Assessment of Sexual Risk Behaviours among Young People Patronizing Alcoholic Beverage Selling Outlets in Makurdi, Benue State, Nigeria Audu O,^{1*}, Ogbeyi GO¹, Omole VN², Joshua IA², Gobir AA³, Anejo-Okopi JA⁴

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Abstract

Background: Young people constitute 16% of the global population and in Benue State Nigeria, majority of them take alcohol which is one of the identified drivers of high risk sexual behaviours. However, intervention strategies at the pubs where alcoholic beverages are sold remain peripheral. This study assessed the sexual risk taking behaviours among young people who patronized alcoholic beverage selling outlets in Makurdi, the Benue State capital.

Methods: A community based cross-sectional study using interviewer administered questionnaire was conducted among 273 young people sampled from 4 night clubs and 28 bars. Logistic regression analysis was conducted to determine the relationship between alcohol use and risky sexual practices with statistical significance set at p = 0.05

Results: Seventy-four percent of the respondents had history of sexual intercourse with mean age of 18.2 (\pm 3.0) years at sexual debut. Ninety eight (48.5%) had sexual intercourse within a week prior to the study, 73.8% took alcohol before the last sexual intercourse and the practice corroborates a cycle of sexual risk behaviour which include: heterosexual (100%), one-night stand (62.2%), sex without condoms (48.0%), oral sex (42.6%), sex in exchange for money (32.7%), anal sex (26.5%) and group sex (9.2%). Those who take alcohol are 8.5 times at higher risk of engaging in anal sex {(OR-8.464) (95% CI = 2.919 - 24.53) (p=0.0433)}.

Conclusion: Policymakers working on risk taking behaviour intervention should consider night clubs and other drinking establishments in order to mitigate the effects of diseases transmitted through high risk sexual behavior among young people.

Keywords: Alcohol Intake, Risky Behaviour, Disease

Introduction Benue State Nigeria, like other parts of the Young people (10-24 years) constitute about 16% of the global population and (10-19 years) and young people.^{1,2} As these

population groups go through the demographic transition, they are faced with challenges of peer group pressure, low infection risk perception and low self-esteem. These make adolescents and young people more vulnerable to health risk behaviours like unprotected sex, physical inactivity, use of tobacco, alcohol and illicit drugs as compared to other groups³⁻⁵

Alcohol has been an integral part of most human cultures for years; nevertheless, the consumption carries risk of adverse health and social consequences which are related to its intoxicating and dependenceproducing properties.^{6,7} Alcohol use has been reported as the largest single contributor of risks to health in young people in both low and high income countries.^{7,8} The intake has been identified as a driver of Human Immunodefficiency Virus (HIV) infection in Benue State and the young people are not left out.^{9, 10} In 2016, about 2.1 million people aged between 10 and 24 years were living with HIV and 260,000 became newly infected with the virus.¹¹ In 2018, Benue State had an estimated 190,913 People Living with HIV/AIDS (PLHIVs) accounting for a prevalence of 4.9%, the second highest in Nigeria. There is considerable variation in the prevalence across the Local Government Areas (LGAs) of Benue State with Ado LGA having the least (1.5%), Ukum having the highest (6.1%) and Makurdi, the State headquarter having 4.5%.12

To accelerate efforts towards ending the HIV epidemic, the Joint United Nations Programme on HIV/AIDS (UNAIDS) released the 95-95-95 targets for 2030. In this strategy, 95% of PLHIV are expected to know their HIV status; 95% of people who know their status are to be on anti-retroviral therapy, and 95% of people on treatment are to have suppressed viral loads.¹³⁻¹⁵ This life-cycle approach to HIV

ensures best solutions to a zero transmission level of HIV amongst all population groups throughout their lifetime. However, intervention strategies at bars and nightclubs where alcoholic beverages are sold remain peripheral in response to HIV transmission.¹⁵ Even though it is generally recognized that alcohol is a strong driver of high risk sexual behaviour, the actual sexual behaviour of young people who patronize drinking outlets in Makurdi remains unknown. Against this background, we conducted this study to assess the sexual risk taking behaviours among young people who patronized alcoholic beverage selling outlets in Makurdi, north central, Nigeria.

