# The Prevalence and Pattern of Use of Alcohol among Undergraduate Students in Jos Plateau State, Nigeria 

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How to cite this paper: Okafor, K.C., Bimba, J.S., Adekeye, O.A., Obateru, A.P. and Idoko, L.O. (2022) The Prevalence and Pattern of Use of Alcohol among Undergraduate Students in Jos Plateau State, Nigeria. Open Journal of Preventive Medicine, 12, 141-154.
https://doi.org/10.4236/ojpm.2022.128011
Received: July 10, 2022
Accepted: August 20, 2022
Published: August 23, 2022

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#### Abstract

Introduction: Alcohol abuse is a recognized phenomenon among university students in Nigeria and harms the education and performance of students. This may include disruption of interpersonal relationships, especially within the family, criminal behaviour, academic failure, vocational failure, and a lack of commensurate achievement. Methodology: A cross-sectional descriptive study aimed at assessing the Prevalence and Pattern of Use of Alcohol Among Undergraduate Students In Jos Plateau State, Nigeria. It involved 290 Undergraduates selected using the Multistage sampling method. Results: The prevalence of current use of alcohol was $33.7 \%$ while two-thirds were not taking alcohol. There was a statistically significant association between current use of alcohol and $\operatorname{sex}\left(\chi^{2}=12.168, \mathrm{p} \leq 0.001\right)$, where more males than females use alcohol. Most ( $44.4 \%$ ) undergraduates use alcohol weekly, $11.1 \%$ use it daily, and $14.3 \%$ Two times weekly. A majority (52.4\%) take it after lectures and $27.0 \%$ take whenever they like. There was a statistically significant association between alcohol use and the level/year of study ( $\chi^{2}=27.258, \mathrm{p} \leq 0.001$ ). More students in higher classes (5th year and 4th year) are taking alcohol when compared with new students and lower classes (1st year and 2nd year). A significant association was also found between alcohol use and respondent's Cumulative Grade Point Average-CGPA ( $\chi^{2}=22.809, \mathrm{p} \leq 0.001$ ), as the majority of students using alcohol had a low CGPA ( 1.1 to 2.0) when compared to those with higher. Conclusion: The University and government should collaborate with students to establish peer support groups and programs that discourage the use of alcohol during school hours and while studying.


## Keywords

Alcohol Use, Undergraduates, Students

## 1. Introduction

Alcohol use among students and young people is fast becoming a public health challenge. There is a growing concern about this trend and its consequences [1] [2]. Alcohol has been classified as a depressant alongside barbiturates, benzodiazepines, chloral hydrate and rohypnol [3]. More than 2.6 million young people aged 10 to 24 die each year in the world. These deaths are mostly due to preventable causes such as alcohol and substance abuse. Not less than $14 \%$ of adolescent girls and 18\% of boys aged 13-15 years in low- and middle-income countries are reported to have been taking alcoholic drinks. This problem is grimmer in some countries in the Western Pacific Region of the WHO as more than $50 \%$ of girls aged 10-19 and more than $80 \%$ of boys aged 10-19 had ever consumed alcohol. This precarious situation is also prevalent in Nigeria, as previous studies have revealed a high burden of substance abuse among students [4].

For some people, low-level alcohol consumption is associated with health benefits, mainly due to a reduction in risk for heart disease from middle age onwards. The lowest risk is associated with an average of one standard drink per day for men and less than one drink per day for women. However, excessive alcohol consumption is a risk factor for a wide range of health and social problems and is a major cause of premature illness and death. Acute intoxication with alcohol is associated with aggressive and violent behavior; increased risk of accidents and injury; Nausea and vomiting; hangovers (headaches, dehydration, nausea, etc.), a reduced sexual performance. At the same time, chronic excessive consumption can affect every part of the body and lead to long-term health problems. High-risk drinking is associated with high blood pressure and stroke; anxiety, depression and suicide; liver disease; digestive problems, ulcers and inflammation of the pancreas; blackouts and hallucinations; difficulty remembering things and solving problems; premature aging; impotence; permanent brain injury leading to memory loss, cognitive deficits and disorientation; impaired mobility as a result of osteoporosis, gout, and muscle and nerve damage; cancer of the mouth, throat, and breast. [5] Tolerance and dependence may develop after chronic excessive use of alcohol and dependent drinkers may suffer withdrawal symptoms if they reduce or stop their alcohol consumption. Severe alcohol withdrawal complicated by delirium tremens is a medical emergency. Withdrawal symptoms include tremor, sweating, anxiety, nausea, vomiting and diarrhoea, insomnia, headache, hallucinations, and convulsions [5] [6].

