

Alcohol Use And Sexual Behaviour Of University Undergraduates In Benin City, Edo State, Nigeria

^{*1}Afemikhe, J.A. and ²Olatuja, J.M.

1. Department of Nursing Science, School of Basic Medical Sciences,
College of Medical Sciences, University of Benin, Benin City
2. Institute of Education, University of Benin, Benin City, Nigeria.

***Corresponding author**

Email: juliana.afemikhe@uniben.edu

Abstract

Background: Alcohol use among University students constitutes an increasing public health issue and the effect on sexual behaviour can be problematic if not well understood. The study assessed the use of alcohol among undergraduates in a university in Benin City and the effects as related to their sexual behaviours. **Materials and Methods:** The study was a cross-sectional descriptive survey conducted in two campuses of a university out of three universities in Benin City. A multistage sampling approach was used in the selection of the Faculties, Departments and the respondents who consented to participate. The sample size was calculated using the Cochran formula for sample size estimation for a descriptive cross-sectional study which gave a sample size of 300 respondents. Proportionate sampling and convenient sampling methods were used. A self-constructed questionnaire was utilised to collect data on demographic characteristics, alcohol consumption, types of alcohol consumed, reasons for taking alcohol and sexual behaviour. The variables of interest were subjected to descriptive and χ^2 analysis. **Results:** The results highlighted the prevalence of alcohol use by 60% of respondents, and the consumption was more with males. Alcohol most consumed was beer (48%) with the most frequent sexual behaviour indicated as exposure of the body revealing breasts and thighs. **Conclusion:** Therefore, public health interventions in the university during the orientation week and policies guiding alcohol consumption are required to confront the adverse effect of alcohol consumption on the students.

Keywords: Alcohol Use, Edo State, Sexual Behaviour, University undergraduates

Introduction

Alcohol is a widely used psychoactive substance among University students and constitutes an increasing public health issue globally with about 2 billion people consuming alcohol and 76 million people affected by alcohol use disorders, such as alcohol dependence and abuse (1-3). The developed world has the highest consumption levels with global consumption equal to 6.13 litres among persons aged 15 years and above (4). There has been unrecorded alcohol consumption in India, Africa, Eastern African countries and Latin America which may further increase the number of people involved in alcohol consumption. Countries in America, Europe, and Western Pacific regions have stable consumption rate, unlike countries in Africa and South-East Asia that have recorded marked increases in their alcohol consumption (4-6).

The prevalence of alcohol use in the countries within sub-Saharan Africa, including Nigeria, is high particularly for ceremonial purposes. The 2016 Global burden of disease study revealed that Nigeria stands out among countries in Sub-Saharan Africa with a high prevalence of alcohol use (7). Substance abuse among University and College students is a growing problem in many African countries; studies done in Ethiopia revealed the prevalence of 31.4% and 34.5% (8) and in Kenyan about 30% (2). In Nigeria, the prevalence rate among adults aged 15 years and above is about 40% to 59.9% (7). It is used by both males and females, with about 37% - 50% of students using alcohol at risky level (9). The use of alcohol in social gatherings is rampant, and it plays a dominant role in many African cultural activities (6). Alcohol is easily accessible to the university

students as it is sometimes sold openly in campuses and is a source of income to many people outside but around university campuses without regard to policies guiding the sales despite the negative effect on health (10,11).

The movement of students from college to the university is a developmental period associated with various risky health behaviours associated with alcohol and drug use. In particular, many students are at risk of alcohol abuse because the younger students perceive a sense of freedom from the control of parents when they enter the university as they also perceive the use as an essential part of university socialisation (12,13). The drinking habit among some students may have been formed before the university years as studies have shown an association between alcohol use among university students and dysfunctional family background as well as the effects of media (11,14). Some young students see the school years as a time for experimentation of various habits they have seen exhibited in the environment (15). Alcohol may be consumed for social identity (16), for better sexual performance and to reduce academic stress (17). Very few students on their own drink alcohol alone, the majority of the students consume alcohol in the company of other fellow students which assumes the significance of company and fun (18). Relating to the frequency of use, gender plays a major role and males tend to engage in binge drinking often than the female folks (19).