Methods

Study Area

Benue is one of the 36 States located in the North Central geo-political zone of Nigeria with an estimated population of 6,381,985 (projected from 2006 National Census). It shares boundaries in the north with Nasarawa State, in the east with Taraba State, in the south with Cross River and Ebonyi States and in the west with Enugu and Kogi States. The largest town in the State is Makurdi which serves as the State capital and also as the headquarters of Makurdi Local Government Area (LGA). Makurdi LGA has eleven council wards, namely Mbalagh, Agan, North Bank I, North Bank II, Fidi, Wailomayo, Baa, Mordern Market, Ankpa/Wadata, Clerk Market and Central/South Mission wards. Almost every street in the council wards has a beer palour where alcoholic beverages are sold. At the time of this study, there were five functional night clubs in Makurdi town. The patronage of the bars was on daily basis but more in the evening while the clubs are mainly on Wednesdays, Fridays and Saturdays.

Study design, sample size determination

and study population

A cross sectional descriptive study design was employed for the study which took place between 12th and 28th April, 2019. The study population consisted of all young people patronizing beer palours and night clubs in Makurdi town. In this study the WHO definition of young people (10-24 years) was considered.⁸ With prevalence of 80 % of young adults reported to be engaged in unprotected/risky sex following alcohol consumption in a previous study,⁶ and 5% degree of precision at 95% confidence interval, a minimum sample size of 246 was arrived at using the formula $n = z^2 p(1 - z^2)$ $p)/d^2$. ¹⁶ Considering non-response rate of 10% the calculated sample size was adjusted to 273.

Sampling Technique

A Multistage sampling technique was used for the study. Stage 1 was selection of night clubs and beer palours. In this stage, an ethnographic survey of the major hubs in Makurdi LGA was carried out after which 4 night clubs and 28 beer parlours with the highest patronage were selected from a total of 43 through convenience sampling across the 11 council wards. Stage 2 was selection of respondents. In this stage, equal allocation of 6 persons per night club and at least 5 persons per beer palour was done before the minimum sample size of 273 was arrived at.

Data collection

A structured interviewer administered questionnaire was used to collect data and was administered by research assistants drawn from the Department of Epidemiology and Community Health, Benue State University Teaching Hospital Makurdi. For the night clubs, the questionnaire was administered on Wednesdays (called the lady's night), Fridays and Saturdays while the questionnaire for the beer parlours was administered between 4.00-6.30 pm daily. The purpose of the research was explained to each of the respondents and their consent was sought before the administration of the questionnaire. Information was obtained on sociodemographic profile, knowledge of alcohol as correlate to HIV infection, intake of alcohol, and practice of risky sexual behaviour. The research assistants were trained on the research protocol before data collection commenced.

Data analysis

Data was analyzed using Staistical Package for Social Sciences (SPSS) version 23.0 and presented as tables and charts. Independent variables considered were the sociodemographic variables and intake of alcohol, while the outcome measures of interest included sexual intercourse without condom, casual sex with someone met at first instance, onenight stand, received/performed oral sex, sex in exchange for money, anal sex and group sex. Data collected were sorted, categorized, summarized and presented in frequency tables and charts. Chi square (x2) test was used to test the association between the independent variables and the main outcome variables of the study, with statistical significance set at p-value of 0.05. The linear relationship between the predictor variables and the outcome (criterion) variables was further performed to investigate the independent predictors that had significant association on the Chi square test by controlling for possible confounders.

Results

Socio-demographic characteristics of respondents

Their mean age was 22.5 (\pm 1.5) years, with male to female ratio of 2.3:1. More than three quarters (88.6%) were single and Christians constituted 85.7%. The largest group (46.9%) were in or had completed tertiary institutions, followed by secondary schools (29.7%), primary schools (6.6%) and 16.7% were school drop outs. Table 1

Sexual activities of respondents

Almost three quarters (74.0%) of the respondents agreed to have had sexual intercourse in the

Past and the overall mean age at sexual debut was $18.2 (\pm 3.0)$ years. Eighty-eight (43.6%) had

2-3 lifetime sexual partners, 68(33.7%) had four and above, while 46(22.8%) had a single sexual partner, with mean number of 3.6 partners (±2.6) for males and 2.9 (± 1.9) for females. Ninety

eight (48.5%) had sexual intercourse within the week before the study. Out of these 72 (73.8%) had history of intake of alcohol before the sexual intercourse, while 26 (26.2%) had no history of

intake of alcohol before sexual intercourse **Sexual risk taking behaviour**

Figure 1 presents the high risk sexual behaviours practiced by the repondents who had sexual intercourse within a week before the study. The predominant high risk sexual practice was one-night stand (62.2%), followed by non-use of condom

(48.0%), received and performed oral sex (2.6%, and 39.8% respectively), casual sex with someone met at first instance (35.7%), sex in exchange for money (32.7%), anal sex (26.5%) and group sex (9.2%).

