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Sexual Risk Behaviors and Associated Factors among Senior Secondary Schools Adolescents in Owerri, Imo State Nigeria

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Authors' contributions

This work was carried out in collaboration among all authors. Authors COI was involved in the design and editing of the manuscript. Author CCN was involved in the design, interpretation of results and writing up of the first draft, while authors CIO, OFO, UCO and VCO designed the study, managed the literature searches and statistical analysis of data. All authors read and approved the final manuscript.

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ABSTRACT

Background: The aetiology of sexual risk behaviors is multifactorial. Adequate information on the linkages and influences of these factors on sexual practices of adolescents could hypothetically inform strategies to stem consequential negative implications.
Objective: To determine sexual risk behaviors and associated factors among senior secondary schools adolescents in Owerri, Nigeria.
Subjects and Methods: An institution-based cross-sectional descriptive study of sexual risk behaviors among 384 senior secondary schools adolescents in Owerri Municipal, selected using multistage sampling technique was done. Data were collected using pretested self- administered

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semi- structured questionnaires and were analysed using International Business Machine/ Statistical Package for Social Sciences version 22 Statistical significance were identified with Chi-square tests for proportions, at p values $\leq$ 0.05.

Results: The mean age was 16 ±0.5 years. The mean age at first sexual intercourse was 14 ±1.3 years; with a bimodal age at first intercourse (15 and 16 years). Out of 40 (74%) who ever had sexual intercourse, 31 (57.4%) reported multiple sexual partnerships, 34 (63%) of which reported use of contraceptives, mostly condoms 28(51.9%). The factors associated with sexual practices are; age (p=0.000), gender (p=0.000), nature of school (p=0.000), ownership (p=0.002), alcohol use (p=0.000) and residence of parents (p=0.005).

Conclusions: This study revealed a decreasing age at sexual initiation and a progressive increase in sexual activity with increasing age. Most of them indulged in sexual risk behaviors

We recommend formal comprehensive sex education programs targeted at delaying age at first sexual act and ensuring safe sexual practices among this age group.

Keywords: Risk; sexual behaviors; determinants; in-school adolescents; Owerri Nigeria.

1. INTRODUCTION

In today's world, the adolescent population is increasing, numbering 1.2 billion and making up 16 per cent of the population. Most of the world's adolescents—80 per cent—live in developing countries, including Nigeria [1]. The World Health Organisation (WHO) defines adolescence as a period in human growth and development that occurs in- between childhood and adulthood [2]. It represents one of the critical transitions in life, spanning ages 10 to 19 years, a period of dis-orientation and discovery. And because these subjects face tough choices regarding school work, sexuality, drugs, alcohol, and social life, the adolescent period can bring about issues of independence and self-identity [2,3].

The changes in reproductive organs that occur in the life of adolescents often fuel their quest to explore and take risks in many aspects of their lives, including sexual relationships. In Nigeria, findings emanating from researches have posited that sexual risk behavior is associated with adolescence [4,6,7,8,9,10]. Sexual risk behaviors are defined as sexual activities that render individuals vulnerable to sexually transmitted infections (STIs) including Human Immuno-deficiency Syndrome (HIV), unplanned pregnancies, and their attendant consequences [3,11]. These include: early age at sexual debut, unprotected sexual act, multiple sexual partnerships, coerced sexual intercourse, use of unreliable methods of birth control or inconsistent use of birth control methods, sexual intercourse under the influence of alcohol or other intoxicating substances, homosexuality, and transactional sexual intercourse [11].

Despite efforts at improving adolescent sexuality, it remains a global public health concern. This could be as a result of the attendant unfavorable health and other implications [5,12]. These consequences include: unintended adolescent pregnancy, early childbirth or risky childbearing from sexual acts, suicide, and premature death from accidents, negative effects of alcoholism, drug use, and violence [2,5,12,13,14,15,16].

