

Child sexual abuse, harmful alcohol use and age as determinants of sexual risk behaviours among freshmen in a Nigerian University

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ABSTRACT

In Nigeria, freshmen constitute a risk group of adolescents and young adults capable of engaging in unsafe sexual practices. This study documents the associated factors to sexual risk behaviours practices of University of Ibadan, Nigeria freshmen.

Eight hundred and forty one (841), freshmen who attended a routine orientation program were asked to respond to a questionnaire. Results showed that 30.8% were sexually active and 47% did not use condom in their last sexual episode. Associated with sexual risk behaviours include: being a male freshman increasing age; lower tendency for violence; increase sexual compulsivity; alcohol abuse; history of rape and a history of Child Sexual Abuse (CSA). Three variables: alcohol abuse; history of CSA and increasing age remained significant in a multiple regression analysis. The paper presents the first evidence of vulnerability of freshmen to sexual risk practices in a Nigerian University. (*Afr J Reprod Health* 2008; 12[2]:75-88)

RÉSUMÉ

Abus sexuel sur enfant, usage nuisible de l'alcool et l'âge comme déterminants des comportements sexuels risqués chez les étudiants de première année dans une université nigériane. Au Nigéria les étudiants de première année constituent un groupe d'adolescents et de jeunes adultes capables de s'engager dans des pratiques sexuelles dangereuses. Cette étude documente les facteurs qui sont liés aux pratiques sexuelles risquées chez les étudiants de première année à l'université d'Ibadan. Huit cent quarante-et-un (841) étudiants de première année qui ont assisté à un programme d'orientation de routine ont été demandé de répondre à un questionnaire. Les résultats ont montré que 30,8% étaient sexuellement actifs et que 47% n'utilisaient pas des préservatifs pendant leur dernier épisode sexuel. Liés aux comportements sexuels risqués sont: le fait d'être en première année, l'augmentation de l'âge, une tendance réduite de la violence, une compulsivité sexuelle accrue; l'abus de l'alcool; les antécédents de viol et d'abus sexuel sur enfant (ASE). Trois variables: abus de l'alcool, les antécédents de l'ASE et l'âge croissant, sont restés significatifs dans une analyse de la régression multiple. L'article présente la première évidence de la vulnérabilité des étudiants de première année aux pratiques sexuelles risquées. (*Rev Afr Santé Reprod* 2008; 12[2]:75-88)

KEY WORDS:

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Introduction

Sexual risk behaviours are widespread among adolescents as well as young adults, placing them at high risk for HIV/AIDS and other STD infection¹⁻³. For example the Centre for Disease Control and Prevention,¹ reported that 82% of all cases of Chlamydia and gonorrhoea in the United States occur in those aged 15-29 years. Data based on the 1999 National demographic and health survey in Nigeria among unmarried adolescents (15-19) showed that 26.4% were sexually active and 67.55 had unprotected vaginal intercourse².

Freshmen in universities constitute a risk group of adolescents and young adults that can be targeted for intervention against risk sexual risk behaviour, including those that predisposed them to HIV/AIDS infection. Available evidence in studies in United States of America, Europe and Sub-Saharan African countries showed that sexual risk behaviours has progressively been on the increase and constitutes a big problem among College and university students⁴⁻¹³ albeit, the extents of the problem is relatively unknown. Documenting prevalence and pattern of sexual risk behaviour on entering university may provide insight about the magnitude of problems of risky sexual practices of University students and may also enable a trend observation of changes in pattern of risky sexual practices among the students. Furthermore, anecdotal evidence showed that most sexual risk behaviours among university and college students may have been acquired through period of campus life. This may be possible due to the life of independence, away from parental control, that often characterise such setting.

Suffice to say that university campuses may be conducive to a variety of interventions that can help maintain and encourage safer sexual practices; therefore it may be possible to develop a program to address such problems if the extent and pattern of these risk behaviours are identified at the point of entry.

