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Sexual Risk Behaviour Among In-School Adolescents in Public Secondary Schools in a Southwestern City in Nigeria

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Abstract

Purpose: Several studies have documented the high sexual activities and risky sexual behaviours among adolescents in most parts of the world thus putting them at high risk of contacting the HIV infection and other complications. This study aimed to determine sexual risk factors among adolescents in secondary schools in urban areas of Osogbo in South western Nigeria.

Methods: A descriptive cross sectional study was done among 521 public secondary school students in Osogbo, Southwestern Nigeria, using multistage sampling technique and semi-structured administered questionnaire. Data were analyzed using the SPSS software package version 15.

Results: Appreciable number (31.5%) of the respondents have had sexual intercourse (the mean age of sexual debut being 15.2 ± 1 yr). Some of them (14.6%) had had more than one sexual partners, 17 (3.3%) had visited commercial sex workers before, 33 (6.3%) had been raped previously while 25 (4.8%) had been treated for STIs symptoms in the past. Most respondents were aware of common modes of transmission of the HIV virus. Less than half (32.8%) of the respondents were prepared to be screened for HIV infection.

Conclusion: Many adolescents studied were sexually active, and taking a lot of risky sexual behaviours that could facilitate transmission of HIV. Advocacy programme that will make adequate information about sexual health available to the adolescents needs to be intensified.

Keywords: Adolescents, Sexually transmitted infections, Risky sexual behaviours, HIV/AIDs

Adenike I Olugbenga-Bello¹

Wasiu O Adebimpe²

Olugbenga L Abodunrin¹

¹Department of Community Medicine, College of Health Sciences, Ladoke Akintola University of Technology, Osogbo, PO Box 4400, Osun State, Nigeria

²Global HIV/AIDS initiative Nigeria (GHAIN), Central business district, Lagos, Nigeria.

For Correspondence:

Tel: +234-803-709-4427

Email: nike_bello@yahoo.com

Introduction

HIV infection has been described as the pandemic of our times and has been receiving a lot of attention worldwide. It has also been said that approximately half of all HIV infections have occurred in men and women younger than age 25. In many developing countries, recent data indicates that up to 60% of all new HIV infected people are between ages 10-25 years [1]. In 2004, the UNAIDS estimated that about 5000-6000 young people aged 15-24 become infected with HIV on daily basis, and 63% of these lives in sub Saharan Africa [2] Nigeria's STD/HIV Control estimates that more than 60 percent of new HIV infections occur in youth ages 15 to 25 [2]. Sexual transmission still remains the most common way of acquiring the deadly virus in most communities around the world.

Several studies have reported high rates of pre-marital sexual activities among Nigerian adolescents [3]. Over 16% of teenage females reported first sexual intercourse by age 15 while among young women of ages 20 to 24, nearly half (49.4%) reported first sex by age 18. Also, among teenage males, 8.3% reported first sex by age 15 while among those ages 20 to 24, 36.3% reported first sexual intercourse by age 18 [4]. These adolescents experiment a lot with risky sexual behaviours at this time of self discovery coupled with considerable risk taking, hiding under being on a brink of maturity and a future filled with possibilities. These risky sexual behaviours were often complicated by high school drop out, parental abuse and battering, social stigmatization, child abandonment, abuse and even infanticide. Adolescents are known to be an adventurous group, and practices such as homosexuality, lesbianism, sexual orgies are indulged in just for the reason of experimentation and peer influences, owing to a wealth of uncensored information they are exposed to, through an intensifying wave of westernization, the internet, and electronic media.

