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Assessment of Sexual Behaviour and Utilization of Sexual and Reproductive Health Services among Secondary School Students in Ekiadolor, Edo State

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Abstract:

BACKGROUND: Sexual and reproductive health (SRH) is an important aspect of health and a fundamental human right which includes sexuality education, family planning, safe motherhood, post-abortion care, prevention and management of sexually transmitted infections and HIV/AIDS. The aim of this study was to assess the sexual behaviour and utilisation of SRH services (SRHSs) among in-school adolescents in Ekiadolor, Edo state.

MATERIALS AND METHODS: This was a cross-sectional study conducted among in-school adolescents in Ekiadolor. The respondents were then selected using a multistage sampling technique. An interviewer administered questionnaire was used to obtain data for the study. Data were coded and entered into IBM SPSS version 22.0 for analysis and $P < 0.05$ was considered significant.

RESULTS: A higher proportion of the respondents were male and 58.2% were of early adolescent age group (10–14 years), with a mean age of 14.29 ± 1.72 years. Only 6 (5%) of the respondents had good knowledge. Forty-seven (11.7%) respondents were sexually active and 36 (76.6%) of these engaged in safe sexual behaviour. Seven (1.7%) respondents visited hospital for SRHS and the major services utilised were counselling, HIV testing and acquisition of contraceptive pill. Eighteen (38.3%) of those sexually active had utilised condom during sex.

CONCLUSION: There was a poor knowledge of contraception and low level of utilisation of SRHSs among the secondary school students. However, a higher proportion of the sexually active respondents engaged in safe sexual behaviour.

Keywords:

Adolescents, Edo State, Ekiadolor, sexual and reproductive health, sexual behaviour

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Introduction

The adolescent period refers to the stage of development between 10 and 19 years and it is a time of rapid growth, curiosity, myths and misinformation concerning sexuality.[1] This phase is also characterised by experimental behaviour that could threaten long term health and wellbeing.[2] Adolescents are highly vulnerable and easily influenced by peers and people considered as role models such as parents and teachers.[2,3] They are also slightly at an increased level of vulnerability for different health conditions including sexually transmitted diseases when compared to the adult population.[4]

Exploring sexuality in adolescence such as kissing and fondling is normative and developing healthy sexuality is an important part of adolescent development.[5] Sexual behaviour is multidimensional and progressive as adolescents engage in a variety of different sexual behaviours (e.g., kissing, fondling, vaginal intercourse and oral sex) and do so in a number of different contexts (with romantic or non-romantic

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partners, with or without condoms).[5] Adolescents are at a high risk of developing risky sexual behaviour with an attendant increase in the spread of sexually transmitted infection (STIs) if not given adequate sexual and reproductive health (SRH) education.[2] Risky sexual behaviour is characterised by various harmful practices such as early sexual debut, multiple sexual partners and unprotected sexual intercourse. These risky practices result in negative health outcomes like STIs including HIV/AIDS, unwanted pregnancies and unsafe abortions.[4]

To ensure adolescents' SRH wellbeing, adolescents require quality and affordable SRH services (SRHS) to support their physiological, cognitive, emotional and social transition into adulthood. The SRH needs of adolescents are often underserved and are yet to receive adequate attention especially in the developing countries like Nigeria.[6] Inequitable distribution of and inadequate access to quality SRHSs have contributed to poor utilisation of SRHS among adolescents. This can result in high prevalence of SRH problems especially among the adolescents.[6] Delivering quality and effective services that are tailored to the needs of adolescents may improve utilisation of SRHSs thereby promoting safe sex practices. It is, therefore, important to understand how to best deliver services to adolescents in other to improve adolescents SRH outcomes.

Nigeria has been classified as a high-burden country for adolescent SRH problems.[7] As at 2018, about a fifth of adolescent girls in Nigeria had commenced childbearing in 2018 putting them at higher risks of maternal complications compared to older age groups.[8,9] Unsafe abortion contributes significantly to Nigeria's high maternal mortality burden as adolescents who desire to prevent pregnancies may be unable to do so due to inadequate knowledge and misconceptions on contraception[10] This can inadvertently lead to a preponderance of unintended pregnancies and unsafe abortion.[11] Globally, an estimated 75 million of 180–200 million pregnancies are unintended with about 16 million girls aged 15–19 years and about one million girls <15 years of age giving birth every year.[11,12] In Africa, young girls from 15 to 19 years account for 25% of all unsafe abortions in Africa while young girls within the age range of 15–24 are responsible for 57% of all unsafe Abortions in Sub-Saharan Africa. Although, the abortion law and policy in Nigeria prohibits legal access to legal abortion services, not <60% of the 600,000 induced abortions occurring annually are found among adolescents while 250 out of 1000 adolescent pregnancies end in unsafe abortion.[13] Furthermore, majority of these induced abortions are carried out by unskilled providers and many have serious complications without obtaining the post-abortion care needed.[14]