In Nigeria, studies about sexual risk behaviours of university students are few and evidence indicates that sexual activity is high, which make many to be susceptible to engage in unsafe sexual practices. For example Iwuagwu *et al*⁷ found in a sample of female university students in Nigeria found that 16.9% and 39% of those who were sexually active had used condom during their first and last sexual encounters respectively, with only 34.3% reporting using them consistently. Similarly, Olley and Rotimi,⁸ in a study involving male and female university students found that 77% of the students had never used a condom and these include 30% of males and 11% of females who did not use condom at their last sex. In an all female study, Aziken *et al*.⁹ found that among the 43% who were sexually active, only 26% had ever used condom relative to other available contraception to prevent unwanted pregnancy. The results from these aforementioned available studies in Nigeria reinforce the notion that university students are sexually active and that few students are consistently practicing safe sex.

There is a dearth of research addressing sexual practices of entering fresh university students in Nigeria. Freshmen is a “transitional” period, in the sense that it is a move from a hitherto restricted life, monitored by parents, to a more independent self directed life, which may be influenced

by a complex University system. The freshmen owing to this, are vulnerable to risk sexual practice and to the possibility of contacting a sexually transmitted disease (STD)¹⁴. It is therefore expedient to examine the extent and pattern of sexual risk behaviours of newly matriculated students with the aim of documenting levels of risk behaviours after entering the university.

A number of studies in USA, Europe and Sub-Saharan Africa have examined correlates of sexual risk behaviours among freshmen and university students. These works have suggested that certain socio-demographic variables and situational characteristics are positively associated with increase risk sexual behaviour such as alcohol or drugs used before sexual intercourse, being in monogamous relationships, multiple partners, being in non-traditional university campuses, and perceived greater susceptibility to infection. Others include perceived ability to talk with new partner about condoms and to enjoy sex using condoms, increasing age and reduced condom use intentions^{4,6,15}. For example Nicholas,¹⁵ surveyed the experience of first-year college students of their first intercourse and contraception use in a black university in South Africa. Results showed that among 40% of those who were sexually active, mean ages at first intercourse were, respectively, 15.5 and 17.8 years between male and female. 35.7% of males and 32.8% of females reported not practicing safe sex during first intercourse.

Factors influencing non safe sexual behaviour among these students were increasing age, sexual sensation, self esteem and early first sexual initiation. Gullette and

Lyons¹² found that students with low self esteem had more sexual partners, and more risk-taking behaviours than other students. Sanderson and Yopyk¹³ found that the most common reason college student's state for not practicing safe sex is the influence of alcohol or other drugs. According to Elliott and Brantley⁴, 76% of college students have had sex with a partner who was drunk or high, and many of these students do not engage in safe sex. Peltzer⁶ found, among male and female first year university students in South Africa, that almost one third (29.2%) of the sample reported never using condoms.

There has been little work in the context of freshmen and sexual risk behaviours in Nigeria, despite the exponential spread of HIV/AIDS in the country². There has been no study in Nigeria, where peculiar risk sexual behaviors such as exchange money for drugs or place to stay have been reported. The aims of this study were: (1) to establish the prevalence of sexual risk behaviours among entering freshmen in a Nigerian university and (2) to identify to what extent the above stated factors and some others are associated with sexual risk behaviours

Methods

Design

This study was a cross-sectional survey, focusing on a correlation design method, to investigate the association between certain psychosocial factors (HIV knowledge, self esteem, sexual compulsivity, alcohol and drug use etc) and sexual risk behaviour among a sample of freshmen at the University of Ibadan.

Setting

The University of Ibadan was founded in 1948 as the premier tertiary institution in Nigeria. With a campus covering over 1032 hectares of land and a student population of approximately 19,000, the University of Ibadan is one of the largest universities in the country. There are 12 faculties and 57 departments in the University. With the exception of Law, Pharmacy and Veterinary Medicine, each Faculty runs a variety of undergraduate and postgraduate courses leading to the award of diplomas and degrees.

Participants

Eight hundred and forty one (841) freshmen who attended a routine orientation program for new students of the University of Ibadan Nigeria were asked to participate in this study. Eligibility criteria were freshmen in the 2003/2004 academic sessions, who attended the university of Ibadan orientation program and who fell within the age range of 16 – 25 years. They were 538 (64%) males and 303 (36%) females. Eight hundred and nineteen (97%) of them were single and twenty two (3%) of them were married. Their mean age was 20.4 years (SD 1.33) while the mean years of education was 12.3 (SD 2.56).

