P., Massawe, S., Mpembeni, R., Deri, E., and Axemo, P., 2015. Knowledge and attitude towards rape and child sexual abuse: A community-based cross- sectional study in Rural Tanzania. Journal of Public Health, 15,428

Akanle, F. F., and Asebiomo, S., 2012. Perception of female secondary school students on the influence of   sexual abuse on academic achievement in Anabra State.   South/South Journal of Women in Colleges of Education, 1(1), 204-208.

Brenick, A., Shattuck, J., Donlan, A., Duh, S., and Zurbriggen, E., 2014. Empowering Children with Safety-Skils: An evaluation of the Kidpower Everyday Safety-Skills Program, Children and Youth Service Review 44,152-162.

CASA House Sexual Assault Sexual Assault Prevention Program for Prevention Program for Secondary Schools Secondary Schools (SAPPSS) REPORT 2008. Retrieved from https://www.partnersinprevention.org.au/wp-content/uploads/CASA-House-Sexual-Assault-Prevention-Program-for-Secondary-Schools-SAPPSS-Report-.pdf Center for Disease Control. 2014. Preventing Sexual Violence on College Campuses: Lessons from Research and Practice.www.cdc.gov/std/tg2015/sexualassualt

Del Campo, A., and Fávero, M., 2020. Effectiveness of programs for the prevention of child sexual abuse: A comprehensive review of evaluation studies. European Psychologist, 25(1),1–15. https://doi.org/10.1027/1016-9040/a000379

Eke, G. K., Ofori, P. I. and Tabansi, P. N., 2011. "Perception of Rape amongst Secondary School Students in Port Harcourt" The Nigerian Health Journal,11(1), 23 – 26.

Green L. W., and Ottoson J. M., 2008. Public health education and health promotion,4, 589–620

Hilton, N. Z., Harris, G. T., Rice, M. E., Krans, T., and Larigne, S. E., 2014.Antiviolence education in high schools; implementation and evaluation. Journal of interpersonal violence 13(6),726-742.

Hollander, J., 2014. Does Self-Defense training Prevent sexual Violence against Women? Violence against Women, 20 (3), 205-235.

Jewkes R. K., Dunkle K., Nduna M., and Shai N., 2010. Intimate partner violence, relationship power inequity, and incidence of HIV infection in young women in South Africa: a cohort study. Lancet, 376 (9734):41–48. doi: 10.1016/S0140-6736(10)60548-X. [PubMed] [Cross Ref].

Kimberly, K. M., Marlene, M. B., Omar, H. A., and Merrick J., 2014. Sexual violence against adolescent and young adult women. Paediatric Journal 144:266

O'Donohue, W. T. and Yeater A. H., 2015. Protocol for the Standardization of Sexual Harassment Investigations: A Mediational Approach. Sexual Harassment in Education and Work Settings: Current Research and Best Practices for Prevention: Current Research and Best Practices for Prevention 26:281.

Odu, B. K., Falana, B. A. and Olotu, O. K., 2014. Prevalence of violent sexual assault on South West Nigeria Girls. European Scientific Journal, 10 (7): 471-481.

Onasoga, Olayinka, Afolayan, Joel Adeleke, Rejuaro F. M., and Onwordi, Ozioma R., 2019. Perceived knowledge of causes and prevention strategies for sexual violence among university students in Niger Delta region of Nigeria. The Journal of Positive Psychology and Counselling, 3(1). Available from: https://www.researchgate.net/publication/330971221_Perceived_knowledge_of_causes_and_prevention_strategies_for_sexual_violence_among_university_students_in_Niger_Delta_region_of_Nigeria (accessed Feb 08 2021).

Rufus, T. R., and Olagun, J. A., 2009. "When does sex become violent? Conceptualizing sexual violence in the context of rural young Igala women in Nigeria", International Journal of Sociology and Anthropology 1(1), 6 – 11.

Sarnquist, C., Omondi, B., Sinclair, J., Gitau, C., Paiva, l., Muinge, M., Cornfield, D., and Maldonado, Y., 2014. Rape prevention through empowerment of adolescent girls.www.pediatrics.org/cgi/doi/10.1542/peds.2013-3414 doi:10.1542/peds.2013-3414

Sudha, A. R., Ashakumari, H. R., and Sangeeta N. K., 2010. Effectiveness of planned program on knowledge of sex education among adolescent girls. World Journal of Dentistry, 2(1),85-88

UNFPA, 2015. Global Population Policy Update, Issue 5, June 23. United Nations Children's Fund, A Statistical Snapshot of Violence against Adolescent Girls, UNICEF, New York, 2014.

World Health Organization, 2010. Preventing intimate partner sexual violence against women: Taking action and generating evidence, 25(9), 262.

Wright, V., Akers, S., and Rita, S., 2012. The Community Awareness Rape Education (CARE) Program for high school students. Journal of Emergency Nursing, 26(2), 182-185.