The adverse consequences of alcohol consumption are not self-limiting as friends, family and society are involved. The consumption of alcohol, tobacco and other substances among adolescents and university students constitutes risk-taking behaviours with consequent physical and mental health effects. It increases the odds of fights, accidents, injuries and deaths among this group of people (20). Studies have shown that harmful use of alcohol may lead to functional impairment resulting in poor performance academically and higher rates of drop out (13,21). It intensifies the threat of being victimised by impairing perceptions of impending dangers and risky sexual behaviour, which reduces the ability to effectively respond to sexual advances and assault (11,12,17,23). Students under the influence of alcohol can have poor decision-making ability and lack of control of the use of protective

measures during sexual acts thus exposing them to sexually transmitted infections, HIV/AIDS and unintended pregnancies (24,25).

Furthermore, alcohol consumption among this group is usually accompanied by the use of other psychoactive substances, which may further increase the adverse effects on the individuals (26,27). Expectedly, the negative effect of the use of alcohol globally calls for concern among students but this concern seems to have been neglected at the universities in Benin City. In an earlier study (28), the sexual behaviour of secondary students was assessed, and findings revealed high risky sexual behaviour among adolescents. Alcohol use could influence this type of behaviour and since tertiary level students are likely to be involved in it, the need to further explore it becomes imperative. Moreover, these alcoholic use effects, particularly as they affect sexual behaviour, looks neglected within the Nigerian context. Public health nurses play an essential role in giving adequate information to students from an early age as they come in contact with them through the school health services, but this may not be practised in most of the schools. Adolescents' reproductive health services are neglected in most states of Nigeria, including Edo State, and this is one adverse effect of students not yet fully investigated. Therefore, the study aimed to assess the use of alcohol among students in one of the universities in Benin and the effects as related to the sexual behaviour of university undergraduates.

Materials and Methods

Design, Setting and Population

A descriptive cross sectional survey design was used for the study. The study was carried out at one of the universities in Benin City, Nigeria, located on two campuses made up of males / females students at all levels. All the students in both campuses were included in the study though only one Faculty had students on both campuses. The university was purposively sampled from universities in the city.

Sampling Technique and sample size

The three-stage multistage sampling procedure was adopted in selecting the sample from the university. The first stage was done through random sampling (balloting) of three Faculties

with one of the Faculties running programmes of six years' duration. The second stage entailed the selection of two Departments from each Faculty using balloting system with replacement. The third stage was achieved using the proportional stratified technique in selecting respondents for the study. Convenience random sampling was used in selecting respondents. A pilot study conducted as part of this study yielded a consumption rate of 22.6%. This value was used as a projected prevalence level ($p=0.266$) and a corresponding $q=0.734$. The confidence level was 95% with a precision of $\pm 5\%$. The sample size using the Cochran formula for sample size estimation for a descriptive cross-sectional study gave a sample size of 300 respondents. The respondents were of ages between 16 and 35 years distributed among the Faculties based on the total number of students in the Faculty.

The Instrument

The instrument for this study was a self-structured questionnaire which was subjected to validation. The questionnaire consisted of four main domains of demographic characteristics, alcohol consumption, types of alcohol consumed, reasons for taking alcohol and sexual behaviour. The socio-demographic characteristics captured were to assess for the diversity of subjects with respect to age, gender, marital status, level of study, age at first alcohol use, and alcohol consumption before admission into the university. The second domain was on alcohol use regarding types when used, and quantity consumed. It consisted of seven items. The third domain was on reasons for alcohol consumption, and the fourth domain focused on sexual behaviour. The questionnaire was validated by a juror of experts made up of a psychiatrist, a public health nurse and a statistician. The experts were to determine the suitability, adequacy and ease of understanding of the items on the questionnaire and how adequately they covered the issues of interest. The validated questionnaire was administered two times within a time interval of two weeks on 30 undergraduates from a Faculty not included in the study and resulted in a reliability coefficient of 0.92.

The study was approved by the institutional research committee, and approval was also given by various Deans of the Faculties. The Heads of Departments also consented to the study. The

purpose and process of the study were explained to the respondents, and written informed consent was obtained from each of them. They were also intimated about voluntary participation and discontinuation without any effect on the students. Data collection was accomplished with the aid of two trained research assistants. Moreover, confidentiality was ensured as data collection was anonymous, and information that could be used to identify the participants were not included in the questionnaire and data were kept in a secured place. Respondents were protected from any form of psychological harm. The questionnaire was administered at a time when the students had no lectures, and therefore there was no encroachment on their study time. Adequate time was given for filling of questionnaires, and they were retrieved at completion.