Instruments/Measures

The study included measures of social-demographic characteristics. It utilized a 93-item questionnaire comprising six mutually exclusive scales namely: HIV knowledge, attitudes towards rape; self esteem, sexual compulsivity, Alcohol Use Disorder

Identification Test (AUDIT) and sexual risk behaviours scale.

Socio-demographic variables

The following variables were recorded: family type, religiosity (i.e. level of religious activities), sex, age, years of education, course of study, and drug use. Most of these variables have been implicated as determining factors for sexual risk behaviour among adolescents and young adults.

Sexual Risk Behaviour Questionnaire

This 20-item interviewer rating measure was adapted from the work of Olley et al¹⁶. Participants were asked about their sexual activities in the 6 months preceding the study. Questions included: “had sex with a partner who used intravenous drugs”; “had sex after heavy use of alcohol or other drugs”; “had sex with a partner known to you for less than 1 day”. Furthermore the freshmen were asked if they had been “forced to have sexual intercourse against their will by been threatened, held down, or hurt in some way” or “persuaded to have sexual intercourse when they did not want it” and whether these events had happened before the age of 15 years.

HIV Knowledge Questionnaire

The HIV knowledge Questionnaire (HIV-KQ-18) was developed by Carey and Schroder,¹⁷. The questionnaire is self-administered and requires respondents to indicate whether a statement is true or false, or they indicate they don't know. Items include: “*coughing and sneezing do not spread HIV*”, “*a person will not get HIV if she or he is*

taking antibiotics” “there is a vaccine that can stop adults from getting HIV”, “showering, or washing one’s genitals/private parts after sex keeps a person from getting HIV”. This measure has demonstrated good internal consistency (coefficient alpha= 0.73, $p < 0.0001$).

Self-Esteem Scale:

The Rosenberg Self-Esteem scale¹⁸ was used to assess the freshmen’s’ attitude towards their self worth. The Rosenberg Self-Esteem scale is a 10-item measure of global self-regard, and includes items such as “On the whole, I am satisfied with myself”. Respondents express their degree of agreement on a 4-point Likert-type scale of Strongly Agree=3, Agree=2, Disagree=1, and Strongly Disagree=0. The scale generally has high reliability: test-retest correlations are typically in the range of .77 to .88 (Rosenberg; 1979). Preliminary cross validation of the scale among high school pupils in Nigeria¹⁹, using a principal factor analysis with varimax rotation yielded two factors: self confidence and self depreciation. The extracted factors are in the line with that reported by Rosenberg, (1979). All items had a factor loading of .4 Eigen value. Coefficient alpha was 0.94. A test-retest reliability of $r = 0.74$, among high school students has also been reported by Olley,¹⁹. In the present sample, coefficient alpha was 0.87.

Sexual Compulsivity Scale

The sexual compulsivity Scale is a 10 item scale,²⁰ Likert-format measure that asks respondents to endorse the extent to which they agree with a series of statements related to sexually compulsive behaviour, sexual preoccupation, and sexually intrusive

thoughts. Items include: “my sexual appetite has gotten in the way of my relationship”, “I think about sex more than I would like to” “I find myself thinking about sex while at work” “It has been difficult for me to find sex partners who desire having sex as much as I want to”, Respondents are expected to indicate their responses on a 4 point scale ranging from 1(not at all) to 4 (very much like me). The reliability of the scale for both men and women was established in a previous report²⁰.

Alcohol Use Disorder Identification Tests (AUDIT)

This is a scale developed by the World Health Organisation through a six-nation cross-cultural study to tap the frequency of drinking, dependence symptoms and signs of harmful consumption²¹. The AUDIT scale consists of 10 items measured on a 4 point Likert format, with a total maximum score of 40, (for example: ‘How often do you have a drink containing alcohol?’ ‘How often do you have five or more drinks on one occasion?’; ‘How often during the last year have you found that you were not able to stop drinking once you had started/had a feeling of guilt or remorse after drinking?’) were unable to remember what happened the night before because you had been drinking?’). The classification of normal, hazardous and harmful alcohol was based on the total score of a respondent on the scale. If a respondent’s score was within 0-8 it was classified as being within the ‘normal’ range of alcohol use, if their score was within 9-18 it was classified as being within the ‘hazardous’ range of alcohol use and a score within 19-40 was classified as ‘harmful’ use.²¹. The AUDIT has been used in Nigeria among freshmen though with a poor sensitivity record of 32% and a

specificity of 93%. An internal consistency of the item was established however with an alpha of 0.70 with a sample of 100 freshmen²⁴.