Sexual risk behaviors are influenced by a complexity of factors at various levels comprising individual, family, school and peer group, community as well as the media [17]. Factors at the individual level include; personal satisfaction, childhood abuses, alcohol and substance abuse, love for money or class symbol [6]. At the family level; single parenthood, parental connectedness, parental education, parental lifestyle, parental, communication on sex, parental norm and monitoring [6]. At the school level; school adoption of sex education, teachers' sexual abuse of students, teachers' poor monitoring of students [6]. At peer group level; peer pressure influence sexual initiations, sexual behaviour as adolescents who perceive that their friends engage in sexual practices are more likely to adapt to this [6]. At the community level; unsupportive, unsafe neighbourhood conditions, connections to caring adults and participation in community out school time activities [6]. The media also plays a role in promoting risky behaviors via sexuality undertone in brand marketing of an unimaginable range of products and services, enhancing the vulnerability of this group through the lure for experimentation. With often uncontrolled access to the internet, adolescents seem unduly exposed to pornography [6]. Though not much work has been done in this area in Nigeria, Nnebue, et al. [7] in Nigeria and other scholars in the USA [18,19], have duly noted the direct proportionality

in trend between STIs and proliferation of the popular media outlets among youths.

In Nigeria, the sexual health needs of adolescents remains high, as evidenced by the rates of pregnancy and STIs, including HIV [20,21,22,23]. These negative outcomes could be controlled or averted by ensuring good knowledge of sexual risk behaviors and associated factors among this age group. There is also need for a positive change in behavior. The findings of this work will update and encourage sexual education by parents, schools, communities and the media, in helping adolescents crave for safe sexual behaviors. It will also inform policy makers in addressing issues bordering on availability and utilization of reproductive health services and an enhanced guide to their choices. More so, the influence that families have on effectively promoting a positive attitude and healthy sexual behaviors among adolescents has been reduced by the negative effects of modernization among other factors [24]. In the light of the above, schools could be another veritable avenue to effectively reach this group and timely too. With this backdrop, the current study was designed to examine trends in sexual risk behaviors and associated factors among secondary schools adolescents in Owerri, Imo state Nigeria.

2. METHODOLOGY

2.1 Study Area

This study was carried out in Owerri municipal, one of the three local government areas that constitute Owerri the capital of Imo State in South Eastern Nigeria [25]. Owerri municipal has its headquarters in the city of Owerri, with an area of 58 km^2 and population of 127,213 as at the 2006 census [26] Majority of the inhabitants are Ibos. Their major occupations are civil service and schooling, while a few engage in trading and farming. Christianity is the dominant religion [25] Owerri is a metropolitan city hosting several educational institutions ranging from the primary to the tertiary level. There are 14 private and 11 public registered secondary schools in the Municipality.

2.2 Study Design

A cross sectional descriptive study on risky sexual behaviors and associated factors among secondary schools adolescents in Owerri Municipal, Imo State Nigeria, conducted from August to October, 2017.

2.3 Study Population

The study population comprises both male and female senior secondary schools (SS) students (SS1–3) aged 10-19, of the selected registered public and private secondary schools in Owerri Municipal LGA, Imo state.

2.3.1 Inclusion criterion

Adolescents in senior classes in select secondary schools in Owerri Municipal LGA, Imo state, who were 18- 19 years and gave consent (or those below 18 years and from whom parental consent were gained).

2.3.2 Exclusion criterion

Adolescent senior secondary school students who were absent from school during the study period.

2.4 Sample Size Determination

The sample size was determined using the sample size formula for cross sectional studies in population greater than 10,000 (Cochran) stated thus: $n=z^2$ pq/ d^2 [27], Where n= minimum sample size; z=Standard normal deviate set at 1.96 (95% confidence interval); p=prevalence in a previous study; q=1 – p; d=degree of accuracy (0.05); 20% attrition rate will be used. Thus using a prevalence of 34.3% of sexually active students reported in a study in Nnewi Anambra state; p= 0.343 and q= 0.657, n= 346 students. Using 10% attrition, the sample size was 380 students.

