

Adolescent sex education: Prevalence, sources and perspective among senior secondary school students in Obio/Akpor Local Government Area of Rivers State

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Abstract

Background: Adequate sex education is an essential tool for all adolescents. The purpose of this study was to determine the proportion of adolescents who have had access to sexuality education, their source and their perspective to sexuality education in Obio/Akpor local government area (LGA) of Rivers State.

Methods: This is a cross sectional descriptive school based study. A multistage sampling method was used to select four secondary schools (two public and two private) in Obio/Akpor LGA of Rivers State. The study participants were recruited by simple balloting from the senior secondary classes. The study instrument was a pretested semi-structured self-administered questionnaire. Data were analysed with Epi Info version 7.2.2.16 statistical programme. In all cases, a value of $P < 0.05$ was statistically significant.

Results: One thousand one hundred and ten participants were recruited for the study, ages ranged from 13 to 19 years with a mean age of 15.5 ± 1.6 years. Majority (91.9%) of the participants have been taught sex education. More males and students from public schools had not been taught sex education. Sources of sex education were school (58.3%) and parents (13.5%). Most (74.0%) of the students preferred a school-based sex education taught by their teachers and 96.5% supports sex education to be incorporated into the school curriculum. Furthermore, majority of the students acknowledged that sex education will help them prevent sexually transmitted infection and HIV/AIDS, pregnancy and help them relate better with the opposite sex.

Conclusion: It is concluded that every child irrespective of the gender, school type be given access to adequate sex education. Parents and teachers are encouraged to ensure that the appropriate age-specific information is given to the children to prevent them from accessing wrong information from unreliable sources. There is need to incorporate sex education into the secondary school curriculum.

Keywords: Adolescents, perspective, prevalence, sex education, source

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INTRODUCTION

Sexuality is a complex behavioural characteristic in human being and it is determined by physical and psychological

development as well as societal norms and values.¹ It has remained a delicate topic, especially among children and young person's as it is rarely a topic to be discussed; however, its untoward effect has prolonged impact on the individual.²

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Sexuality education also known as sex education is defined as an appropriate agespecific, culturally acceptable method of passing on information about sex and relationships by providing a realistic, nonjudgemental and scientifically accurate information.¹ It includes learning about reproductive health, sexual relationships and the changes that occur at every stage of puberty.³

Adequate sex education is a fundamental right of an adolescent. According to the United Nations Committee on the Rights of the Child; adolescents are entitled to ample information necessary for their proper physical health and development. It is mandatory to ensure that all adolescents irrespective of their gender, race, socioeconomic class have access to correct and proper information on how to promote and protect their health and development as well as to help them practice healthy sexual behaviours.⁴

With rapid urbanisation, globalisation and the cosmopolitan pattern of living, there have been changes in the cultural, religious and social beliefs. Furthermore, the rapid spread of modern means of communications, especially smartphones, Internet and particularly easy access to pornographic sites by under aged children, the easy access of paedophiles to children, and the changing view about sexuality and sexual behaviours among adolescents, a formal sex education is needed to help these young person's to make an informed decision concerning their sexual relationships.^{5,6}

Study has shown that a comprehensive sexuality education during the early years of life plays a vital role to delay sexual debut. It also helps to provide knowledge on methods of preventing sexually transmitted infections (STIs), reduces the incidence of unwanted and teenage pregnancy.⁷ It has been reported that teaching children to abstain from sexual intercourse only, does not yield much positive outcome instead holistic teaching on sexuality education is more important. This highlights the significances of the contents of sexuality education taught to the children.⁷

Tanton *et al.*⁶ in 2015 reported that there was a decline in the prevalence of teenage pregnancy, abortions and STIs including HIV/AIDS among young persons aged 15–24 years when sex education was introduced in some European countries.⁶ Similarly, Manyike *et al.*⁸ also reported that adolescents who received sex education from their parents were protected from sexual abuse.

Although parents, relatives and peers are sources of sex education, these non-formal sources may not be adequate. This is because parents, or relatives may not feel comfortable

to discuss such sensitive topic with their children or wards, furthermore information gotten from peers may be wrong and misleading, in addition because of the intricacy of the knowledge required and proficiency needed to pass this information to young people, the non-formal means of acquiring sex education may be inadequate.^{5,6}

In Nigeria, formal sex education has not been integrated into the school curriculum and discussing sexual-related issues and sexuality is not done routinely and usually done in secrecy.⁹ Young people do not have access to comprehensive information on sex and sexuality, therefore, can source for these information from unreliable sources further making them more vulnerable to harmful sexual behaviours.⁹

Sexuality education is said to be an effective tool for vulnerable groups, particularly the adolescents who are in their formative years of life.⁷ Ensuring that they have adequate sex education will not only delay the onset of sexual initiation but also equip them with information on the prevention of STIs and other complications, this on the long run will have a positive impact not just to the individual but to the society at large. This study sought to determine the proportion of adolescents who have had access to sex education, their source of information and their perception about sexuality education.