Alcohol abuse is a recognized phenomenon among university students in $\mathrm{Ni}-$ geria and has a negative impact on the education and performance of students [7]. This may include disruption of interpersonal relationships especially within the family, criminal behavior, academic failure, vocational failure, and a lack of commensurate achievement [8] [9].

Literature [9] [10] [11] [12] [13] reveals that certain factors have been associated with alcohol use among students and they include but are not limited to; substance availability, accessibility, poor mental health, high social class, unhealthy family background, perceived adult drug use, peer's use of substances,
poor academic achievement, desire to remain awake at night, conflicts with parents, emotional distress, low sense of social responsibility, its use in local films and videos and low level of religiosity [14]. All these factors are real and play a part in this fast-growing problem among young people. Students are particularly at risk because they have unchecked freedom; some have too much money, poor role models, peer pressure, and irrational ambition [15] [16]. Students experience independence and freedom during the university period from direct adult and family supervision, self-decision making, and intense academic pressures, as well as sharing accommodation and hostels with people they barely know. They also form new social groups and may be exposed to values different from their parental values [17]. These new values may motivate the youth to indulge in unhealthy behaviors such as smoking, alcohol, and illicit drug use. Undergraduate students make the transition from the restricted life monitored by parents to a more self-directed life influenced by the university environment and as such, the risk of substance use is increased in the university environment.

The tendency for an increase in antisocial tendencies and behavioral problems among undergraduate students in and outside the school makes it imperative to find out the prevalence, pattern, and factors affecting the use of alcohol among undergraduate students in Plateau State. This is with the view of suggesting a possible way of curbing and preventing substance abuse among this vulnerable but very significant group of people in our society.

## 2. Materials and Methods

Plateau state is one of the thirty-six (36) states in Nigeria located in the North Central Geopolitical Zone of the country. The State has Seventeen (17) Local Government Areas (LGAs) and covers an area of 26,899 square kilometer with a population of 3 million ( 2006 population census). Jos is the capital of Plateau State with a population of about 900,000 residents. There are government-owned institutions of higher learning in the state which include the University of Jos, Plateau State University Bokkos, Plateau State Polytechnic Barkin-Ladi, Federal College of Education Pankshin, and Federal College of Forestry Jos.

The study was done among undergraduate students at the University of Jos, Jos, Plateau State in November 2019. The University of Jos is a federal govern-ment-owned tertiary institution located in Jos; it has 12 faculties and 87 departments with about 21,374 students comprising both undergraduate and postgraduate students. The school offer courses in Law, Medical Sciences, Pharmaceutical Sciences, Natural Sciences, Social Sciences, Management Sciences, Education, Environmental Sciences as well as Arts \& Humanities. Other recently added faculties are Veterinary Medicine, Agriculture \& Engineering. These are in four (4) major campuses on Bauchi Road, Gangare, Lamingo \& Farin Gada (where the permanent site is situated) all in Jos.

### 2.1. Study Design

A cross-sectional descriptive study aimed at determining the prevalence and
pattern of Use of Alcohol Among Undergraduate Students in Jos Plateau State, Nigeria.

### 2.2. Sample Size Determination

A minimum sample size of 290 was obtained using the Kish formula [9] [18] [19]:

$$
n=Z^{2} p q / d^{2}
$$

where, $n=$ minimum sample size;
$z=$ standard normal deviant at $95 \%$ confident interval equivalent to 1.96 ;
$d=$ level of precision which is usually 0.05 ;
$p=78.0 \%$; the proportion of the population having the characteristic of interest obtained from a previous study [20].

$$
\begin{aligned}
& q=1-p \\
& n=\frac{1.96^{2} \times 0.78 \times 0.22}{0.05^{2}} \\
& n=\frac{3.8416 \times 0.78 \times 0.22}{0.0025}=263.7
\end{aligned}
$$

$$
n=263.7
$$

Allowing for $10 \%$ attrition and error in questionnaire administration, this brings the sample size to 290.1 and subsequently rounded up to 290 for ease of statistical analysis.