Coupled with a shallow knowledge about the dreaded HIV virus, these risky behaviours predispose many adolescents to the risk of HIV infections, other STIs, unplanned pregnancies and abortions, among others. Teenage mothers have also been found to be more likely than older women to suffer from serious complications during delivery, resulting in higher morbidity and mortality for both mothers and infants [4]. With a great tendency to over-express their sexual desires, situation becomes worsened as they attempt to navigate the difficult transitions from childhood to adulthood, resulting in teenage age at sexual initiation among them [5]. As much as these practices happen to be major risk factors for the development of dire health consequences, the imbalance is further aggravated by long standing inability of policy makers in this environment to inculcate sexuality education into the school curriculum. Beside this, a lot of factors could influence these behaviours ranging from socioeconomic and family background including upbringing, access to first hand information on health issues to the influence of peers and similar groups with which they associate.

To design appropriate interventions aimed at disease control, it is important to know about adolescents' knowledge of and experience with HIV, and about their health-seeking behavior related to HIV and STDs. It is widely recognized that Nigerian adolescents do not use existing reproductive health services [6] and this poor utilization of public services is probably largely attributable to the fact that such services do not specifically address the needs and concerns of adolescents. Eliciting adolescents' views on reproductive health in communities where sexuality is not openly discussed can be problematic, but will go a long way to fashion acceptable preventive measures and methods that will assist adolescents, and as well favour norms and cultures as much as possible. Thus, studies like these targeting adolescents in secondary schools will provide an ample chance to influence a larger percentage of their like-population

including those who are not in schools that they relate with in their various communities. These include the drop-outs, the artisans, apprentices, and the less-privileged that may share the misinformation and erroneous beliefs about sexuality.

The objective of this study is to determine sexual risk factors among adolescents in secondary schools in urban areas of Osogbo in South western Nigeria.

Methods

This was a descriptive cross sectional study that was carried to determine sexual behaviour and the risk of HIV/AIDs among public secondary school students in Osogbo local government area of Osun State in Southwestern Nigeria. Osogbo local government is the commercial nerve center of Osun State, and it is predominantly urban in nature. There are 326 secondary schools, both public and privately owned, in the state. However, only government secondary schools registered with the local ministry of education were included in this study. Private schools and those existing in the peri-urban part of the town were excluded. Students whose ages were less than ten years and greater than 19 years were also excluded from this study.

Based on the total population of students greater than ten thousand, a sample size of 521 was calculated. Multistage sampling method was used in selecting the participants for the study. In stage I, a simple random sampling method employing simple balloting was used in selecting two-third (8 out of 12) of the total public secondary schools in Osogbo Local Government. Questionnaires were equally allocated to each school. In Stage II, each school was stratified into junior and senior secondary school using their level or class of education as the stratifying factor. All the public secondary schools in the local government area had both strata further divided into three levels (1, 2 and 3). Junior secondary school 1 was excluded from the study on account of

age. Questionnaires were equally allocated to the remaining five levels. In stage III, {arm selection}, stratified random sampling method was used; and the questionnaires reaching a level or class were proportionately divided among the three different arms of each level (A, B and C). In stage IV, {respondent selection}, systematic sampling method of one in three students was used to select participants from each class; after random selection of first subject, and this continued till desired no of respondents (based on proportionally allocated number of questionnaires for that class (were obtained).

A pre-coded semi-structured self-administered questionnaire was administered on the selected students. The questionnaire was pre-tested among 20 secondary school students in urban part of Ede Local Government of the State, and modifications were made to clear areas of ambiguity and areas that could inhibit the response of the student since sexual issues in this environment are usually regarded as personal. Study variables included background data about the participants, sexual pattern and consequences, risky sexual behaviours, awareness and knowledge about HIV/AIDs. Selected students were seated in a hall/classroom and were allowed to respond to the questionnaire without interference from other students or their teachers with the writing materials provided for them. Before completing the questions in the questionnaire, detailed orientation was done by members of the research team and afterwards, instructions and explanations on each question were read aloud by a member of the research team. Also, students were told to indicate in cases of inadequate clarity for private explanations. Ethical issues were settled at the levels of the school, the local ministry of education, and the respondents. Verbal informed consent was obtained from individual participants, with the assurance of confidentiality.