2.5 Sampling Technique

The Multistage sampling technique was used to select study respondents. **STAGE 1:** This involved getting the list of all government approved secondary schools in Owerri Municipal comprising 25 secondary schools, from the State Ministry of Education. Using this as a sampling frame, the schools were stratified into private and public schools (14 private, 11 public schools). **STAGE 2**: This involved further stratification into private single boys, public single boys, private single girls, public single girls, private co-educational schools and public co-educational schools. **STAGE 3**: Simple random sampling technique was used to select 6 schools, 3 each from both private and public secondary schools of which comprise one boys' only, one girls' only and one co-educational secondary school.

STAGE 4: This involved selection of students from each school, using systematic sampling method by consecutive recruitment until the number allotted to each select school is attained putting our inclusion and exclusion criteria into consideration.

2.6 Data Collection Technique

Data was collected using pre- tested, self-administered, semi structured questionnaires designed from relevant literature, which comprises three sections namely: a) Sociodemographic, which was used to collect data such as respondents' age, sex, class, religion, tribe and type of family; b) Practice of risky sexual behaviors; c) Factors affecting sexual behavior among respondents.

2.7 Data Management and Analysis

The data were reviewed and entered into the computer. The data were cleaned by checking for any data collection or coding errors. Data analysis was carried out with the aid of International Business Machines –Statistical Package for the Social Sciences (IBM-SPSS) Windows version 22.0. [28]. Descriptive data were presented as charts, simple frequencies and percentages. Tests of statistical significance were carried out using Chi square for proportions. A p value of $\leq$ 0.05 was considered significant.

3. RESULTS

Three hundred and eighty four questionnaires were distributed in this survey. Out of this, 271 were analysed giving a response of 96.6%. Table 1 shows the socio-demographic distribution of respondents. The modal group of respondents 175(47.2%) were aged 16 years, while the mean age was 16 ± 0.5 years. More females 225(60.6%) participated in this survey, with majority of the participants in SS3 308(83%). The predominant religion was 184(49.6) Catholicism, while majority 356 (95.9) were Ibos. Altogether 365(98.4%) have never been married.

Table 2 shows the sociodemographic characteristics of respondents' family. Eighty percent of respondents' parents 320(86.4%) live in urban areas, while 301(81.1%) live with their parents. A total of 303(81.7%) are from monogamous families. Majority of the respondents' parents had attained a tertiary level of education 264(71.2%). One hundred and eleven (29.9) of respondents' fathers were Business men or Traders, while 74(19.9) were Civil servants.

Table 3 shows the sexual practices of respondents who ever had sexual intercourse. The mean age at first sexual intercourse was 14 ±.1.3 years; there was a bimodal age at first intercourse (15 and 16 years). Out of those who ever had sexual intercourse, 40(74%) reported to have done so with a friend, 5(9.3%) with a relative. Thirty one (57.4%) reported to have had more than one sexual partners. Twenty four (44.4%) of the ever had sex, reported having sexual intercourse in the last three months preceding the study, while 32(59.3%) of the ever had sex reported having sexual intercourse in the last 12 months preceding the study. Thirty six (94.7%) of males reported sexual attraction to female, while 9(56.3%) of females reported sexual attraction 320(86.4%) to males. However, relatively more females 18.8% reported attraction to both gender compared to males 2.6%. Generally, the most common type of sexual intercourse engaged in by respondents was vaginal/penile sex 55.6%.

Table 4 shows the contraceptive use and HIV counselling and testing (HCT) uptake among respondents. Only 34(63%) of those who ever had sexual intercourse reported use of contraceptives of which mostly of these were condoms 28(51.9%). Reasons given for non-use of contraceptives, 20(37%) include: getting more pleasure without it 2(10%), not presently sexually active 1(5%), sexual intercourse not planned 1(5%). Only 40(10.8%) have gone for HCT, while 178(48%) claim to know their HIV status.

Table 5 shows the relationship between certain socio demographic variables of respondents and their being sexually active. The factors that were significantly associated with sexual practices of respondents are age (p=0.000), gender (p=0.000), nature of school (mixed or single) (p=0.000), ownership (type) of school (private or public) (p=0.002), alcohol use (p=0.000) and residence of respondents' parents (p=0.005).