### 2.3. Sampling Technique

Sampling was done using the multistage sampling method.
Stage 1: Simple random sampling was used in this stage. The sampling frame was the list of 12 faculties, each given the number 1 to 12 . Two (2) faculties were selected using balloting. Of the 12 faculties, the faculty of Law and the faculty of social sciences were chosen. Obtaining the total number of students in each faculty, which was 1747 and 3373 for the faculty of Law and Social sciences respectively. The questionnaires were proportionally allocated to each faculty.

For Faculty of Law,
$\frac{1747}{5120} \times 290=99$ respondents
For Faculty of Social sciences
$\frac{3373}{5120} \times 290=191$ respondents
Stage 2: Stratified random sampling was used to group the students into 100L to 500 L .

Step 1: Proportional allocation to each class.
Faculty of Law,
100L; $\frac{392}{1747} \times 99=22$ respondents
200L: $\frac{349}{1747} \times 99=20$ respondents

300L: $\frac{341}{1747} \times 99=19$ respondents
400L: $\frac{336}{1747} \times 99=19$ respondents
500L: $\frac{329}{1747} \times 99=19$ respondents

## Faculty of Social sciences,

100L; $\frac{896}{3373} \times 191=51$ respondents
200L: $\frac{841}{3373} \times 191=48$ respondents
300L; $\frac{824}{3373} \times 191=47$ respondents
400L; $\frac{812}{3373} \times 191=45$ respondents
Tools for Data Collection included a structured, self-administered questionnaire used in this study. Questionnaires contained questions on the use of alcohol by respondents, awareness of various types of alcoholic products, Pattern of current use of alcohol by undergraduates, period of use, willingness to stop, Reason for alcohol Use, Location of first alcohol use, event at First Use of alcohol, Association between socio-demographic variables and current use of alcohol. Questionnaires were screened for completeness, coded, and entered the Statistical package for social sciences (IBM SPSS) version 20.0 software for analysis. Discrete data were presented as proportions (percentages) while continuous variable such as age was expressed as mean $\pm$ standard deviation. The data was analyzed using Statistical Package for Social Sciences (SPSS) and its management involved the use of tables and appropriate diagrams. Comparison and prevalence of alcohol among study participants were determined. Chi-square was used to determine association and test of significance with $\mathrm{p}<0.05$ being the level of precision.

Ethical clearance to conduct this research was sought from the Bingham University Teaching Hospital Research Ethics Committee. (Protocol Number NHREC/21/05/2005/00656). Written informed consent was obtained from each respondent before the administration of questionnaires and adequate information was provided to the respondents concerning 1) the identity of the researcher and the university; 2) the purpose of the research; 4) the nature of the questions, and 5) advice to make any complaint to the contact number of the investigator. Confidentiality and privacy were respected during data collection. To ensure confidentiality, the respondent's serial number rather than the name was used to identify each respondent.

Limitations/Constraints in this study were that findings from this study might not be generalized to the young population at large as the study involved only students in the University of Jos. A descriptive cross-sectional design was used, and it cannot establish trends and causality between alcohol use and potential
risk factors. The responses from respondents were based on self-report and depended on the truthfulness of the respondents. Recall bias could have occurred especially among respondents who have used several substances at various times.

## 3. Results

Table 1 shows Sixty-three (33.7\%) respondents currently use alcohol, and 124 (66.3\%) are not currently drinking alcohol.

Table 2 shows that most of the respondents 255 (87.9\%) were aware of Beer, 213 (73.4\%) Burukutu, 185 (63.8\%) Goskolo, 200 (69.0\%) Ogogoro.

Table 3 shows that seven (11.1\%) of students use alcohol daily, 28 (44.4\%) Use it weekly, 9 (14.3\%) Two times weekly, 6 (9.5\%) three times weekly, 5 (7.9\%) four times weekly, 3 (4.8\%) once a month, 2 (3.2\%) above once a month.