Data Analysis

Data management and analysis were done using IBM Statistical Package Social Science version 21. The variables of interest were subjected to descriptive and inferential statistics. The outcome variables were described with frequency distribution; percentages and relationship between sexual behaviour and alcohol consumption were established using χ^2 of model fit.

Results

Table 1 contains the demographic characteristics of the respondents. There were more males (191) respondents than females (108) respondents. Ninety-six percent of the respondents were single, and the modal age was 20 years and below. With respect to year of study, 30% were in 400 to 600 levels and less than 23% in each of levels 100, 200 and 300. Thus the distribution of the respondents mirrored all the classificatory variables considered.

Table 2 shows the number of respondents who take alcohol, whose parents take alcohol and those who took alcohol before entry into the university. Among the respondents, 60% take alcohol with 37% taking alcohol before coming into the university, and the results indicated that 41% of the parents of the undergraduates take alcohol.

Table 1: Frequency distribution of demographic characteristics

Variable	Frequency	Percent
Gender		
Male	191	63.67
Female	108	36.00
Total ⁺	299	99.67
Marital		
Single	288	96.00
Married	7	2.33
Divorced/ Separated	1	0.33
Total ⁺	296	98.66
Age		
20 years and below	178	59.33
21 - 25 years	99	33.00
26 years and above	18	6.00
Total ⁺	295	98.33
Level of Study		
100	72	24.00
200	68	22.67
300	64	21.33
400	53	17.67
500	24	8.00
600	13	4.33
Total ⁺	294	98.00

⁺Shortfall in totals due to no response

Table 2: Frequency distribution of alcohol intake

Question	Yes Frequency (%)	No Frequency (%)	No response Frequency (%)
Have you ever taken alcohol?	180 (60)	117 (39)	3 (1)
Do your parents take alcohol?	122 (41)	172 (57)	6 (2)
Did you take alcohol before entry into the university?	111 (37)	178 (59)	11 (4)

An examination of the frequency of alcohol intake show that 36 (12%), 30 (10%), 10 (3.3%), 3 (1%), 1 (0.3%) and 2 (0.7%) take 1 bottle, 2 bottles, 3 bottles, 4 bottles, 5 bottles and 6 bottles respectively at a sitting. Though this is the case, most of the students were not in the habit of doing that on a regular basis. Thus one could conclude that the intake of alcohol was not on a regular basis. Furthermore, 13.7% of the respondents did not see drinking of alcohol as a problem.

Different types of alcohol are normally available for sale in the market place. Thus students have a choice as to which type to take. Table 3 shows the

alcohol types that the respondents in this study normally take. The most common one is beer (48%), followed by Palm wine (28%) and wine (20%). The alcohol least taken were Local gin (Ogogoro) (5%), stout (10%) and whisky (11%). From Table 3, it is noticed that a greater proportion of males compared to female undergraduates took wine, local gin (not taken by females at all), liquors, stout and palm wine. The reverse was the case for beer, cider and whisky for which more the female undergraduates took more than the male ones.

Table 3: Frequency of different types of alcohol taken by students

Type of alcohol	Male		Female		Total	
	Yes	No	Yes	No	Yes	No
Wine (Red, White)	40 (21)*	151 (79)	20 (19)	88 (81)	60 (20)	238 (80)
Beer (Star, Harp, Gulder, etc)	90 (47)	101 (53)	53 (49)	55 (51)	143 (48)	156 (52)
Cider (Brandy, Cognac, Rum, etc)	12 (6)	179 (94)	24 (22)	84(78)	36 (12)	263 (88)
Local gin (Ogogoro, etc)	14 (7)	177 (93)	0 (00)	108 (100)	14 (5)	285 (95)
Whisky (Scotch, Irish, etc)	20 (10)	171 (90)	12 (11)	96 (89)	32 (11)	267 (89)
Liquors (Snap, Cream, etc)	33 (17)	158 (83)	10 (09)	98 (91)	43 (14)	256 (86)
Palm Wine or Burukutu	60 (31)	131 (69)	24 (22)	84 (78)	84 (28)	215 (72)
Stout	19 (10)	172 (90)	10 (09)	98 (91)	29 (10)	270 (90)
Total		191		108		299