METHODS

This study is a school-based cross-sectional descriptive survey which involved secondary schools in Obio/Akpor local government area (LGA) in Rivers State between April and July 2017.

Participants were male and female students from senior secondary school (SSS 1 – 3) who were between the ages of 13 and 19 years who had given consent for the study.

The sample size was calculated by using the Cochran formula,¹⁰ a prevalence of knowledge concerning sexual and reproductive health of 90.5% from a previous study¹¹ at a confidence limit of 95% and a sampling error tolerated at 2.5% with allowance for non-response of 10% was used. The minimum sample calculated was 588; however, a total of 1142 adolescents were recruited for this study.

Using the list of secondary school in Obio/Akpor LGA as a sampling frame, a multi-stage sampling method was used to select four secondary schools (two private and two public schools). The first stage was stratification of schools into public and private schools, followed by the

selection of schools: Two schools each were selected by simple balloting from the private and public schools. The last stage was selection of the study participants. From the SSS 1 to 3 classes from each selected school, two arms were selected randomly from each class and 95 students from these selected arms were recruited by simple balloting, 286 adolescents were recruited from each school and a total of 1142 adolescents participated in the study.

A pre-tested semi-structured, self-administered questionnaire which has three sections was used to obtain information on socio-demographic data, exposure and knowledge of sexuality education as well as perception of the study participants to sex education. In some questions, multiple responses were allowed. Participants who responded to yes to the following questions 'Have you ever been taught sex education' were considered as having learnt sex education irrespective of where he or she was taught, be it from a formal or non-formal sources.

Before the commencement of the study permission was obtained from the Rivers State Ministry of Education, ethical approval was sought and gotten from the University of Port Harcourt Research and Ethics committee with the code number (UPH/CEREMAD/REC/04) also the details of the study was explained to the participants. All the participant gave assent to be part of the study, a written consent was also obtained from the parents or guardians of the study participants who were <18 years of age while those that were 18 years and above completed the consent forms by themselves.

The social classification as demonstrated by Oyedeji¹² was used to place the study participants into the different social classes. The parent's profession and academic levels attained were the two factors used. This was done by assigning scores to the professions and their educational levels, after which the sum and mean for both parent was obtained. Based on the figures obtained, the participants were assigned into social Class I–V, which was further classified into upper (Class I-II) and lower (Class III-V) social classes.

Data were analysed using the Epi Info is a software developed by the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia (US) statistical programme. Comparison of means was made using the Student's *t*-test, while the test for association was carried out using the Chi-square test. In all cases, a value of $P < 0.05$ was regarded as statistically significant.

RESULTS

A total of 1142 questionnaires were distributed all were retrieved; 32 of them were not completely filled giving a response rate of 97.2%. Five hundred and seventy-six (51.9%) of them were males, whereas 534 (48.1%) of them were female with a male-to-female ratio of 1:1. The participant's age ranged from 13 to 19 years with a mean age of 15.5 ± 1.6 years. The mean age of males of 15.4 ± 1.5 years was lower the 15.6 ± 1.7 years for the females. However, the difference was no statistically significant ($t = 0.77 P = 0.44$).

Table 1 shows the socio-demographic profiles of the respondents.

Table 2 shows the relationship between exposure to sex education and various socio-demographic variables. The

Table 1: The socio-demographic profiles of the respondents (n=1110)

Socio-demographic	Frequency, n (%)
Gender	
Males	576 (51.9)
Females	534 (48.1)
Classes	
SSS 1	393 (35.4)
SSS 2	378 (34.1)
SSS 3	339 (30.5)
School type	
Public	585 (52.7)
Private	525 (47.3)
Social class	
Upper	648 (58.4)
Lower	462 (41.6)
Age (years)	
13-15	540 (48.6)
16-17	501 (45.1)
18-19	69 (6.2)
Mean age (years)	15.5±1.6