Table 1. Current Alcohol used by respondents, $\mathrm{n}=187$.

| Alcohol Use | Yes (\%) | No (\%) |
| :---: | :---: | :---: |
|  | $63(33.7)$ | $124(66.3)$ |

Table 2. Respondents awareness of various types of alcoholic products.

| Types of Alcoholic Products | Yes (\%) | No (\%) |
| :---: | :---: | :---: |
| Beer | $255(87.9)$ | $35(12.1)$ |
| Burukutu | $213(73.4)$ | $77(26.6)$ |
| Goskolo | $185(63.8)$ | $105(36.2)$ |
| Ogogoro | $200(69.0)$ | $90(31.0)$ |

**Burukutu, Goscolo, Ogogoro - Local drinks.

Table 3. Pattern of current use of Alcohol by undergraduates, $\mathrm{n}=63$.

| Variables | Frequency | Percent (\%) |
| :---: | :---: | :---: |
| Pattern of Use |  |  |
| Daily | 7 | 11.1 |
| Once weekly | 31 | 49.2 |
| Two times weekly | 9 | 14.3 |
| Three Times Weekly | 6 | 9.5 |
| Four times weekly | 5 | 7.9 |
| One a month | 3 | 4.8 |
| Above once a month | 2 | 3.2 |
| Period of use |  |  |
| Before Lecture Hours | 13 | 20.6 |
| After Lecture Hours | 33 | 52.4 |
| Anytime I like | 17 | 27.0 |

## Continued

| Willingness to stop alcohol use |  |  |
| :---: | :---: | :---: |
| Yes | 16 | 25.4 |
| No | 47 | 74.6 |
| Reason for Alcohol Use ${ }^{* *}$ (Multiple response) |  |  |
| Highness feeling | 52 | 82.5 |
| Peer Use | 45 | 71.4 |
| For Anxiety | 37 | 58.7 |
| For Fun | 61 | 96.8 |
| No reason | 14 | 22.2 |
| Location of first alcohol use |  |  |
| Cannot Remember | 6 | 9.5 |
| At home | 16 | 25.4 |
| At school | 41 | 65.1 |
| Pvent at First Use of Alcohol | 2 |  |
| Cannot Remember | 38 | 3.2 |
| Party | 12 | 60.3 |
| Meeting with friends | 7 | 19.0 |
| Meeting with family | 4 | 11.1 |
| Alone | 63 | 6.3 |
| Total | 100.0 |  |
|  |  |  |
|  |  |  |

Thirteen (20.6\%) take alcohol before Lecture hours, 33 (52.4\%) take it after Lecture hours, 17 (27.0\%) take it anytime they like.

Three quarters 47 (74.6\%) are unwilling to stop their current alcohol intake, while $16(25.4 \%)$ are willing to stop.

Almost all stated that fun 61 ( $96.8 \%$ ) was the reason they indulged in alcohol intake, 52 ( $82.5 \%$ ) took it for the feeling of highness, 45 ( $71.4 \%$ ) used alcohol because their friends indulged in it. 37 (58.7\%) stated they drank alcohol to reduce stress and tension.

Two third 41 (65.1\%) first took alcohol at school. 6 (9.5\%) Cannot Remember, a quarter 16 (25.4\%) first took alcohol home,

The majority 38 (60.3\%), had their first alcohol at a party, 2 (3.2\%) Cannot Remember, 12 (19.0\%), 7 (11.1\%), at Meeting with friends, 4 (6.3\%) Meeting with family, other were alone.

Table 4(a) shows factors significantly associated with current use of alcohol use among the respondents were $\operatorname{sex}\left(\chi^{2}=12.168, \mathrm{p} \leq 0.001\right)$, where more males 50 (28.6\%) than females 13 (11.3\%) use alcohol. Other variables were not statistically significant but, more students above 26 years use alcohol when compared to those 25 years and lower. More student 43 , (63.0\%) in the faculty of social sciences, use alcohol when compared to students in the faculty of law 20 (20.2\%).

Table 4. (a) Association between socio-demographic variables and current use of Alcohol, $\mathrm{n}=290$; (b) Association between socio-demographic variables and current use of Alcohol, $\mathrm{n}=290$; (c) Association between socio-demographic variables and current use of Alcohol, $\mathrm{n}=290$.
(a)