An estimate of 333 million new cases of curable STIs occur mostly in developing countries with the second highest rate occurring within the ages of 15–19 years.[13] One in 20 of these adolescents contracts a STIs each year, and half of all cases of HIV infection take place among people under the age of 25 years.[15] Currently, 1.3 million adolescent girls and 780,000 adolescent boys are living with HIV worldwide, and 79% of new HIV infections among adolescents are in Sub-Saharan Africa.[15,16] In Nigeria, 1 in 20 adolescents contracts a STIs each year, and half of all cases of HIV infection take place among people under the age of 25 years. This could result from early sexual debut which increases adolescents' HIV vulnerability, leads to unwanted pregnancies and unsafe abortions.[17]

The above SRH problems could also be due to poor utilisation of SRHSs by the adolescents. This could be due to poor awareness of the availability of SRHSs, disparities in both provision and accessibility of the services and also lack of priority to adolescents' SRH.[11,14] Therefore, this study was aimed at assessing the SRH behaviour and utilisation of SRHSs among in-school adolescents in Ekiadolor, Edo State. Findings from this study will contribute to the existing body of knowledge on the SRH behaviour among secondary school students. This study also generates data on the various factors affecting the utilisation of SRHSs and thereby promoting the favourable factors that ensure optimal utilisation.

Materials and Methods

This study was conducted in Iguediaken Secondary School in Ekiadolor community of Ovia North-East Local Government Area (LGA) of Edo State, Nigeria with administrative headquarters in the town of Okada.[18] It has a population of 155,344 persons and a projected 2020 population of 236,428 from 2006 population census with an annual growth rate of 2.8%.[19] Ekiadolor community has one primary health centre, one primary school, one secondary school and one tertiary institution. Benin is the predominant ethnic group, their occupation varies from trading to civil service and Christians make up a large proportion of the population. The major means of communication is Benin language and Pidgin English.[18]

The study population comprised of all Secondary School Students at Iguediaken Secondary School, Ekiadolor who gave their consent to participate in the study. Permission was obtained from the Heads of the Communities, headmaster and proprietress of the schools, verbal assent was obtained from the pupils and the confidentiality of the pupils were ensured by not putting their names on the questionnaires. A minimum sample size of 398 was calculated using Cochran's

formula $n = z^2pq/d^2$.[20] This was calculated considering a standard normal deviate of 1.96 at a significance level of 5%; 62% proportion of adolescents who utilised SRHSs in a study done in Oyo State, Nigeria[21] and a 10% non-response rate.

Multi-stage sampling technique was used in selecting respondents for this study. In the first stage, simple random sampling technique by balloting was used to select Ovia North-East LGA from the seven LGAs in Edo South Senatorial District. In stage two, simple random technique by balloting was used to select Ward 1 (Adolor) from the 13 political wards (Adolor, Iguoshodin, Isiuwa, Oduna, Ofunmwegbe, Oghede, Okada East, Okada West, Okokhuo, Oluku, Uhen, Uhiere and Utoka) in Ovia North-East LGA. In stage three, simple random technique by balloting was used to select Ekiadolor community from the eight communities in Adolor ward. In stage four, a stratified random sampling was done based on the existing strata (JSS1– SSS 3) and all the classes were utilised for this study. In each class, a systematic sampling technique was used to ensure proportionate allocation from each stratum until the required sample size was achieved. The proportion of students to be allocated to each class was calculated by multiplying the sampling fraction (obtained by dividing the population of each class with the total population of the school) with the sample size. A sampling interval of 3 was used in each class after computation. The class register of each class was used as the sampling frame from which the first student was selected by simple random sampling using a table of random numbers. Subsequently students were selected by applying the sampling interval until the required sample size was achieved.

An interviewer administered questionnaire was used to obtain data for the study. The questionnaire contained open and closed ended questions and were based on the study objectives. The questionnaire was subjected to expert review by the research team for validation Data obtained was sorted and screened for completeness after which they were coded and entered into IBM SPSS version 22.0 for analysis. Univariate analysis was done to assess frequency of all variables. Categorical variables were expressed in frequency tables, charts and graphs using *t*-test. Bivariate analysis was done to determine association of socio-demographic data with SRH behaviour, utilisation of SRHSs and factors affecting SRH behaviour among the respondents using Fisher's exact and Chi-square test. Test of significance was set as $P < 0.05$. Data presentation was done frequency tables and prose.