4. DISCUSSION

This cross sectional descriptive study determined the sexual risk behaviors and associated factors among senior secondary schools adolescents in Owerri Municipal. The socio-demographic characteristics of respondents in this study are similar to those of previous studies conducted in Nigeria [6,8,9,24].

Table 1. Sociodemographic characteristics of senior secondary schools adolescents in Owerri Municipal, Nigeria, from August to October, 2017

Characteristics	Frequency N=371	Percentage (%)
Age (years)		
14	10	2.7
15	84	22.6
16	175	47.2
17	84	22.6
18	16	4.3
19	2	0.5
Gender		
Male	146	39.4
Female	225	60.6
Class		
SS2	63	17
SS3	308	83
Religion		
Catholic	184	49.6
Pentecostal	128	34.5
Orthodox	52	14
Muslim	3	0.8
*Others	4	1.1
Tribe		
Hausa	2	0.5
Ibo	356	95.9
Yoruba	3	0.8
**Others	10	2.7
Marital status		
Never Married	365	98.4
Currently Married	2	0.5
Cohabiting	3	0.8
Separated	1	0.3
Residence of parents		
Urban	320	86.4
Rural	51	13.7
Type of family		
Monogamous	303	81.7
Polygamous	20	5.4
Extended	29	7.8
Single Parent	18	4.9
No response	1	0.3

**Others - Celestial church, Jehovah's witness and Sabbath.*
*** Others - Bini, Efik, Ibibio, Ikwerre, Isoko, Igala, Ogoni.*

Table 2. Sociodemographic characteristics of families of senior secondary schools adolescents in Owerri Municipal, Nigeria, from August to October, 2017.

Characteristics	Frequency n=371	Percentage (%)
Residence of parents		
Urban	320	86.4
Rural	51	13.7
Current living condition		
With both parents	301	81.1
With mother only	40	10.8
With father only	7	1.9
With guardian	22	5.9

Characteristics	Frequency n=371	Percentage (%)
Elder brother	1	0.3
Type of family		
Monogamous	303	81.7
Polygamous	20	5.4
Extended	29	7.8
Single Parent	18	4.9
No response	1	0.3
Educational status of mother		
Primary	8	2.2
Secondary	82	22.1
Tertiary	264	71.2
None	17	4.6
Educational status of father		
Primary	24	6.5
Secondary	65	17.5
Tertiary	264	71.2
None	18	4.9
Occupation of mother		
Artisan	10	2.7
Business woman/Trader	85	22.9
Civil servant/Retiree	55	14.8
Clergy	1	0.3
*Professional	74	19.9
No response	146	39.4
Occupation of father		
Artisan/Farmer	11	3.0
Business man/Trader	111	29.9
Civil servant/Retiree	74	19.9
Clergy	10	2.7
*Professional	57	26.1
No response	68	18.3

**Professionals included occupations like; Accountants, Architects, Barristers/Lawyers, Engineers, Lecturers, Medical Doctors, Nurses, Pharmacists, Surveyors and Teachers.*

Table 3. Practice of sexual risk behavior, indulgence in alcohol, smoking and the ever had sex among senior secondary school adolescents in Owerri Municipal, Nigeria, from August to October, 2017

Characteristics	Frequency n=371	Percentage (%)
Do you take alcohol		
Yes	69	18.6
No	302	81.4
Do you smoke		
Yes	8	2.2
No	373	97.8
Ever had sexual intercourse		
Yes	54	14.6
No	317	85.4
Age at first sexual intercourse, n=54		
4-9	4	7.4
10-14	15	27.8
15-19	35	64.8
With whom did you have the first Intercourse, n=54		
Friend	46	85.1
Colleague	3	5.6
Relative	5	9.3