After manual sorting of the completed questionnaires, double entry of the data was carried out using Microsoft Excel. Data was analyzed using the SPSS software version 15. Association between categorical variable were done using chi-square test. At 95% confidence interval, p values less than 0.05 were considered significant.

Results

A total of 521 questionnaires were analyzed after manual sorting. Table 1 shows the socio-demographic characteristics of the respondents. There was no significant difference between the number of males and females. Majority of them were in their late adolescence age.

Table 2 and 3 showed that 31.5% of the respondents have had sexual intercourse, 5.3% had had oral sex, 5% - anal sex and 4.7% were engaged in homosexuality. The mean age of sexual debut is 15.2 ± 1.62 though mean age at hugging and kissing appears younger. The frequencies of these sexual acts differ among respondents. While the mean age at first hugging and kissing was significantly younger when compared to the mean age at first normal sexual intercourse, a significant association exists between gender and frequency of sexual intercourse.

Table 4 shows that 164 (31.5%) have experienced sexual intercourse while 167(32.1%) indicated that they would accept next opportunity of sexual intercourse, Some of the respondents (76, 14.6%) had more than one sexual partners, 17 (3.3%) had visited commercial sex workers before while 33(6.3%) had been raped before. And 25(4.8%) had been treated for STIs

symptoms in the past. Many respondents had slept with different people including older ones, giving various reasons for such sexual behaviours to include financial needs and pressure from peers. One hundred and thirty seven (26.3%) takes alcohol while 26(5.0%) takes cigarette or Indian hemp and 99(19.0%) of the respondents usually hawk after leaving school. Seventeen (3.3%) usually attend night parties while 15(21.7%) had sexual intercourse at night parties.

Table 5 shows that 513(98.5%) of respondents were aware of HIV/AIDs infection with the electronic media and health workers being the most common means of awareness. Most respondents were aware of common modes of transmission of the virus, and believed that abstinence from sexual intercourse and health education remains viable preventive measures. However, only 171(32.8%) of respondents were ready to be screened for HIV infection.

Table 1: Sociodemographic characteristics of respondents (n=521)

Variable	Frequency
Age group	
Early adolescence	134 (25.7)
Late adolescence	387 (74.3)
Sex	
Male	279 (53.6)
Female	242 (46.4)
Family structure	
Monogamous	344 (66.0)
Polygamous	140 (26.9)
Separated	37 (7.1)
Grouped family size	
Less than 4	37 (7.1)
More than 4	484 (92.9)
Type of residence	
Shared apartment	257 (49.3)
Flat/self-contained	264 (50.7)
Type of school	
Day school	521 (100)
Boarding school	0

Table 2: Frequency of sexual behaviours (n=521)

Practices	Frequency of intercourse				Mean Age
	Never	Occasionally	Once	Many	
Hugging	258 (49.5)	76 (14.6)	62 (11.9)	125 (24.0)	13.5±2.6
Kissing	303 (58.2)	81 (15.5)	64 (12.3)	73 (14.0)	14.2±2.4
Sexual intercourse	357 (68.5)	75 (14.4)	49 (9.4)	40 (7.7)	15.2±1.62
Oral sex	493 (94.6)	7 (1.3)	17 (3.2)	4 (0.8)	15.3±2.15
Anal sex	495 (95.0)	8 (1.5)	14 (2.7)	4 (0.8)	15.7±2.18
Homosexuality	497 (95.4)	6 (1.2)	16 (3.1)	2 (0.4)	15.5±2.28

Table 3: Age of sexual behaviour

Practices	Age in years				Mean Age	n
	<10	10-14	15-19			
Hugging	15.0 (5.7)	136.0 (51.7)	112.0 (42.6)		13.5±2.6	263
Kissing	7 (3.2)	91 (41.7)	120 (55.1)		14.2±2.4	218
Sexual intercourse	0	38 (23.1)	126 (76.8)		15.2±1.62	164
Oral sex	0	7 (25)	21 (74.9)		15.3±2.15	28
Anal sex	0	6 (23)	20 (76.9)		15.7±2.18	28
Homosexuality	0	7 (1.4)	17 (3.4)		15.5±2.28	24