Twelve questions were used to assess sexual behaviour under six domains. The domains include, age of sexual debut, number of sexual partners in the last 6 months, coercion into having sex, incentives for sex, sexual relationship status and use of contraceptives during sexual intercourse. All negative answers were scored 0, while all positive answers were scored 1. There was a maximum total score of 12 and minimum score of 0, and the overall score was converted to percentage. An overall score of <100% was assessed as risky sexual behaviour while an overall score of 50% and above was assessed as safe sexual behaviour.

Ethical clearance was obtained from the UBTH Research Ethics Committee and permission from Ministry of Health, Edo State. Permission was obtained from the Heads of the Communities, headmaster and proprietress of the school, verbal assent was obtained from the students and the confidentiality of the students were ensured by not putting their names on the questionnaires. They were also informed that their participation in the study was voluntary and that they could opt out of the study at any time.

Results

Over half 207 (51.5%) of the respondents were male and 234 (58.2%) within 10–14 years old with a mean age of 14.3 ± 1.7. Majority of the 362 (90%) respondents were Christians and 292 (72.7%) of the respondents resided with both parents with a predominance of the Benin tribe 167 (41.5%). Majority 319 (79.4%) of the respondents are from nuclear family type and monogamous marriage type 311 (77.4%) Table 1.

Only 6 (5%) of the respondents had good knowledge while 113 (95%) of the respondents had poor knowledge of contraceptives based on the scoring system Figure 1.

Forty-seven (11.7%) of the respondents were sexually active. A larger proportion (63.8%) had sexual debut at <15 years, and majority (83.0%) had consensual nature of first sex. Twenty-six (55.3%) of respondents

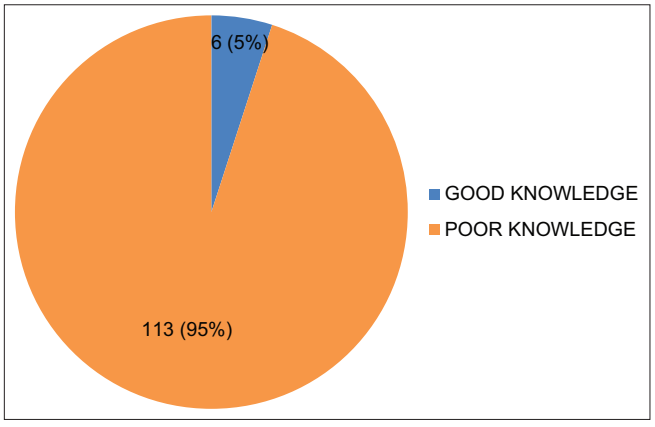

Figure 1: Knowledge of contraceptives among respondents

TABLE 1: Sociodemographic characteristics of respondents

Variables	Frequency (*n*=402)	Percent
Sex		
Male	207	51.5
Female	195	48.5
Age (Years)		
10-14	234	58.2
15-19	168	41.8
Mean age±SD	14.29±1.72	
Religion		
Christian	362	90.0
Islam	38	9.5
African Traditional Religion	2	0.5
Caregiver		
Both Parents	292	72.7
Father	17	4.2
Mother	46	11.4
Guardian	47	11.7
Ethnic group*		
Benin	167	41.5
Yoruba	65	16.2
Igbo	51	12.7
Urhobo	45	11.2
Esan	18	4.5
Ibibio	16	4.0
Efik	11	2.7
Others**	29	7.2
Marriage type		
Monogamous	311	77.4
Polygamous	91	22.6
Family type		
Nuclear	319	79.4
Extended	83	20.6

*Multiple Response. ** Isoko (4), Etsako (9), Idoma (4), Ijaw (3), Nkwanu (2), Tiv (3), Igala (4)

that have had sexual intercourse were currently in a sexual relationship, and 68.1% have had at least one sexual partner within the previous 6 months. Those with only one sexual partner was 57.5%. Pleasure and peer pressure were the predominate reasons for engaging in sexual intercourse with 57.5% and 31.9% respectively. STIs have only been reported in only one out of the 47 respondents that were sexually active. Eleven (23.4%) out of the 47 sexually active respondents engaged in risky behaviour [Table 2].

