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EFFECT OF SEX EDUCATION ON KNOWLEDGE, ATTITUDE AND PRACTICE OF SEXUAL RISK BEHAVIOUR AMONG ADOLESCENTS IN ADO-EKITI, NIGERIA.

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Abstract

Sex education was carried out among adolescents in Ado-Ekiti with the aim of improving their knowledge of and attitude to sexual risk behaviour thereby reducing the practice of these behaviour among them.103 secondary school students, selected from two schools in Ado-Ekiti, using simple random sampling, constituted the sample for this study. Pretest-Posttest quasi-experimental nonequivalent groups design was adopted for this study. Questionnaire with reliability coefficient of 0.68 was the instrument for data collection. Frequency counts and percentages were used to analyse the demographic data of the participants while ANCOVA was

used to test hypotheses at 0.05 alpha level. Sex education had a significant main effect on adolescents' knowledge, attitude and practice of sexual risk behaviour (effect size=57.7%, 26.7% &13.1% respectively). There was no significant main & interaction effect of gender on attitude & practice of sexual risk behaviour. There was however significant interaction effect of gender on knowledge of adolescents' sexual risk behaviour. Sex education is an effective way of reducing the practice of sexual risk behaviour among adolescents. It is therefore recommended that frequent sex education outreaches should be carried out among adolescents.

Keywords: Adolescents, sex education, knowledge, attitude, practice, sexual risk behaviour.

Introduction

The pattern and prevalence of sexual risk behaviour among Nigerian adolescents is alarming. Many adolescents have been reported to be sexually active thus increasing their risk of getting sexually transmitted diseases. Sexual risk behaviour that have been identified among adolescents include: multiple sexual partnership (John, Okolo and Isichei 2014), early debut of sexual activities (Slap, Lot, Huang, Daniyan, Zink and Succop 2003; Imaledo, Peter-Kio, and Asuquo (2012), low and inconsistent use of condoms (Olaseha, Ajuwon and Onyejekwe, 2004), anal sexual intercourse and mouth to genital contact (Iwuagwu, Olaseha and Ajuwon, 2000)

Many factors have been reported to influence the practice of sexual risk behaviour among adolescents. Buga, Amoko and Ncayiyana (1996) identified poor knowledge of reproductive biology and contraceptives while Amu (2014) identified low perception of risk of contacting sexually transmitted diseases leading to poor attitude to sexual risk behaviour. In addition, Owolabi, Onayade and Ogunsola (2005) & Niyonsenga and Hlaing (2007) also reported that gender differences exist in sexual behaviour among adolescents, with boys being more likely to engage in sexual risk behaviours than girls.

Sexual risk behaviours, if not quickly addressed, could have long lasting implication on the health of the individuals concerned, and the nation at large. According to Centres for Disease Control and Prevention CDC (2018), sexual risk behaviours place adolescents at risk of HIV infection, other sexually transmitted diseases (STDs) and unintended pregnancy. In addition, Biglan, Brennan and Foster (as cited in Kipping, Campbell, MacArthur & Hickmann, 2012), stated that risk behaviours in adolescence are associated with poor educational attainment, future morbidity and premature mortality

One of the ways to reduce the occurrence of sexual risk behaviour among adolescents is to target these young ones with se education intervention programme so as to improve their knowledge of and attitude to sexual risk behaviour and in turn reduce risky sexual practices among them. Ibrahim, Rampal , Jamil and Zain (2012) reported significant improvement in knowledge, attitude and practice of sexual risk behaviour after a sex education programme among adolescents.

There have been many research reports on the pattern, prevalence and factors associated with sexual risk behaviour among Nigerian adolescents. More effort is however required to educate these adolescents on

issues related to sexual risk behaviour so as to reduce the practice among them. Ajuwon (2005) submitted that sexuality education during adolescence is likely to foster positive attitudes and healthy behaviours in adult years.

The purpose of this study was therefore to determine the effect of sex education intervention on knowledge, attitude and practice of sexual risk behaviours among adolescents in Ado-Ekiti, Ekiti State Nigeria.

Hypotheses

1. There is no significant main effect of sex education on knowledge of sexual risk behaviour among adolescents in Ado-Ekiti
2. There is no significant main effect of sex education on attitude to sexual risk behaviour among adolescents in Ado-Ekiti
3. There is no significant main effect of sex education on practice of sexual risk behaviour among adolescents in Ado-Ekiti

Materials and Methods

Study Design and Location

Pretest-posttest, control group, quasi-experimental non equivalent group design using 2x2 factorial matrix was adopted for this study. The study consisted of two treatment groups (experimental and control) and sex (male and female) as the moderating variable. The study was conducted in Ado-Ekiti, the capital of Ekiti State Nigeria.