Influence of alcohol intake on sexual risk taking behaviour

Table 3 shows that the respondents who took alcohol were 8.5 times at higher risk of engaging in anal sex compared to those who were not under the influence of alcohol {(OR- 8.464) (95% CI = 2.919 -24.53) (p= 0.0433). Similarly, those who took alcohol were more likely to engage in heterosexual intercourse {(OR- 1.61) (95% CI = 0.648 - 4.007) (p = 0.000). The risk of practice of group sexual intercourse was about 2.88 times higher among those who took alcohol compared to those who did not take alcohol, but the relationship was not statistically significant {(OR-2.889) (95% CI = 0.3795- 21.99) (p= 0. (0.2727). The relationship between onenight stand and intake of alcohol was also not statistically significant {(OR- 1.212) (95% CI = 0.8178 - 1.797) (p = 0.3045).

Table 1: Sociodemographic characteristics of the respondents (n=273)

Characteristics	Frequency (%)
Age (Years)	
<15	27(9.9)
15-19	100(36.6)
20-24	146(53.5)
Mean age (SD)	22.5 (+/-1.5)
Sex	
Male	190(69.6)
Female	83(30.4)
Marital status	
Single	212(77.7)
Married	61(22.3)
Religion	
Christian	234(85.7)
Muslim	39(14.3)
Educational history	
Primary	18(6.6)
Secondary	81(29.7)
Tertiary	128(46.9)
Drop out of school	46(16.8)

Journal of Epidemiological Society of Nigeria Vol. 3 No.2 Dec. 2020 37-45

Variables	Total	Male	Female						
Ever had sexual intercourse	Freq.(%)	Freq.(%)	Freq.(%)						
Yes	202 (74.0)	152(80.0)	50 (60.2)						
No	71(26.0)	38(20.0)	33(39.8)						
Total	273(100.0)	190(100.0)	83(100.0)						
Age at first sexual intercourse (years)									
Mean Age (SD)	18.2(3.0)	18.2(3.0)	18.2(2.9)						
<15	8 (4.0)	6(3.9)	2(4.0)						
15-19	124(61.4)	92(60.5)	32(64.0)						
20-24	53(26.2)	40(26.3)	13(26.0)						
Not remember	17(8.4)	14(9.2)	3(6.0)						
Total	202(100.0)	152(100.0)	50(100.0)						
Number of Lifetime Sexual Partners									
Mean (SD)	3.4(2.4)	3.6(2.6)	2.9(1.9)						
1	46(22.8)	32(21.1)	14(28.0)						
2-3	88(43.6)	66(43.4)	22(44.0)						
<u><</u> 4	68(33.7)	54(35.5)	14(28.0)						
Total	202(100.0)	152(100.0)	50(100.0)						
Sexual intercourse within a week prior to Study									
Yes	98 (48.5)	67 (35.3)	31 (37.3)						
No	104 (51.5)	123 (64.7)	52 (62.7)						
Total	202 (100.0)	190 (100.0)	83(100.0)						
Take alcohol before the last sexual intercourse (n=98)									
Yes	72(73.8)	55(82.1)	17(54.8)						
No	26(26.2)	12 (17.9)	14(45.2)						
Total	98(100.0)	67(100.0)	31(100.0)						

Table 2: Sexual activities of respondents by gender



Multiple responses

Figure 1: Sexual risk taking behaviour practiced by respondents who had sex within a week before study

Sexual risk taking		Take	Do not	Adjusted	95%	p-value
behavio ur	Total	alcohol	take	OR	Confidence	
			alcohol		Interval	
	n (%)	n (%)	n (%)			
Anal sex	26(26.5)	23(88.5)	3(11.5)	8.464	2.919 - 24.53	0.0433
Group sex	9(9.2)	8(88.9)	1(11.1)	2.889	0.3795 - 21.99	0.2727
Heterosexual	98(100.0)	72 (73.5)	26 (26.5)	1.616	$0.648\;-4.007$	0.0000 *
One night stand	61(62.2)	47(77.0)	14(23.0)	1.212	0.8178 - 1.797	0.3045
Sex in exchange for gifts or money	32(32.7)	20(62.5)	12(37.5)	0.6019	0.3446 - 1.051	0.0867
Casual sex with someone met only once	35(35.7)	21(60.0)	14(40.0)	0.5417	0.32658986	0.0243 *
Non-usage of condom	47(48.0)	28(59.6)	19(40.4)	0.5322	0.3669 - 0.7718 -	0.0027 *
Oral sex(performed)	39(39.8)	23(59.0)	16(41.0)	0.5191	0.32978173	0.0082 *
Oral sex (Received)	42(42.6)	24(57.1)	18(42.9)	0.4815	0.3179 - 0.7293	0.0015 *