| Variable | Yes (\%) | No (\%) | Total (\%) | $\mathrm{X}^{2}$ | P-Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |  |
| Male | 50 (28.6) | 125 (71.4) | 175 (100.0) | $12.168^{\text {a }}$ | <0.001* |
| Female | 13 (11.3) | 102 (88.7) | 115 (100.0) |  |  |
| Age |  |  |  |  |  |
| $15-20$ | 10 (14.5) | 59 (85.5) | 69 (100.0) | $5.421^{\text {a }}$ | 0.143 |
| 21-25 | 35 (21.6) | 127 (78.4) | 162 (100.0) |  |  |
| 26-30 | 13 (28.3) | 13 (71.7) | 46 (100.0) |  |  |
| >30 | 5 (38.5) | 8 (61.5) | 13 (100.0) |  |  |
| Religion |  |  |  |  |  |
| Christianity | 61 (22.3) | 213 (77.7) | 274 (100.0) | $0.847^{\text {a }}$ | 0.357 |
| Islam | 2 (12.5) | 14 (87.5) | 16 (100.0) |  |  |
| Faculty |  |  |  |  |  |
| Law | 20 (20.2) | 79 (79.8) | 99 (100.0) | $0.205^{\text {a }}$ | 0.651 |
| Social sciences | 43 (63.0) | 148 (77.5) | 191 (100.0) |  |  |
| Type Of Family |  |  |  |  |  |
| Monogamous | 56 (22.6) | 192 (77.4) | 248 (100.0) | $1.882^{\text {a }}$ | 0.390 |
| Polygamous | 5 (13.9) | 31 (86.1) | 36 (100.0) |  |  |
| Divorced | 2 (33.3) | 4 (66.7) | 6 (100.0) |  |  |
| Total | 63 (33.7) | 227 (67.3) | 290 (100.0) |  |  |

(b)

| Variable | Yes (\%) | No (\%) | Total (\%) | X $^{2}$ | P-Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mother's Level of Education |  |  |  |  |  |
| None | $6(20.7)$ | $23(79.3)$ | $29(100.0)$ | $0.979^{\text {a }}$ | 0.806 |
| Primary | $8(21.1)$ | $30(78.9)$ | $38(100.0)$ |  |  |
| Secondary | $17(26.2)$ | $48(73.8)$ | $65(100.0)$ |  |  |
| Tertiary | $32(20.3)$ | $126(79.7)$ | $158(100.0)$ |  |  |

Father's Level of Education

| None | $4(33.3)$ | $8(66.7)$ | $12(100.0)$ | $1.985^{\mathrm{a}}$ | 0576 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Primary | $5(15.6)$ | $27(84.4)$ | $32(100.0)$ |  |  |
| Secondary | $12(25.0)$ | $36(75.0)$ | $48(100.0)$ |  |  |
| Tertiary | $42(21.2)$ | $156(78.8)$ | $198(100.0)$ |  |  |
| Father's Occupation |  |  |  |  |  |
| None | $2(14.3)$ | $12(85.7)$ | $14(100.0)$ | $1.225^{\mathrm{a}}$ | 0.976 |

## Continued

| Civil Servant | 29 (20.7) | 111 (79.3) | 140 (100.0) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Business | 10 (21.7) | 36 (78.3) | 46 (100.0) |  |  |
| Farming | 7 (25.0) | 21 (75.0) | 28 (100.0) |  |  |
| Professionals | 10 (25.6) | 29 (74.4) | 39 (100.0) |  |  |
| Retired | 3 (25.0) | 9 (75.0) | 12 (100.0) |  |  |
| Others | 2 (18.2) | 9 (81.8) | 11 (100.0) |  |  |
| Mother's Occupation |  |  |  |  |  |
| None | 6 (26.1) | 17 (73.9) | 23 (100.0) | $3.205^{\text {a }}$ | 0.783 |
| Civil Servant | 18 (18.0) | 82 (82.0) | 100 (100.0) |  |  |
| Business | 21 (22.1) | 74 (77.9) | 95 (100.0) |  |  |
| Farming | 6 (23.1) | 20 (76.9) | 26 (100.0) |  |  |
| Professionals | 7 (25.0) | 21 (75.0) | 28 (100.0) |  |  |
| Retired | 3 (42.9) | 4 (57.1) | 7 (100.0) |  |  |
| Others | 2 (18.2) | 9 (81.8) | 11 (100.0) |  |  |
| Total | 63 (33.7) | 227 (67.3) | 290 (100.0) |  |  |
|  |  | (c) |  |  |  |
| Variable | Yes (\%) | No (\%) | Total (\%) | $\mathrm{X}^{2}$ | P-Value |
| Place Of Residence |  |  |  |  |  |
| Hostel | 17 (18.5) | 75 (81.5) | 92 (100.0) | $1.811^{\text {a }}$ | 0.404 |
| Off Campus | 30 (25.6) | 87 (74.4) | 117 (100.0) |  |  |
| Living With Family | 16 (19.8) | 65 (80.2) | 81 (100.0) |  |  |
| CGPA |  |  |  |  |  |
| 1.1 to 2.0 | 8 (80.0) | 2 (20.0) | 10 (100) | $22.809^{\text {a }}$ | <0.001* |
| 2.1 to 3.0 | 2 (24.7) | 70 (75.3) | 93 (100) |  |  |
| 3.1 to 4.0 | 25 (17.0) | 122 (83.0) | 147 (100) |  |  |
| 4.1 to 5.0 | 7 (17.5) | 33 (82.5) | 40 (100) |  |  |
| Class |  |  |  |  |  |
| 100L | 5 (6.8) | 68 (93.2) | 73 (100.0) | $27.258^{\text {a }}$ | <0.001* |
| 200L | 14 (20.6) | 54 (79.4) | 68 (100.0) |  |  |
| 300L | 11 (16.7) | 55 (83.3) | 66 (100.0) |  |  |
| 400L | 24 (37.5) | 40 (62.5) | 64 (100.0) |  |  |
| 500L | 9 (47.4) | 10 (52.6) | 19 (100.0) |  |  |
| Total | 63 (33.7) | 227 (67.3) | 290 (100.0) |  |  |