Characteristics	Frequency n=371	Percentage (%)
Total number of partners sexual partners ever, n=54		
One person	23	42.6
More than one person	31	57.4
Sexual intercourse in last 3 months, n=54		
Yes	24	44.4
No	30	55.6
Sexual intercourse in last 12 months n=54		
Yes	32	59.3
No	22	40.7
Sexual orientation, boys, n=38		
Heterosexual	36	94.7
Homosexual	1	2.6
Bisexual	1	2.6
Sexual orientation, girls, n=16		
Heterosexual	9	56.3
Homosexual	4	25
Bisexual	3	18.8
***What type of intercourse, N=54**		
Vaginal/ Penile	30	55.6
Anal	11	20.4
Oral	15	27.8
Fondling of Privates	14	25.9
Kissing	3	5.6

**Multiple responses applicable,*

Table 4. Contraceptive use and HIV counselling and testing uptake among senior secondary schools adolescents in Owerri Municipal, Nigeria, from August to October, 2017

Characteristics	Frequency n=371	Percentage (%)
Have you used any form of contraceptives, n=54		
Yes	34	63
No	20	37
Total	54	100
***Which contraceptive do you use, n=34**		
Abstinence	6	11.1
Condoms	28	51.9
Pills	4	7.4
Herbs	0	0
Why you do not use contraceptives, n=30		
More pleasure without	2	10
Haven't had anal sex	1	5
No longer sexually active	1	5
Was little then	1	5
The accident wasn't planned	1	5
Not important	1	5
No response	13	65
Total	20	100
Have you gone for HCT		
Yes	40	10.8
No	272	73.3
Not important	45	12.1
No response	14	3.8
Total	371	100

**Multiple responses apply*
***One respondent listed malaria as a type of STI he knows.*
****The specific answers to this option was not supplied by the respondents;*
*****Others - use of spermicides.*

Table 5. Factors affecting sexual behavior among senior secondary schools adolescents in Owerri Municipal, Nigeria, from August to October, 2017. Owerri Municipal, Nigeria

Variables	Ever had sexual intercourse			Chi square (χ2)	p value
	Yes (%)	No (%)	Total (%)		
Age					
14	1 (10.0)	9 (90.0)	10 (100)	32.340	0.000
15	7 (8.3)	77 (91.7)	84 (100)		
16	21 (12.0)	154 (88.0)	175 (100)		
17	15 (17.9)	69 (82.1)	84 (100)		
18	8 (50.0)	8 (50.0)	16 (100)		
19	2 (100)	0 (0.0)	2 (100)		
Total	54 (14.6)	317 (85.4)	371 (100)		
Gender					
Female	16 (7.1)	209 (92.9)	225 (100)	25.476	0.000
Male	38 (26.0)	108 (74.0)	146 (100)		
Total	54 (14.6)	317 (85.4)	371 (100)		
Nature of school					
Boys only	34 (30.9)	76 (69.1)	110 (100)	36.228	0.000
Girls only	10 (5.4)	175 (94.6)	185 (100)		
Mixed	10 (13.2)	66 (86.8)	76 (100)		
Total	54 (14.6)	317 (85.4)	371 (100)		
Type of school					
Private	28 (22.4)	97 (77.6)	125 (100)	9.328	0.002
Public	26 (10.6)	220 (89.4)	246 (100)		
Total	54 (14.6)	317 (85.4)	371 (100)		
religion					
Catholic	28 (15.2)	156 (84.8)	184 (100)	1.483	0.830
Orthodox	7 (13.5)	45 (86.5)	52 (100)		
Pentecostal	17 (13.3)	111 (86.7)	128 (100)		
Muslim	1 (33.3)	2 (66.7)	3 (100)		
Others	1 (25.0)	3 (75.0)	4 (100)		
Total	54 (14.6)	317 (85.4)	371 (100)		
Alcohol intake					
Yes	23 (33.3)	45 (66.7)	69 (100)	24.033	0.000
No	31 (10.3)	271 (89.7)	302 (100)		
Total	54 (14.6)	317 (85.4)	371 (100)		
Parents' residences					
Urban	40 (12.5)	280 (87.5%)	320 (100)	7.906	0.005
Rural	14 (27.5)	37(72.5%)	51 (100)		
Total	54 (14.6)	317 ()85.4)	391 (100)		
Type of family					
Monogamous	39 (12.9)	264 (87.1)	303 (100)	8.632	0.071
Polygamous	7 (35.0)	13 (65.0)	20 (100)		
Extended	6 (20.7)	23 (79.3)	29 (100)		
Single Parent	2 (11.1)	16 (88.9)	18 (100)		
No response	0 (0.0)	1 (100)	1 (100)		
Total	54 (14.6)	317 (85.4)	371 (100)		
Educational status of mother					
None	5 (29.4)	12 (70.6)	17 (100)	7.018	0.071
Primary	2 (25.0)	6 (75.0)	8 (100)		
Secondary	16 (19.5)	66 (80.5)	82 (100)		
Tertiary	31 (11.7)	233 (88.3)	264 (100)		
Total	54 (14.6)	317 (85.4)	371 (100)		
Educational status of father					