Only 1.7% out of the entire respondents visited a health facility for SRHS and the most common services utilised were counselling, HIV testing and drug prescription. Smaller percentage (38.3%) of the sexually active respondents made use of condom and the major reason for utilisation was prevention of unwanted pregnancy and STIs [Table 3].

On association between sociodemographic factors and hospital visitation for SRHSs, sex was found to be marginally significant ($P = 0.047$) while family structure and caregivers the respondents reside with were found to be statistically significant. There was a higher level of utilisation among the females, those in polygamous family structure and those residing with guardian. The association between care-givers and utilisation of SRHSs was the only variable on sociodemographic factors that was found to be statistically significant. Whereby, there was a greater proportion of utilisation among respondents living with either both parents and guardians. Furthermore, a greater proportion of adolescents in early adolescent age group utilised SRHSs though it was not statistically significant. Respondents with extended family type also utilised condom more, and this finding was not also statistically significant [Table 4].

Discussion

Less than one tenth of the respondents had good knowledge of contraceptives and this may be due to inadequate source of information, non-availability of Adolescent and Youth Friendly Centres and lack of sex education in schools. Poor knowledge of contraceptives can lead to consequences like unintended pregnancies, unsafe abortions and an increased prevalence of STIs including HIV/AIDS.[22] This finding is in contrast to a studies done in Dilla town, South Ethiopia[22] and Lagos, Nigeria where majority of the students had good knowledge of contraceptives.[23] This contrast could be due to the location of the respondents in this study which could affect their level of exposure and knowledge of SRH.

Although only a small proportion of the adolescents were sexually active this is still worrisome as sexual activity among adolescents can leave them vulnerable to consequences like unplanned pregnancy, unsafe abortion and HIV and STIs and HIV infection. This is tandem with a study done in Shendi town, North Ethiopia where minority of the students were sexually active.[24] More than half of the respondents who had sexual exposure experienced sexual debut at age <15 years. This early sexual debut can be as a result of peer pressure, lack of parental monitoring, alcohol use, sexual abuse and influence of social media. Early sexual debut has been correlated with greater number of sexual partners, lower levels of condom use, a greater chance of unintended pregnancy and a higher risk of STIs.[25] This is in contrast with a study done in Ido-Ekiti, Nigeria, where 16.2% of respondents' first sexual exposure occurred at age <15 years.[24] The first sexual exposure of majority of the respondents who were sexually active was consensual. Reasons for consensual sex in adolescents include expression of love, pleasure, peer pressure and incentives. This is similar to a study done in Ado-Ekiti

Table 2: Sexual behaviours of respondents

Variables	Frequency (*n*=402), *n* (%)
Sexual intercourse (*n*=402)	
Yes	47 (11.7)
No	355 (88.3)
Age of sex debut (*n*=47)	
<15	30 (63.8)
≥15	17 (36.2)
Nature of first sex (*n*=47)	
Consensual	39 (83.0)
Coercive	8 (17.0)
Number of sexual partner (6 months) (*n*=47)	
0	15 (31.9)
1	27 (57.5)
2-3	4 (8.5)
4	1 (2.1)
Currently in a sexual relationship (*n*=47)	
Yes	26 (55.3)
No	21 (44.7)
Reason for engaging in sexual intercourse* (*n*=47)	
Pleasure	27 (57.5)
Peer pressure	15 (31.9)
Gifts	11 (23.4)
Money	10 (21.3)
Favours	9 (19.2)
Ever had STIs (*n*=47)	
Yes	1 (2.2)
No	46 (97.8)
Overall sexual behaviour (*n*=47)	
Risky	11 (23.4)
Safe	36 (76.6)

*Multiple response. STIs: Sexually transmitted infections

Table 3: Utilisation of sexual and reproductive health services

Variable	Frequency, *n* (%)
Visit to health facility (*n*=402)	
Yes	7 (1.7)
No	395 (98.3)
Services utilised* (*n*=7)	
Counselling	4 (57.1)
HIV testing	3 (42.9)
Drug prescription	3 (42.9)
Treatment for STIs	1 (14.3)
Post-rape care	1 (14.3)
Ever used condom (*n*=47)	
Yes	18 (38.3)
No	29 (61.7)
Reasons for condom use (*n*=18)	
To prevent unwanted pregnancy	16 (88.9)
To prevent STI	12 (66.7)
To please partner	2 (11.1)