Table 3: Relationship between sexual risk taking behaviours and alcohol intake among respondents

* Pearson chi-square is significant at the 0.05 level (2-tailed)

Discussion

The socio-demographic characteristics of the respondents in our study are in line with risk factors of reproductive health challenges. Majority of the young people are males and more than two third were singles. This implies that the alcoholic beverage selling points are predominantly patronized by unmarried young persons. School enrolment among the young people in this study was good as majority had either primary, secondary or tertiary education. However, 16.8% were school drop outs. This condition can predispose young people to engage in crime and other social vices such as armed robbery, and prostitution which has been documented in some studies.¹⁷

In our study majority of the young people became sexually active during adolescence (mean age of first sexual debut was 18.2 ± 3.0 years). This finding is similar to the national average, but the gender differences in our study is at variance with the national values of 17.2

years for males and 21.7 years for female respectively.² On the other hand, the findings in our study is higher than the 11.7 years reported from a study conducted among secondary school students in Idoekiti, Nigeria.¹⁸ Even though the group in our study commenced sexual activity at an age when they could take informed decision about their lives, if they are not properly educated on the dangers associated with sexual activities, majority of them will come up with several complications in adulthood.

Limiting the number of sexual partners and practicing protected sex are crucial in the fight against the spread of sexually transmitted infections, including HIV. In our study, majority of the young people had multiple lifetime sexual partners. This was higher than the 33% report to have multiple sexual partners in studies conducted among young adults in an urban community in south-south Nigeria.¹⁹ The high sexual activity among the young people corroborates the finding in previous

studies worldwide.²⁰⁻²⁵ The result of this study further confirms the assertion that young people usually take advantage of freedom from direct parental supervision to engage in various social activities which usually make them to engage in sex early.²¹ Regarding the intake of alcohol, majority of young people in our study took alcohol and more males than females took alcohol. This is consistent with other studies where male involvement has been found to be higher.²²⁻²⁴ However, our finding is at variance with that from a study conducted in Italy where more females were found to take alcohol compared to the males.²⁵ Despite the gender differences, the male and female involvement in our study could be in line with the general belief that alcohol forms an integral part of most human cultures.^{6-8,23-25} The early drinking habit established in our study shows the likelihood of future alcohol dependence or abuse in adulthood if not controlled. The cumulative effect of the alcoholic intake may be the probable reason behind the multiple sexual relationship demonstrated in our study. Therefore, addressing these issues would assist in scaling down risky sexual practices, unsafe sexual behaviours and HIV infection through sexual intercourse.

In our study, even though young people became sexually active during adolescence, the use of condoms during sexual intercourse was low. The result of our finding is probably the reason why young adults have been reported to have contributed to high burden of sexually transmitted infections and unsafe abortions globally.¹¹ From the logistic regression analysis, young people who take alcohol have greater tendency of engaging in anal sex, sex in exchange for money, casual sex, non-use of condom and oral sex. The strong association between alcohol intake and risky sexual practice in this study is in support of reports by other authors that intake of alcohol is among major drivers of HIV infection in Benue state. ^{9,10}. Inadequacy or lack of sex and reproductive health education in schools and at home may be responsible for this. Targeted health education campaigns including increasing access to condoms should be intensified for youths.

Conclusion

Intake of alcohol before sexual intercourse among young people who patronize night clubs and alcohol beverage selling points in Makurdi, Benue State was high and that corroborate the practice of anal sex among them. It was concluded that policymakers working on HIV intervention should consider nightclubs and other drinking establishments catering for young people in order to reduce high risk sexual behaviour and mitigate the effects of disases transmitted through risky sexual behaviour among this population.

One of the major limitation of this study is the interviewer administered questionnaire used for data collection. Some sensitive questions might not have been responded to with the honesty that was desired. There is a tendency to under report risky behaviour. An exploratory component would have helped us to understand more about the context and bring up issues that were not considered. Application of focus group and key informant interviews should be considered in future studies on this subject matter among young adults. Another limitation is the certainty of the age. Young people in this study were regarded as those between 10-24 years old, but the age description was only based on what the respondents gave to the interviewers. However, some historic events in the country and school age history were used as checks to ascertain the age of the respondents.

Acknowledgement

We sincerely want to thank all the

participants who took part in the study.

Conflicts of Interest

There are no conflicts of interest.

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