*Figures in parenthesis are percentages

Activate Win

The reasons for taking alcohol are contained in Table 4. The most important reason being for pleasure (33%), cultural participation (16%), change of mood (13%) and reduction of boredom (11%). These expectancies could be behavioural, cognitive and even affective and reflect the individual's expectations from taking alcohol. They model explanations for drinking alcohol. According to the result of a study¹¹, the expectations predict one's attitude to the drinking of alcohol. Pleasure (33%) is seen as the most potent factor for drinking. Mood change and reduction of boredom were equally well rated as alcohol consumption can reduce boredom due to opportunities it provides for interacting with one's peers. The low rating of 'doing things which ordinarily one cannot do' underscore beliefs about hiding under the influence of alcohol. The importance of cultural participation is embedded in the use of alcohol during the pouring of libations as part of prayers, marriages and cultural activities in most Nigerian societies.

Table 4: Frequency of reasons undergraduates take alcohol

Reason	Yes (%)	No (%)	No Response (%)
Sociability (Kills Social fear)	49 (16)	258 (84)	1 (1)
Peer Influence	28 (9)	271 (90)	1 (1)
Pleasure	99 (33)	200 (67)	1 (1)
Change mood	39 (13)	260 (87)	1 (1)
Do things which ordinarily, I cannot do	22 (7)	277 (92)	1 (1)
Reduce boredom	34 (11)	265 (89)	1 (1)
Cultural participation	31 (10)	268 (89)	1 (1)

A conjecture that is normally made is that alcohol use can lead to behaviour that society frowns at among which are sexual behaviours ranging from exposure of body parts, unplanned sex without the use of condom among others. Table 5 shows that the most prominent behaviour was exposing body parts (64%), and having sex without a condom (17%). A large number did not have sex within the last three months (87%), and 94% did

not exchange sex for money or other gratifications. The behaviours above are mainly risky because of the implications they have for those who display them. They could be indiscriminate such as having multiple sexual partners, anal sex and even sex with adults. It could also involve not taking protective measures such as the use of the condom, avoidance of sex, among others.

Table 5: Frequency distribution of sexual behaviour associated with alcohol use

Reason	Yes (%)	No (%)
Not exposing the body (breasts, laps, chest, etc.)	107 (36)	192 (64)
Sexual intercourse through unusual routes	14 (5)	286 (95)
Having sex with adults	36 (12)	263 (88)
Sex without condom	51 (17)	248 (83)
Enhances performance	35 (12)	263 (88)
Using it to have fun	36 (12)	263 (88)
Having unplanned sex	46 (15)	253 (84)
Exchange of sex for money or other present	17 (6)	282 (94)
Having sex within the last three months	39 (13)	260 (87)

Table 6 contains the chi-square test for the consumption of alcohol as related to the exhibition of sexual behaviour. The goodness of fit procedure was applied to test the hypothesis that each of sample sexual behaviour is distributed evenly among all levels of the number of bottles of alcohol consumed. Prior to categorisation, students who consumed between 4 and 6 bottles were classified as a group because of the smallness of the number involved. The

results in the table showed that sexual behaviour was not equally distributed among the categories of students who consume alcohol. For example, not exposing the body, sex without condom, enhancement of performance, using it for fun and having unplanned sex were significantly different among the groups at .05 level of significance. Having sex with adults was the same across all levels of classification.

Table 6: χ^2 of goodness of fit of sexual behaviour as related to number of bottles of alcohol taken

Sexual behaviour	Number of bottles alcohol taken					χ^2	df	α
	1	2	3	4-6	Total			
Not exposing the body (breasts, laps, chest, etc)	23	14	30	40	107	13.56	3	.004
Sexual intercourse through unusual routes	2	4	5	3	14	1.43	3	.699
Having sex with adults	3	3	3	3	12	0.00	3	1.000
Sex without condom	3	10	3	1	17	9.21	3	.027
Enhances performance	0	5	1	6	12	8.67	3	.034
Using it to have fun	0	2	7	3	12	8.67	3	.034
Having unplanned sex	3	0	7	5	15	7.13	3	.068
Exchange of sex for money or other presents	0	3	0	3	6	6.00	3	.113
Having sex within the last three months	0	1	3	9	13	15.00	3	.002
Total					208+			

[†]Double counting possible as a respondent could have been involved in more than one sexual behaviour