SSS: Senior secondary school

Table 2: Proportion of adolescents who have been taught sex education

Variables	Ever heard of sex education		Total, n (%)	χ^2	df	P
	Yes, n (%)	No, n (%)				
Gender						
Males	513 (89.1)	63 (10.9)	576 (100.0)	12.853	1	0.000
Females	507 (94.9)	27 (5.1)	534 (100.0)			
School type						
Public	519 (88.7)	66 (11.3)	585 (100.0)	16.708	1	0.000
Private	501 (95.4)	24 (4.6)	525 (100.0)			
Social class						
Upper	597 (92.1)	51 (7.9)	648 (100.0)	0.118	1	0.751
Lower	423 (91.6)	39 (8.4)	462 (100.0)			
Age (years)						
13-15	483 (89.4)	57 (10.6)	540 (100.0)	19.314	2	0.001
16-17	479 (95.6)	22 (4.4)	501 (100.0)			
18-19	58 (84.1)	11 (15.9)	69 (100.0)			
Total (%)	1020 (91.9)	90 (8.1)	1110 (100.0)			

majority (91.9%) of the respondents reported that they have been taught sex education. Sixty-three (10.9%) of the males compared to 27 (5.1%) of females reported that they had never been taught sex education. This was statistically significant $P = 0.000$. Sixty-six (11.3%) of the students from public schools compared to 24 (4.6%) from private school reported that they had never been taught sex education, the difference was statistically significant $P = 0.000$.

Table 3 shows the different sources of sex education. Amongst the students who have been taught sex education, 598 (58.6%) of them were taught in school, 137 (13.5%) by their parents, while 127 (12.5%) by their friends.

More females 71 (66.4%) were taught by their mothers compared to the males 36 (36.4%).

Odds ratio (OR) 2.127; confidence interval (CI) 1.4006–3.231; $P = 0.000$, whereas more males 28 (90.3%) compared to the females 3 (9.7%) were taught by their fathers OR: 9.043; CI 2.733–29.926; $P = 0.000$.

Table 4 shows students opinion on where and who should teach them sex education. Majority (74%) of them preferred to be taught at school by their school teachers (81.4%), while only 3 (0.3%) of them preferred their parents to teach them sex education.

One thousand and seventy-one (95.8%) of the students supports that sex educations be incorporated into the school curriculum. Only 39 (3.5%) of them were not in support this. More males 24 (4.2%) compared to the females 15 (2.8%) were not in support of school-based sex education. This was not statistically significant as shown in Table 5.

All the participants as shown in Table 6 reported that the knowledge of sex education can help them to delay initiation of sex, while 53.2% said that knowledge of sex education will improve their interaction with the opposite sex.

Table 6 shows what the students reported that they will benefit if they were taught sex education.

DISCUSSION

In this study, majority (91.9%) of the participants had been taught sex education this is similar to a study by Opara *et al.*¹¹ who had reported that as high as 90% of adolescent had received sexuality education. The proportion of those who had never been taught was 8.1% in this study and this was statistically significant, for this

Table 3: Sources of sex education

Source of sex education	Frequency (%)		Total (%)
	Males	Females	
School	302 (51.5)	296 (49.5)	598 (58.6)
From parents			
Mother	36 (33.6)	71 (66.4)	107 (10.5)
Father	28 (90.3)	3 (9.7)	31 (3.0)
Other relatives			
Older sibling	18 (20.5)	70 (79.5)	88 (8.6)
Aunt/uncles	10 (45.5)	12 (54.5)	22 (2.2)
Friends	106 (83.5)	21 (16.5)	127 (12.5)
Media			
Television	3 (37.5)	5 (62.5)	8 (0.8)
Radio	5 (41.7)	7 (58.3)	12 (1.2)
Place of worship	5 (18.5)	22 (81.5)	27 (2.6)
Total	513 (50.3)	507 (49.7)	1020 (100.0)

Table 4: Student's opinion on the preferred place and person to teach them sex education (n=1110)

Variables	Frequency, n (%)
Preferred place	
At school	274 (74.0)
At home	15 (1.4)
Place of worship	114 (10.3)
Health centres	99 (8.9)
From the media	60 (5.4)
Total	1110 (100.0)
Preferred person	
School teacher	903 (81.4)
Parents	3 (0.3)
Friends	60 (5.4)
Religious teachers	18 (1.6)
Health-care workers	102 (9.2)
Other relatives	24 (2.2)
Total	1110 (100.0)

Table 5: Student's perception on the need to include sex education in school curriculum

	Sex education should be included in school curriculum		Total, n (%)
	Yes, n (%)	No, n (%)	
Gender			
Male	552 (95.8)	24 (4.2)	576 (100.0)
Female	519 (97.2)	15 (2.8)	534 (100.0)
Total (%)	1071 (96.5)	39 (3.5)	1110 (100)

$\chi^2 = 1.505$, $df = 1$, $P = 0.219$

Table 6: What the students reported that they will benefit if they were taught sex education (n=1110)