Table 4: Risky behaviours of respondent (n=521)

Variable	Frequency	%
Never had sexual intercourse	357	68.5
Will like to have sex when next the chance comes	167	32.1
Had more than one sexual partners	76	14.6
Have visited prostitutes before	17	3.3
Had experienced rape before	33	6.3
Treated for STI before	25	4.8
Person respondent had sex with (n=164)		
School mates	63	38.4
Neighborhood friends	75	45.7
Prostitutes	2	1.2
Older persons	24	14.6
Reasons for sexual behaviour (n=210)		
Peer pressure/peer influence	25	11.9
Just for fun	62	29.5
Financial	9	4.3
No reason/I don't know	112	53.3
Drug and alcohol influence	2	1.0
Other risky behaviour (n=521)		
Usually hawks after school hours	99	19.0
Takes alcohol	137	26.3
Takes cigarette or Indian hemp	26	5.0
Frequently attends night parties	17	3.3
Had sexual intercourse at night parties	15	21.7

Table 5: Awareness about HIV and prevention

Variable	Frequency	%
Aware of HIV/AIDS (n=521)	513	98.5
Means of awareness (n=521)		
Electronic Media	333	64.0
Print Media	169	32.4
Health Workers	234	45.0
Parents	214	41.1
Peers	140	27.0
Known route of transmission (n=521)		
Multiple sexual partners	295	57.0
Unprotected sexual intercourse	306	58.7
Sharing sharp object	295	56.6
Blood transfusion	366	70.3
Willing to be screened(n=521)	171	32.8
Preventive measures adopted by respondents (n=365)		
Abstinence	221	60.5
None	39	10.7
Faithfulness	35	9.6
Condom	64	17.5
Traditional Medicine	1	.3
Personal Hygiene	5	1.4

Discussions

This study documented the sexual behaviours among adolescent in public secondary schools in Osogbo southwestern Nigeria. The nearly one third of the respondents that had experienced sexual intercourse in this study supports a study in Bobo-Dioulasso, Burkina Faso that revealed that almost one out of three adolescents (30.6%) had already experienced sex, and the rate is a bit higher for females (33.5%) than for males (26.9%) [7]. Three out of four of those that are sexually active had their sexual debut in the late adolescence (15.2 ± 1.62) which is compatible with another study carried out in Osogbo [8] where the mean age was 16.5years and also from a study done in Malawi where the mean age of first intercourse was 15.7 ± 1.8 years [9]. The relatively high sexual involvement recorded in this study could be attributed to a gradual loss of moral values in many societies, coupled with peer pressure to experiment with sexual intercourse among adolescents. Females have higher rates because of the

fact that they are exposed to intimacy and relationship earlier in life when compared to boys, and many of these relationships could easily become sexual, most especially when they have such contacts with older men, as observed in this study. Majority of those who have sex with older persons are females and most of these did so for financial reasons. This supports a similar study, [4] and by another finding in which most of adolescent females (95.4%) got involved in sex with older men while most of males (68.5%) were involved with younger ladies [7].

There is high level of awareness among the respondents about HIV/AIDs, this is in agreement with a study carried out in Calabar,[10] among secondary school students where awareness about HIV was high (90%) and mass media was the main source of information as also observed in this study, in which electronic media was their major source of information. In this environment, most homes have access to electronic gadgets, at least radio and television which could serve as means of getting them informed. Further, the in-depth

knowledge about HIV/AIDS was fairly good among respondents as regards awareness of modes of transmission and preventive measures. This is at variance with a study in which, in-depth knowledge about the disease i.e. HIV/AIDS was described as poor, but agreed with another in which a good knowledge of means of transmission among adolescents was observed, as well as another where 87 percent of males and 78 percent of females knew that having sex with a stable partner and using condoms consistently could prevent HIV infection.[10-12]. In depth knowledge about HIV could assist adolescents to take preventive measures against acquiring the disease including pre marital sex and use of dual method of contraception, getting screened for HIV infection and prevention of non sexual spread of the virus.