Procedure

The study was approved by the Student Affairs Department (SAD) of the University of Ibadan (a statutory body in the university with the responsibility of coordinating students activities on campus). All students who attended the second day of the orientation program for the 2003/2004 academic year were asked to participate in the study. The purpose of the study was highlighted after informed consent and assurance of confidentiality from the students. They were also informed that participation was voluntary and could be stopped at any time if they felt

uncomfortable answering any questions. They were encouraged to fill the questionnaire independently and without any interference from the person sitting next to them. Names or matriculation numbers of students were not required and they were strongly encouraged not to put any mark of identification on their completed questionnaire. Three trained graduate students of psychology were in attendance assisting in collecting completed questionnaires. No student refused completion of the questionnaire. The exercise lasted approximately 45 minutes.

A total of 841 questionnaires were filled in and collected on the spot through the graduate assistants. Five hundred and eighty three (583) questionnaires were found to be suitable for data analysis. Two hundred and

Table 1: Socio-Demographic Characteristic of the Freshmen Studied (N = 583)

	Sexually Active (N=180)		Non-sexually Active (N=403)		Total (N=583)	
	N	%	N	%	N	%
Gender						
Male	127	71	28	57.5	355	61
Female	53	29	175	42.5	228	39
Course of Study						
Social Sciences	86	14.8	135	23.2	221	38
Sciences	29	5.0	92	15.8	121	21
Arts	13	2.2	40	6.9	53	9
Education	12	2.1	20	3.4	32	5.5
Agriculture	11	1.9	41	7.0	52	8.9
Medicine	8	1.4	29	5.0	37	6.3
Law	8	1.4	13	2.2	21	3.6
Technology	10	1.7	18	3.1	28	4.8
Vet Medicine	3	0.5	15	2.6	18	3.1
Family Type						
Monogamy	110	18.9	291	49.9	401	68.8
Polygamy	70	12.0	112	19.2	182	31.2
Mean Age	21.4	(SD 2.3)	20.3	(SD 2.5)	20.6	(SD 2.5)
Mean Years of Education	12.5	(SD 1.4)	12.3	(SD 1.3)	12.4	(SD1.3)

Table 2: Gender Differences of Sexually Active Freshmen

	Male** (n=118)		Female (N=62)		Total (N=180)	
	M	SD	M	SD	M	SD
Age	21.5	2.4	21.1	2.0	21.4	2.2
Years of education	12.5	1.4	12.3	1.4	12.5	1.4
No. of sex (?) in past 6 months	4.7	4.4	4.0	3.3	4.5	4.0
No. of sex partners	1.8	1.3	1.6	1.5	1.8	1.4
Age at first sex	15.8	3.8	15.3	4.4	15.6	4.0
HIV Knowledge	27.0	4.5	26.3	4.4	27.0	4.4
Sexual compulsivity } range?	7.4	7.0	6.0	6.7	6.8	6.8
Self esteem }	31.6	5.1	30.4	5.3	31.1	5.2
	N	%	N	%	N	%
Usage of condom in last sex						
Yes	64	54.2	32	52	96	53.3
No	54	45.8	30	48	84	46.7
Use of heavy alcohol before sex						
Yes	10	8.5	10	16	20	11
No	108	91.5	52	84	160	89
*Ever Raped						
Yes	12	10.2	22	36	34	18.9
No	106	89.8	40	64	146	81.1
Alcohol use						
Non Use	55	47	30	48	85	47
Normal Use	53	45	20	32	73	40.5
Hazardous Use	10	8.5	11	18	21	12.0
Harmful Use	0	0	1	4	1	0.5
Describe first sexual intercourse						
Wanted it	36	31	18	29	54	30
Do not want it but happened	64	54	35	56	99	55
Was forced	18	15	09	15	27	15
First sexual partner						
Regular partner	14	12	46	74	60	33
Casual partner	102	86	10	16	112	62
Others	02	2	6	10	8	5

* P < 0.01

fifty eight (258) representing 31% attrition of the questionnaires were rejected due to incomplete and missing data. Breakdown of the 583 students showed that they represented students from nine faculties: Arts (53 students, 9%); Social Science (221 students, 38%); Law (21 students, 3.6%); Science (121 students, 21%); Technology (28 students, 4.8%); Agriculture (52 students, 8.9%); Education (32 students, 5.5%); medicine (37 students, 6.3%) and veterinary medicine (18 students, 3.1%). From the 583 properly completed questionnaires, 180 (30.8%) were sexually active and had engaged in sexual activity 6 months prior to the study. They had their

data analyzed and presented in the results for this study.