*Multiple response. STIs: Sexually transmitted infections, HIV: Human immunodeficiency virus

where a higher proportion of first sexual activity was consensual.[26] Majority of respondents engaged in sexual relationship to experience pleasure and this is similar to a study done in Udupi, India where most of the students identified pleasure as their main reason for engaging in sexual relationship.[27]

A higher proportion of students who were sexually active had single sexual partners. This may be due to the fact that the study was done among adolescents who are too young to have several sexual partners. Fewer sexual partners reduce the risk of transmission of STIs and HIV/AIDS. This is similar to a study done in Shendi town, North Ethiopia where 118 out of 157 (75%) had a single sexual partner.[24] There was poor utilisation of contraceptives among the students which may be attributed to poor knowledge of contraceptives. Poor utilisation of contraceptives can result in unintended pregnancies, unsafe abortions and increased transmission of STIs including HIV/AIDS. This is in keeping to a study carried out in Osun state, where a small percentage (27.7%) of the respondents utilised contraceptives during sex.[28] STIs was only reported in only one out of the 47 respondents that were sexually active.

Overall, about one fifth of the sexually active respondents engaged in risky behaviour. Risky sexual behaviour has been found to be one of the major causes of preventable mortality in low-income countries. It is also the major means of transmission for HIV/AIDS and human papillomavirus, with overall mortality more than one million people worldwide.[29] The above finding is similar to a study done among in-school adolescents in Ogun State, Nigeria, where the prevalence of risky sexual behaviour was 19.2%.[30]

Only a few of the respondents visited health facilities to assess SRHSs. This could be a result lack of perceived need for SRHSs, non-availability of SRHSs, lack of confidentiality and poor attitude of health care workers. This is in contrast to a study carried out in Oyo State, Nigeria where 22 (61.1%) respondents utilised SRHSs.[21] More female respondents visited health facilities for SRHSs compared to their male counterparts. This could be due to the fact that females have more SRH related problems and a higher need for services. This finding is in keeping with a study done at Nekemte Town Ethiopia in 2016 among secondary students which showed that more female students utilised SRHSs.[31]

Only one third of the sexually active respondents used condoms during sexual intercourse and the major reason for utilisation was prevention of unwanted pregnancy and STIs. This low condom utilisation could also be due to poor knowledge of contraceptives, poor health-seeking behaviour, low availability of adolescent-and-youth-responsive health services and

Table 4: Sociodemographic factors and utilisation of sexual and reproductive health services

Variable	Hospital visitation		χ^2	P
	Yes (*n*=7), *n* (%)	No (*n*=395), *n* (%)		
Age				
10-14	4 (1.7)	230 (98.3)	1.344	0.511
15-19	3 (1.8)	165 (98.2)		
Sex				
Male	1 (0.5)	206 (99.5)	3.948	0.047
Female	6 (3.1)	189 (96.9)		
Religion				
Christianity	5 (1.4)	357 (98.6)	3.065	0.216
Islam	2 (5.3)	36 (94.7)		
Family type				
Nuclear	5 (1.6)	314 (98.4)	0.273	0.601
Extended	2 (2.4)	81 (97.6)		
Family structure				
Monogamous	3 (1.0)	308 (99.0)	4.844	0.028
Polygamous	4 (4.4)	87 (95.6)		
Care givers				
Both parents	2 (0.6)	290 (99.4)	14.844	0.002
Father	0	17 (100)		
Mother	1 (2.2)	45 (97.8)		
Guardian	4 (8.5)	43 (91.5)		

χ^2=Chi-square

health workers' bias.[32,33] Unmarried adolescents are at higher risk of having unmet need for contraception than the older population due to social pressure, contraceptive access barriers arising from providers' bias and gender-based violence among others.[34,35] This could lead to unintended pregnancies, maternal mortality and STIs, including HIV/AIDS.

Conclusion

Knowledge of contraception among secondary school student in Ekiadolor community was poor. Less than half of the respondents who were sexually active engaged in risky sexual behaviour. The utilisation of SRHSs among the secondary students in Ekiadolor community was noted to be poor. Sex of the respondents caregiver they reside with and family structure were the major factors affecting the utilisation of SRHSs among secondary school students in Ekiadolor community.

Recommendations

Students should utilise SRHSs. Parents/guardians should regularly provide sexual education to their children. Inclusion of sex education in the school curriculum. Adolescent Youth Friendly centres should be established within the community where adolescents can be guided on SRH issues. Training and retraining of health care professionals to enable them improve the provision of SRHSs.

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Conflicts of interest

There are no conflicts of interest.

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