Reasons	Frequency, n (%)
Prevention of STI/HIV	1048 (94.4)
Prevention of pregnancy	1086 (97.8)
Improvement of personal hygiene	855 (77.0)
To delay sex	1110 (100.0)
Improves interaction with opposite sex	590 (53.2)
To overcome peer influence	1083 (97.6)
To know about human reproductive cycle	320 (28.8)

Multiple responses was recorded. STI: Sexually transmitted infection

proportion of adolescent there is an infringement of their right to access information regarding sexuality education and therefore may be more vulnerable to engage in risky behaviours.^{4,13}

From the present study, more males than females had not been taught sex education. Though previous work on this finding is not available, due to variations in our culture, societal and religion norms, females and males are socialised to assume different roles.¹⁴ In most African countries boys are more liberal to sex and are made to believe that engaging in sex is a show of masculinity;¹⁵ therefore, males may not even be given the basic non-formal sex education from their homes. Girls, on the other hand, are seen as those who bear the negative consequences of engaging in sex are, therefore, talked to and are guided early so as to avoid bringing shame to the family.

It was noted from this study that being in private school gives a child an opportunity to be taught sex education; this highlights the need to ensure that students in both private and public schools have access to sex education.

Contrary to finding from previous studies in which the media was the main source of sex education.^{11,16} The finding of this study showed that the source of sex education is from school (58.6%), parents 13.5%, friends/peers 12.5% and media was 5.3%. While teachers may claim that the responsibility to give sex education to children lies on the parents, the parents, on the other hand, may not be able to openly talk to their children about sex-related matters due to cultural barriers and societal norms and therefore may abandon this responsibility to their school teachers this may, therefore, account for the finding from this study. The American Academy of Paediatrics¹⁷ advocates that sex education should be given by parents, teachers and health-care personnel, it encourages parents and other caregivers to discuss sexuality education that are age appropriate to the children. In this study, only 13.5% of adolescents obtained sex education from their parents this was much lower than the 34.8% from Opara *et al.*¹¹

In this study, females were two times more likely to have home-based sex education from their mothers compared to the males, while the fathers mostly focussed on their male children. This is similar to two previous studies.^{18,19} This finding highlights the attitude of some parents towards discussing sexual issues with their children, especially when they are of the opposite sex, mothers will, therefore, prefer to talk with their daughters and fathers their son.¹¹

In this study, 12.5% of adolescents learnt sex education from their peers/friends, this is high and worrisome. The danger in this is that the tendency of getting wrong information from peers is higher and may pre-dispose these children to risky behaviours.⁹

With respect to who and where the subjects will prefer to teach sex education only 0.3% and 1.4% of the subjects preferred to obtain sex education from their parent and at home, respectively, this is not surprising as the parents may be uncomfortable to discuss sexual issues with their children, this finding was however much lower than the 52.8% earlier reported by Opara *et al.*¹¹ who stated that majority of the adolescents preferred to be taught sex education by their parents at home.

The finding of this study collaborates the finding from other studies as majority (74%) of the students preferred sex education to be taught in school by their school teachers. For instance, Jaideep²⁰ and Kumar *et al.*²¹ had reported that adolescents preferred to be taught sex education by their teachers at school. The possible reason for this is because the students will be freer to ask questions relating to sex education to their school teachers as they may see it as the usual learning that occurs in school, also the teachers will not be bias to give out information to the students.

Sex education has always been an extremely controversial issue especially in African where such topics is considered a taboo;¹⁷ however, in this study, most (96.5%) of the respondents supports that sex education be incorporated into the school curriculum, this is similar to other studies were majority of adolescents in a study favoured inclusion of sex education into their school curriculum^{16,21} this could be due to the benefits that they attribute to sex education.

From the present study, reasons given for obtaining sex education includes to delay sexual initiation, prevention of pregnancy, STIs and HIV/AIDS. Furthermore, 97.6% of the respondents reported that sex education can help them overcome peer influence. Kumar *et al.*²¹ had also reported similar finding of 86.3% adolescents reporting that sex education can help prevent AIDS; similarly, Mueller *et al.*²² also had reported that reasons given by adolescents for obtaining sex education was to prevent the negative consequences of sexual intercourse.

Conclusion

The study concludes that most students in secondary schools in Obio/Akpor LGA have heard about sex education and were of the opinion that sex education is better learnt at school, from their teachers by incorporating sex education into the school curriculum.

A comprehensive sex education should be incorporated into the school curriculum so as to give the adolescents

sufficient and correct information to how to have a better reproductive health.

Limitation

In this part of the world where diverse religious and cultural beliefs may affect discussion on sexuality and participant may not give true information. The investigators clarified this before commencing the study as students were told what the study entails and that the finding from this study will not be linked to any one of them.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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