Data Analysis

Analyses were computed with SPSS software version 10 for Windows. To elicit the determinants of risk sexual behaviour of the freshmen, linear regression analysis was performed with the dependent variable being the degree of risky sexual practices experienced within six months preceding the study. Independent variables were derived from (1) socio demographic characteristics (for e.g. gender, age, and years of education; (2) psychosocial characteristics (e.g. sexual compulsivity, HIV knowledge, self-esteem and alcohol abuse and (3) history of sexual abuse characteristics.

Bi-variate analysis was obtained from Pearson correlation coefficients and contingency tables with Yate's corrected Chi-square and Fishers' exact test as appropriate. All *p* values quoted are 2-tailed

Results

Socio-demographic characteristics

Table 1 compares the socio-demographic characteristic of the freshmen who were

sexually active within 6 months prior to the study and those not sexually active. There was a preponderance of male freshmen in both groups. Majority of the freshmen were from the social sciences discipline with least coming from human medicine, law and veterinary medicine respectively. Most of the freshmen were from monogamous home. Overall there were no significant differences in socio-demographic variables between those not sexually active, and freshmen who were sexually active except that sexually active freshmen were older in age ($t=4.96$, $p<0.000$).

Prevalence and pattern of sexual risk behaviors

As was indicated, 180 respondents, representing 30.8% of the entire freshmen surveyed were sexually active at the time of study with a preponderance of male sexually active than female freshmen ($\chi^2 = 10.21$, $p<0.001$). Of these and as presented in Table 3, 47% of the sexually active freshmen did not use condom in their last sexual episode. Those who had sex for various peculiar reasons include: 11% (money); 3, 3% (drugs); 6.7% (place to stay); 7.2% (drinks); 5% (transport); 6.7% (with partner on IVD); 11% (sex after heavy use

Table 3: Gender Differences in Sexual Risk behaviour of Sexually active Freshmen

Variables	Male % (N = 118)	Female % (N = 62)	Total % (N = 180)
Had sex for money	9.3	14.5	11.1
Had sex for drugs*	0.8	8.1	3.3
Had sex for place to stay*	2.5	14.5	6.7
Had sex for food	5.1	11.3	7.2
Had sex for drinks	4.2	12.9	7.2
Had sex for transport	2.5	9.7	5.0
Had sex with partner on IVDU	4.2	11.3	6.7
Had sex after heavy use of alcohol	8.5	16.1	11.1
Had sex with a partner known for a day	22.9	21.0	22.2

*Gender differences, $P < 0.05$

of alcohol) and 22.2% (with partner known for a day).

As shown in Table 3, gender comparison between the sexually active freshmen showed, there were no significant difference between them in sexual risk behaviours except that females were significantly more likely to have had sex with the expectation that drugs would be given ($X^2=6.57, p<0.02$) and a place to stay ($X^2=9.36; p<0.004$) respectively. Female freshmen were also significantly more likely to have had a history of rape ($X^2=17.0, p<0.000$) than male freshmen.

Pattern of alcohol use among the Freshmen

Analysis of the entire freshmen studied (as shown in Table 2) indicated that 389 (67%) have never used alcohol, while 194 (33%) have used alcohol at various times prior to study. Among the sexually active, 95 representing 53% have used alcohol at different range prior to study. As shown in Table 2, 53 of the sexually active male freshmen, representing 45% and 20 female freshmen, representing 32% respectively use alcohol normally (i.e. had a score on the AUDIT within 0-8). Furthermore, ten males (8.5%) and 11 females (18%) used alcohol hazardously (i.e. had a score on the AUDIT within 9-18). Only one female of the sexually active freshmen used alcohol harmfully (i.e. had a score on the AUDIT within 19-40).