The readiness of only few respondents to be screened for HIV infections is comparable to a study in Ethiopia [13] in which only a quarter of sexually active have been screened while only three out of five of the remainder would give consent to be screened. This is despite the high awareness programmes going on in many quarters on voluntary counseling and testing of HIV infections by governmental, non governmental and the private sector.

A significant relationship exists between polygamy and occurrence of sexual activities ($P < 0.05$). This supports studies in which sexual activity was more common among students from polygamous families (42% of students) than monogamous families (28%). Secondary school students in Nigeria from a polygamous family structure are more likely to have engaged in sexual activity than students from a monogamous family structure [14]. This involvement of family structure affecting sexual activity could be explained by the fact that parents in polygamous settings have little or no time to spend in educating their children, and in most cases, care is left to the mother who makes it her responsibility to cater for her own children whether or not the husband

assists or not.. Also a significant relationship existing between alcohol intake and sexual activities, this is similar to a study in which Graves and Leigh found that males age 18-30 who smoked cigarettes or marijuana and those who drank alcohol excessively were more likely than males who did not use these substances to be sexually active [14]. This is because substance use can impede a adolescent's decision making ability, thereby making sexual activity more likely.

The poor use of contraception observed in this study, is supported by some Nigerian studies. In one, only 31% of Nigerian women aged 15-19 knew any modern method of contraception and 23% of these were aware of a source of family planning services [15]. In another done among 2,460 Secondary School Students in two South Eastern states of Nigeria, only 17% of sexually active students had ever used a contraceptive method other than abstinence [16, 17]. Also, among teenage women, only 37.5 % knew some methods of contraception, [11]. This study discovered that males were most likely to use condom as reported in other studies, and females, the rhythm method [12].

One third had more than one sexual partner while a little less than one tenth each has been raped or treated for a STI before. This figure is low when compared with another Nigerian study[18] in which 57.1% of males and 48.3% of females reported having had more than one sexual partner, and 30.5% and 38.4% had been treated for a sexually transmitted disease. This is an indirect measure of closeness to transmission of HIV/AIDs and other STIs, the degree of degradation of moral values in the society and the extent to which parents, religious leaders lay emphasis on preventive measures against premarital sexual intercourse. Six point three percent of the girls had experienced rape before; this is however high considering the risk of STDs and the psychosocial consequences of rape. A study in Benin city, Nigeria also reported as high 330 female rape victims majorly among females under the age 13 [19]. In the

event of rape, victims are highly exposed to sexually transmitted infections, sexual trauma that could facilitate HIV transmission most especially if any of the rapists are infected. Victims may get pregnant and resulted into unsafe abortion apart from physical and psychological assault on the victim.

It is worthy of note that despite high level of sexual activity among the respondents and the significant level of awareness of communicability of HIV and other STIs, less than one-third of the sexually active use condoms in this study. This contradicts the research done among sexually experienced youth ages 18 to 24, in which it was found that 72 percent of males and 81 percent of females had ever used contraception, and males were most likely (43 percent) to have used condoms and females (31 percent), and this trend has led to a drastic reduction in prevalence of HIV infections. [12]

Conclusion

There are still many risky sexual behaviour common among adolescents among public secondary school students in Osogbo local government area of Osun State. Sexual risk behaviour could be reduced by increasing awareness to the deadly infection, encouragement of disease screening and voluntary confidential counseling and testing, reproductive health education in schools and parents modeling adolescents at hope and predisposing them to better sexual orientation, quality information on sex and its implications.

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