Variables	Ever had sexual intercourse			Chi square (χ2)	p value
	Yes (%)	No (%)	Total (%)		
None	5 (27.8)	13 (72.2)	18 (100)	4.481	0.214
Primary	5 (20.8)	19 (79.2)	24 (100)		
Secondary	11 (16.9)	54 (83.1)	65 (100)		
Tertiary	33 (12.5)	231 (87.5)	264 (100)		
Total	54 (14.6)	317 (85.4)	371 (100)		

**Others - Celestial church, Jehovah's witness and Sabbath.*

The findings of this study revealed that the mean age at first sexual intercourse was 14±1.3 years; This report is in tandem with the reports of the study done in military barracks in Lagos (14.1± 1.2 SD years for males and 13.4 ± 1.5 SD for females) [10]. This finding differs from those of other studies [6,29]. Though our study revealed decreasing age of sexual initiation (5years) among in-school adolescents, this report is inconsistent with the findings of other studies conducted in Lagos (10years) [10], Anambra (10years) [6], and North-eastern Nigeria (10 years) [30]. It is worthy of note that in the index study, parents' residences, type of school and alcohol use are factors that advance to explain the decreasing age at first sexual intercourse These should be put in perspective when planning specifically targeted intervention programs.

The index study revealed that of eight in every ten respondents who ever had sexual intercourse one in every ten, reported they had it with relatives. This differs from the reports of the study done in military barracks Lagos, where more than five in every ten sexually active females and less than two in every ten sexually active male were forced into sexual intercourse and about six in every ten (6.5%) of respondents all males reported to have had their sexual debut with a commercial sex worker [10]. This could be due to the nature of the environment (barracks) and lack of parental monitoring especially the absence of working fathers.

The current study reported that about six out of every ten sexually active respondents had sexual intercourse in the last three and/or 12 months preceding the study. This finding is in keeping with the findings in Lagos Nigeria [10], but inconsistent with reports from Anambra, Nigeria [6], and Jimma, Ethiopia [31]. Explanations for these variations could be differences in study methodologies.

On sexual orientation, this study reported that majority of respondents (94.7% of males and 56.3% of females) were heterosexuals. This trend was reported in other studies including the one in Anambra. Though the study done in Anambra had no reports on homosexuality [6], this may be linked to the methods used in data collection among other factors. Our study reported that the most common type of sexual intercourse engaged in by respondents was vaginal/penile sex (55.6%), a trend that was commonly reported by other studies [6,10],

The current research x-rayed respondents' indulgence on practices enhancing sexual risk behaviors. From our findings, significantly more males than females reported sexual activities in a ratio of more than 2:1, a finding consistent with reports elsewhere [6,10,29]. Also, in this study, such practices include: alcohol consumption (18.6%), smoking (2.2%) and sexual exposure (14.6%). These figures are lower than the findings of other studies [6,10]]. This report is however consistent with a report elsewhere [30]. This relatively low level of sexual activity reported among respondents can be attributed to the fact that more females than males participated in the study and evidence from similar studies where females are less likely to engage in risky sexual behaviors [6,10,30,31]. Interpretation of the findings of the index study within the context of probable limitations in data collection, as well as the socio- cultural differences in the study areas, could explain the variations reported.