Study Population and Sampling Procedure

The study consisted of one hundred and three adolescents with age range of 10-14 years. These adolescents were selected from two government owned secondary schools in Ado-Ekiti using purposive sampling procedure. The research design and factorial matrix adopted for this study could only accommodate two schools (one representing experimental and the other control group). However the authorities of one of the schools initially selected using random sampling declined consent hence only the schools where consent was given to carry out the study were selected. Students in Senior Secondary School 1 were purposively selected to constitute the study population for this study and an arm of Senior secondary 1 was randomly selected in each of the two schools and all the students in each of the classes selected constitute the participants for the study.

Data Collection

Researcher developed, validated Questionnaire with 4 sections was the instrument for data collection in this study. The first section was designed to elicit information on: participants' demographic attributes. Second section has 15-items with reliability coefficient of 0.68 and a Yes or No response format was used to test adolescents' knowledge of sexual risk behaviour. The third section was used to assess adolescents attitude to sexual risk behaviour. This has 17 items with a 4 point rating scale of Strongly Disagree (SD), Disagree (D), Agree (A) and Strongly Agree (SA) and a reliability coefficient of 0.78. The fourth section of the instrument, was used to assess the practice of sexual risk behaviour among the participants. This has 10 items with a reliability coefficient of 0.94 and a 4 point rating scale of 'never', 'once a while', 'once a week' and 'more than once a week'.

Data Analysis

Data generated in this study were analysed using SPSS version 16. Descriptive statistics

of frequency counts and percentages were used to describe the demographic attributes of respondents while ANCOVA was used to determine the effect of sex education on knowledge, attitude and practice of sexual risk behaviour among adolescents. All inferences were made at 0.05 alpha level.

Results

Table1: Demographic attributes of participants

Variable		Frequency	(%)
Gender	Male	53	51.5
	Female	50	48.5
Age group	10-14yrs	34	33.0
	15-19yrs	69	67.0
Groups	Experimental	57	55.3
	Control	46	44.7
	Total	103	100.0

Table 1 shows that 53(51.5%) of the participants are male while the rest are female, majority 69(67.0%) are between the ages of 15 and 19 years and 57 (55.3%) of the participants constituted the experimental group while 46 (44.7%) constituted the control group.

Hypothesis 1: There is no significant main effect of treatment on adolescents' knowledge of sexual risk behaviour

Table 2: Analysis of covariance (ANCOVA) of post test scores of adolescents' Knowledge of sexual risk behaviour using pretest scores as covariates

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	881.507[a]	4	220.377	64.023	.000	.723
Intercept	503.310	1	503.310	146.221	.000	.599
preknow	52.002	1	52.002	15.108	.000	.134
treatment	460.754	1	460.754	133.857	.000	.577
gender	.117	1	.117	.034	.854	.000
treatment * gender	15.382	1	15.382	4.469	.037	.044
Error	337.328	98	3.442			
Total	16755.000	103				
Corrected Total	1218.835	102				

a. R Squared = .723 (Adjusted R Squared = .712)

Table 2 shows that treatment had significant main effect on adolescents' knowledge of sexual risk behaviour ($F_{1, 98}$ = 133.857; P<0.05; partial eta squared= 0.577). Therefore hypothesis 1 is rejected. This implies that sex education intervention programme had significant main effect on adolescents' knowledge of sexual risk behaviour. Partial eta squared of 0.577 implies that treatments accounted for 57.7% of the observed

variance on participants' knowledge of sexual risk behaviour. This table also shows there was no significant main effect of gender but a significant interaction effect of treatment and gender on participants' knowledge of sexual risk behaviour. Further analysis revealed that the participants in the experimental group displayed better knowledge ($\bar{X}$ =14.486) of sexual risk behaviour than their counterparts in the control group ($\bar{X}$ =9.664) and also that female participants displayed significantly higher knowledge ($\bar{X}$ =12.900) than their male counterparts ($\bar{X}$ =11.698) after the sex education intervention programme.

Hypothesis 2: There is no significant main effect of treatment on adolescents' attitude to sexual risk behaviour

Table 3: Analysis of covariance (ANCOVA) of post test scores of adolescents' Attitude to sexual risk behaviour using pretest scores as covariates

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	3380.719[a]	4	845.180	20.142	.000	.451
Intercept	4987.849	1	4987.849	118.868	.000	.548
preatt	381.984	1	381.984	9.103	.003	.085
treatment	1496.655	1	1496.655	35.668	.000	.267
gender	1.437	1	1.437	.034	.854	.000
treatment *gender	24.939	1	24.939	.594	.443	.006
Error	4112.194	98	41.961			
Total	342482.000	103				
Corrected Total	7492.913	102				

a. R Squared = .451 (Adjusted R Squared = .429)

Table 3 shows that treatment had significant main effect on adolescents' attitude to sexual risk behaviour ($F_{1, 98}$ = 35.668; P<0.05; partial eta squared= 0.267). Therefore hypothesis 2 is rejected. This implies that sex education intervention programme had significant main effect on the attitude of adolescents to sexual risk behaviour. Partial eta squared of 0.267 implies that treatments accounted for 26.7% of the observed variance on participants' attitude to sexual risk behaviour. This table also shows there was no significant main and interaction effect of gender on participants' attitude to sexual risk behaviour. Further analysis revealed that the participants in the experimental group displayed better attitude ($\bar{X}$ =60.942) of sexual risk behaviour than their counterparts in the control group ($\bar{X}$ =52.314) and also that that there is a significant difference in participants' attitude to sexual risk behaviour with female participants displaying better attitude ($\bar{X}$ =58.180) than their male counterparts ($\bar{X}$ =55.143) after the sex education intervention programme.