History of Child Sexual Abuse (CSA) among the sexually active Freshmen

Table 4 shows the prevalence of Child Sexual Abuse (CSA) among the sexually active freshmen. Eighteen (10%) of these freshmen had a history of CSA within the

family, and male family members (67%) were the major perpetrators. Prevalence of CSA with non-family members was 16.7% with family friends being the major perpetrators. Gender comparison showed that female freshmen were significantly more likely to have had CSA with non-family members than the males freshmen ($X^2=7.87, p<0.00$).

Correlates and predictors of Sexual Risk behaviours among the sexually active freshmen

Table 5, 6 and 7 respectively presented the associated factors to sexual risk behaviours among the freshmen by gender. Seven variables were found to be associated with sexual risk behaviours. They were: being a male freshman ($r = 0.15, p < 0.05$); increasing age ($r = 0.19, p < 0.05$); lower tendency for violence ($r = -0.16, p < 0.05$); increase sexual compulsivity ($r=0.17, p<0.17$); alcohol abuse ($r=0.28, p<0.001$); history of rape ($r=0.18, p<0.05$) and a history of Child Sexual Abuse ($r=0.26, p<0.001$). When these seven variables were entered into a step wise multiple regression in a separate gender analysis to determine their relative predictive power to sexual risk behaviours among the freshmen, two variables; alcohol abuse ($p < 0.001$); and increasing age were found to predict sexual risk behaviours in male freshmen. Also two variables: history of rape ($p < 0.01$) and increasing age ($p < 0.01$) remained significant as predictors of sexual risk behaviours in female.

Discussion

The aim of this study was to examine the prevalence as well as the associated factors

Table 4: Gender Differences in Childhood Sexual Abuse among Sexually Active Freshmen (N = 180)

Values	Male		Female		Total	
	N	%	N	%	N	%
CSA/Family Members						
Yes	10	5.6	8	4.4	18	10.0
No	108	60.0	54	30.0	162	90.0
Who CSA Family Members						
Parents	1	0	3	0.6	4	22
Other Male Family Member	2	1.1	0	1.1	2	11
Other Female Family Member	8	2.8	4	2.2	12	67
*CSA Non Family Members						
Yes	13	7.2	17	9.4	30	16.7
No	105	56.3	45	25.0	150	83.3
Who CSA Non Family Member						
Neighbour	1	0.6	1	0.6	2	6
Friend	4	2.2	9	5	13	43
Stranger	0	0	4	2.2	4	15
Housemaid	8	4.4	3	1.7	11	36.6

* Gender Difference (Chi-square = 7.87, P < 0.007)

Table 5: Correlates of Sexual Risk behaviours among the sexually active freshmen (N=180)

Values	Correlation Coefficient
Gender	.15*
Age	.19*
Violence	-.16*
Sex Compulsivity	.17*
Alcohol Abuse	.28**
Ever Raped	.18*
CSAA	.26**

* 0.05

** 0.01

Table 6: Predictors of Sexual Risk behaviour among Male Freshmen (N = 118)

Variables	β	Adjusted R Square	Partial r	P
Alcohol Abuse	.32	.09	.30	.001
Increasing Age	.18	.12	.19	.04

Table 7: Predictors of Sexual Risk behaviours among Female Freshmen (N = 62)

Variables	β	Adjusted R Square	Partial r	P
CSA	.39	.08	.56	.002
Increasing Age	.26	.14	.20	.03

of sexual risk behaviours among freshmen of the University of Ibadan Nigeria. A major finding in the study is that approximately one third (31%) of the freshmen were sexually active at entering University. Consequently, unsafe sexual practices were common. It was found that 47% of those sexually active did not use condom at last sex. This rate is considerably higher than that previously reported 39% among female University students,⁷ but lower than the 70% males and 89% females reported between the general male and female university students⁸. Nevertheless the finding is comparable to 38% males and 33% females reported for the first year college students, during their first sexual intercourse in South-Africa¹⁵, but relatively lower (30%) among first year University students in a black province in South Africa⁶. It is possible; however, that condom use was underreported by our subjects. Also of significant is that the age at sexual initiation is higher in the present study than what had been earlier reported among first Year College and University students respectively^{6, 15}

Overall there was no significant difference in risky sexual risk behaviour between male and female freshmen, however it was found that females were more likely to exchange sex for drugs and place to stay. This finding contradicts earlier studies in Europe, where it was shown that male university students were more likely to practice unsafe sex than females^{12, 13}. Other peculiar sexual risk behaviour reported by the freshmen includes 7% who reported sexual intercourse with person with IVD. This result is unprecedented in the adolescent sexuality literature in Nigeria. Due to its

implication for the spread of HIV/AIDS, an urgent step intervention will be required to minimise its effect.