The index study showed fair (63%) use of contraceptives among the ever had sex, with condoms cited as the most used contraceptives. The key reasons given for non-use of contraceptives were: getting more pleasure without it, not presently sexually active and unplanned sexual intercourse. Similar findings have been documented previously [6,10,30,31].

From the findings of this study, several factors were revealed to have significant association with sexual practices of respondents. These factors are: age, gender, nature of school (mixed or single), ownership (type) of school (private or public), alcohol use and residence of respondents' parents. This study reported a

progressive increase in sexual activity with increasing age. This is similar to the finding of the study done in Lagos [8]. On gender, more proportion of males than females reported sexual activity. This could be due to the fact that females are usually more restricted and monitored by their parents [8].

Also, students from the boys' only schools reported more sexual activity than those from the girls only and co-educational schools. This finding is in keeping with the findings of another study [6], and could be due to peer group influence as well as little or no supervision and education about sexual relationships in single sex schools based on the notion that there are no students of the opposite sex to mingle with [8]. However, this finding differs from that in the study in North-eastern Nigeria where respondents from coeducational schools were more likely to have had sexual intercourse than those in single sex schools [8]. This could be due to socio- cultural variations in the study areas for instance, the presumed non-liberal cultural and religious practices thus coeducational schools were reported as a rare avenue for the opposite gender to mingle and thus enhance sexual activity. The index study reported more sexual activity in private than public schools. This could be linked to poor parental control, enhanced peer influence and associated negative effect.

From the findings of this research, alcohol use has been linked to sexual risk practices. Alcohol use is cited by several studies as one of the factors that increase indulgence on risky sexual behaviors such as multiple sexual partners, unprotected sexual intercourse and selecting high risk partners [8,14,15,31].This is consistent with the findings of the study done in Jimma Ethiopia, where it was reported that respondents who took alcohol were five times more likely to engage in risky sexual behaviors than those who do not [31]. Poor parents' residence similar to the findings of another study [8], has been explained in the light of undue exposure to situations that put adolescents at risk; a whole family sharing room with parents or older relatives of opposite sex or house-help, they may observe their parents and older siblings indulge in sexual activity and thereafter practice what they observed [8,10]. However, this study did not probe on the duration of alcohol use as well as how long the respondents' parents have lived in the residences reported. These missed findings could have enabled the researchers to ascertain the influences of alcohol use and residence of respondents 'parents on sexual risk behaviors.

5. LIMITATIONS OF THE STUDY

Due to the sensitive nature of our study, some respondents might not fill the questionnaires honestly. This we overcome by using anonymous questionnaires and ensuring the students that their answers are going to be strictly confidential and strictly used for research purposes.

6. CONCLUSIONS AND RECOMMENDA-TIONS

This study revealed a decreasing age at sexual debut (5 years) among in-school adolescents, and a progressive increase in sexual activity with increasing age. Most of the study participants have had sexual intercourse, and are sexually active (more males than females). On sexual orientation, heterosexuality was the commonest practice, coerced sexual intercourse was reported, while the most common type of sexual intercourse engaged in was vaginal/penile sex There was fair use of contraceptives among the ever had sex, with condoms cited as the most used contraceptives. Factors revealed to have significant association with sexual risk practices are: age, gender, nature of school (mixed or single), ownership (type) of school (private or public), alcohol use and residence of respondents' parents.

In view of the findings of our study, we thus recommend that efforts should be intensified to promote formal comprehensive sex education programs targeted at delaying age at first sex and safe sexual practices including contraceptive use in this age group. The Government; at all levels should formulate and ensure implementation of policy for the inculcation of adolescent reproductive health services into the school curriculum and enforce laws for the punishment of paedophiles and rapists. The school teachers should be educated on the need and proper institution of sex education and effective peer education in schools.

CONSENT

As per international standard or university standard, respondents' written consent have been collected and preserved by the author. The respondents benefited from this study via health

education on the consequences of risky sexual behaviour and its preventive measures.

ETHICAL APPROVAL

As per international standard or university standard, written approval of Ethics committee has been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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