Hypothesis 3: There is no significant main effect of treatment on adolescents' practice of sexual risk behaviour

Table 4: 2x2 analysis of covariance (ANCOVA) of post test scores of adolescents' Practice of sexual risk behaviour with treatment and sex using pretest scores as covariates

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2279.931[a]	4	569.983	48.038	.000	.662
Intercept	902.532	1	902.532	76.066	.000	.437
preprac	1039.919	1	1039.919	87.645	.000	.472
treatment	177.139	1	177.139	14.929	.000	.132
sex	44.041	1	44.041	3.712	.057	.036
treatment * sex	1.721E-5	1	1.721E-5	.000	.999	.000
Error	1162.788	98	11.865			
Total	142900.000	103				
Corrected Total	3442.718	102				

a. R Squared = .662 (Adjusted R Squared = .648)

Table 4 shows that treatment had significant main effect on adolescents' practice of sexual risk behaviour ($F_{1, 98}$ = 177.139; P<0.05; partial eta squared= 0.132). Therefore hypothesis 3 is rejected. This implies that sex education intervention programme had significant main effect on adolescents' practice of sexual risk behaviour. Partial eta squared of 0.132 implies that treatments accounted for 13.2% of the observed variance on participants' adolescents' practice of sexual risk behaviour. This table also shows there was no significant main and interaction effect of gender on participants' practice of sexual risk behaviour. Further analysis revealed that the participants in the experimental group had a significant reduction in the practice of sexual risk behaviour ($\bar{X}$ =2.210) of sexual risk behaviour compared to their counterparts in the control group ($\bar{X}$ =2.608) and female participants displayed a significant reduction in practice ($\bar{X}$ =.936) than their male counterparts ($\bar{X}$ =3.741) after the sex education intervention programme.

Discussion

This study examined the effect of sex education on knowledge, attitude and practice of sexual risk behaviour among adolescents. Similar to the findings of Esere (2008) ; Avachat, Phalke and Phalke (2011) and Ibrahim, Rampal , Jamil & Zain (2012), the present study resulted in a significant improvement in knowledge related to sexual risk behaviour among adolescents. Participants in the experimental group had a higher posttest mean score of knowledge than their counterparts in the control group. This finding supports the assertion that education is an effective tool for bringing about improvement in knowledge in every facet of life. The likely reason for this finding is that educational intervention programmes are often planned and packaged in such a way that recipients of such interventions get exposed to information that is expected to improve their knowledge on the target topics.

With regards to the effect of sex education on attitude to sexual risk behaviour, the

findings of this study like that of Peyman and Jangi (2015) shows that sex education resulted in an improvement of attitude towards sex risk behaviour. This is likely because through the sex education programme, participants gained better understanding of the detrimental effects of sexual risk behaviour thereby developing a better attitude towards avoiding such risky behaviours.

The practice of sexual risk behaviour was not left out in this study. Similar to the findings of Puente et al 2011, female participants in this study reported a significant reduction in the practice of sexual risk behaviour. Similarly, participants in the experimental group like those reported by Esere (2008), had significant reduction in practice of sexual risk behaviour after the intervention programme than those in the control group. The significant reduction in the practice of sexual risk behaviour reported among participants in this study was likely to be as a result of improvement in knowledge and attitude towards avoiding sexual risk behaviour brought about by the sex education intervention. Knowledge is power and it is an essential ingredient for developing a positive attitude towards the practice of healthy behaviour (Sharifzadeh, Moodi and Zendehdel,2010).

The findings of this study that gender differences exist in knowledge, attitude and practice of sexual risk behaviour after the sex education programme, is in line with that of Ibrahim, Rampal , Jamil and Zain (2012) who reported better knowledge of sexual risk behaviour after sex education programme among their female participants. The likely reason for this finding is that girls often tend to be more easily motivated than boys and since one of the objectives of the intervention programme is to motivate the adolescents to acquire better knowledge and attitude and adopt healthier sexuality then this might be the reason behind the finding.

Conclusion

Based on the findings of this study, it can be concluded that sex education intervention programme improves adolescents' knowledge, attitude and practice of sexual risk behaviour among adolescents.

Recommendations

The following recommendations are made based on the findings of this study:

1. School authorities should frequently organise sex education programmes among their students.
2. Health education teachers should use all available avenues to emphasize the importance of healthy sexuality among students
3. Parents should make it a point of duty to frequently give sex education talks to their children and wards. This will go a long way at reducing the practice of sexual risk behaviour among adolescents.
4. Health related Government agencies, Non Governmental Organizations and other concerned agencies should intensify efforts on sex education among in-school adolescents.

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