Discussion

The fact that a majority of the students (79%) who use alcohol were males seems to point to the fact that they are more likely to be risk-takers as they endorse higher levels of alcohol expectancies (29). This is consistent with a study in Uganda (30) which indicated that a higher percentage of males consumed alcohol in general and in relation to sexual behaviour. The result is not different from other studies(2,15,19), which revealed more males were consuming alcohol and more frequently. This is contrary to a study in Botswana (1), where there was no gender difference in consumption. Most of the students were single and based on expectancy theory;

these groups of respondents may drink because of expectancies of arousal, pleasure and even tension reduction. The fact that 60% drink alcohol and 37% started taking alcohol before coming to the university is instructive. The current study suggests that the prevalence of alcohol use is comparable to levels found in other studies in Nigeria (7,31) with 40%- 59.9%, and 58% use. The result is higher than studies by in Kenya (2)with 30% use and in Ethiopia (8) 31.4% and 34.5%. First, it shows that alcohol drinking behaviour is not something that was learnt in the university. A study in Sudan also revealed students initiating alcohol consumption at an early age of 17 (32). Therefore, the university

environment was an opportunity to continue a behaviour that could have been clandestinely exhibited before entry into the university.

The quality of the alcohol may have played an important part in their choice. Beer which contains between 3.5 – 5 % alcohol was most preferred, which could be attributed to the size that could come in the form of a bottle or can. It is accessible and available to the students as it is cheaper and can be procured from various shops. Many students also consumed wine, the result corroborates with findings from Botswana (1), where the most consumed alcohol was beer and wine. In Nigerian society, the use of alcohol in traditional and social activities is very common (11). Students gave several reasons for the use of alcohol. The reasons indicated by most students were for pleasure, sociability and change of mood. Most students use alcohol for social life and relaxation from boredom. Other studies also revealed that students consume alcohol for curiosity and pleasure (30,32) . Many of the students indicated that their parents indulge in alcohol. There is strong evidence of the causal relationship of parental consumption of alcohol and the use among their children (33) The fact that so many parents take alcohol can be motivating for the students to get involved in drinking alcohol. Parents play a role in the socialisation of their children and often serve as role models. Students who are out of the home always find the university environment convenient to experiment habits observed at home (15).

The results obtained revealed that students engaged in risky sexual behaviours under the influence of alcohol. The students who disclosed these behaviours were few, and the frequently risky sexual behaviours were indecent body exposures, sex without condom and having unplanned sex. Earlier qualitative study among students in Nigeria revealed students concurring to taking alcohol to enable them to have spontaneous sex without condom (17). This is congruent with a study, showing that individuals who indicated alcohol use in sexual activity would likely not use condom (30). Exposing the body parts is done to attract attention and lure the opposite sex. Sex without condom may engender the contraction of sexually transmitted

infections, including HIV and unplanned pregnancy. Alcohol use may reduce the ability to negotiate for sex, thus allowing for unplanned sex which could also result in sexual assault or abuse.

In this study, we attempted to compute a relationship between alcohol consumption and risky sexual behaviour. Alcohol use caused some risk-taking attendant on intoxication which can impair judgement, suppress inhibition and reduce the perception of risk (31). This has implications for control of alcohol sale on campuses.

Conclusion

The study has revealed a high prevalence of alcohol use among university students. Males were more involved and more frequent with the use, but the females were also affected. Sociability, pleasure and peer influence were the major factors influencing the consumption of alcohol. Risky sexual behaviours influenced by alcohol use were the exposure of the body, sexual act without condom and having unplanned sex. The use of alcohol for sexual pleasure and unprotected sex may expose these students to sexually transmitted diseases, especially HIV and unplanned pregnancy.

Recommendation

The negative consequences of alcohol use necessitate public health promotion interventions among adolescents as many students engage in alcohol use at a very young age. Involving Public health nurses in alcohol education and its effects early during secondary education prior to entering the university is vital. Parents play a role in shaping the health behaviour of children; therefore, they should be involved in teaching assertiveness and act as good role models. Policies geared towards the reduction of minors' and students' access to alcohol within and around the campus should be put in place to designate official licensed sale points. Sponsorships of students' activities by brewery should be banned. In addition, giving away branded stuff should be reviewed. Adolescents' reproductive health requires early sexuality education tailored to their age, and this should be introduced in schools.

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