Another significant finding was the 19% prevalence of rape and 10% prevalence of childhood sexual abuse reported by the students. Both rates are considerably lower than that previously reported in surveys in the general population in Europe and United states^{23, 24} and also of those observed (27%) among male Jordanian university students²⁵. The rates however fall within the range observed among female and male students at a Palestinian university, but are higher than the 6.8% (2.1% of males and 8.3% of females) observed among Malaysian paramedic students²⁶, and the 10.4% (17.3% of females and 3.4% of males) in a New-Zealand adolescent cohort²⁷. It may also be possible; however, that there was an underreporting of rape and CSA in the present sample.

Both prevalence and patterns of rape and CSA found in this study is both interesting and revealing. Though it remain unclear whether the rape experience was vaginal intercourse or mere sexual abuse. Nevertheless rape among male is not a commonly reported phenomenon in previous studies in Nigeria. However, Ajuwon et al²⁸ reported 19% prevalence of rape among female apprentice's adolescents in Ibadan and none of the males in that study reported having been raped. Increase awareness brought about by improved sex education about what constitute sexual coercive behaviours in some secondary schools in Nigeria may have explained improved case reporting of rape among the male boys as observed in this study.

Incest is also a rarely reported sexual phenomenon among adolescents and young adults in Nigeria. We found from this study that 10% of the freshmen had suffered CSA, from a family member, while 17% reported sexual violation from non-family members.

This study further found that there is an association between alcohol usages, history of been sexually violated and increasing age of the freshmen to sexual risk practices. Much of the literatures on sexual risk behaviour of university and college students have consistently reported that alcohol use is a major risk factor^{4, 12, 13, 22}. This present study further supports these findings. It was found that use of alcohol contributed 25% to the total explanatory power of sexual risk behaviours among the freshmen. What consistently explains this pattern remains unclear. However, loss of judgement and self restraint in sexual intercourse due to heavy alcohol consumption may explain this phenomenon.

The finding that freshmen that had history of rape is associated with significant sexual risk behaviour is consistent with previous literature on rape in general^{29, 30}. It is typical in the literature that sexually assaulted individuals either as child sexual abuse CSA or raped as adults were significantly more likely to report recent unprotected intercourse than persons who had not been sexually assaulted. However, given the low reported prevalence of rape in this study, it is possible that our finding may not be representative due to insufficient statistical power.

The results from this study have important implications for the prevention of HIV and engaging in sexual risk behaviours among the students in the University of

Ibadan. This study therefore recommends programs that will emphasise on sexual restraint whilst encouraging correct and consistent condom use among the students; programmes and policies aimed at reducing the number of sexual partners among the students; and programmes promoting non usage of alcohol among students; structural intervention in terms of “on campus” residency for all, particularly freshmen female students; policy on alcohol consumption and other drug use on campus and policy on periodic sex education, particularly among freshmen.

There are a number of limitations to the present study that must be acknowledged. Asking adolescents and young adults freshmen to report about their sexual activity is a sensitive issue, which makes for caution in interpreting the present data. Inaccurate recall of past events and the social desirability expectations often exhibited in such sensitive social issue may have made an underestimation of the actual level of sexual risk behaviour of the freshmen in this study. In addition, though, we attempted studying the entire freshmen admitted in the 2003/2004 academic session, the sample that form this report may not representative of all the freshmen admitted.

Replication using the entire admitted freshmen including a control group consisting of stale: non freshmen but old students might enable comparison and improve generalizability.

We conclude that a number of entering freshmen in a Nigerian University are sexually active and that among those, sexual risk behaviour is common. We therefore suggest that as part of the comprehensive HIV/AIDS preventive program, it is

important that policy players if accessible, document past childhood sexual abuse and current alcohol abuse.

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