Table 4(b) showed that other factors were not significantly associated with the current use of alcohol use among the respondents. More students whose mothers 57 ( $90.5 \%$ ) and fathers 59 ( $93.7 \%$ ) were educated use alcohol compared to those whose parents did not get any education $\{6$ (9.5\%) and 4 (6.3\%) \}. Simi-
larly, more students whose mothers 57 (90.5\%) and fathers 61 (96.8\%) were employed use alcohol compared to those whose parents do not have any jobs. \{6 (9.5\%) and 2 (3.2\%)\}.

Table 4(c) shows factors significantly associated with current use of alcohol use among the respondents Class ( $\chi^{2}=27.258, \mathrm{p} \leq 0.001$ ) and Cumulative Grade Point Average (CGPA) $\left(\chi^{2}=22.809, \mathrm{p} \leq 0.001\right)$. More students in 500L, 9 (47.4\%) and 400L 24 (37.5\%) are taking alcohol when compared with 100L 5 (6.8\%) and 300L 14 ( $16.7 \%$ ) and 200L (20.6\%). The majority of students using alcohol $(80.0 \%)$ had a low CGPA (1.1 to 2.0 ) when compared to those with higher CGPA (17.5\%).

## 4. Discussion

Awareness of local alcoholic drinks is high as most of the respondents 255 (87.9\%) were aware of Beer, 213 (73.4\%) Burukutu, 185 (63.8\%) Goskolo, 200 (69.0\%) Ogogoro. There was a high level of awareness of different types of alcoholic beverages. Burukutu is an alcoholic beverage, brewed from the grains of Guinea corn (Sorghum bicolor) and millet (Pennisetum glaucum). It is commonly consumed in Tropical African countries such as Nigeria, Togo, Kenya, Ethiopia, and Burundi as one of the major traditional and local alcoholic drinks. [21] [22] [23] Goskolo is a local gin that has emerged on the Plateau, with a dangerous effect as many youths are addicted to it in the desire to be 'high' or transmute into a higher realm. [24] Ogogoro is a form of local gin distilled from fermented palm wine. It carries both cultural and economic significance in virtually all parts of the country and is an essential part of many religious and social ceremonies [25].

The prevalence of current use of alcohol was $33.7 \%$, while two-thirds were not taking alcohol and this is in keeping with a study done among undergraduates of the University of Ilorin and Nasarawa State University which reported a current use prevalence of $31.1 \%$ [13]. This is higher than that obtained in a study done in 2018 on the drug factors influencing its use among undergraduate students of Ahmadu Bello University where a prevalence of $16.8 \%$ was obtained. However lower than the prevalence of $78.4 \%$ reported among university students in south eastern [10], $66 \%$ reported in a study among university students in south southern Nigeria [26], and 79.1\% prevalence of alcohol use among Nigeria students at universities in the United States of America [27]. Socio-cultural variation and religious belief may account for the differences between the prevalence of alcohol use among Nigeria states and other parts of the world [28].

As shown in this study, the use of alcohol is a little lower among Muslims compared to Christians. Islam forbids alcohol use, and the enforcement of non-use of alcohol among Muslims is more pronounced in the northern region compared to the southern part of Nigeria.

There was a statistically significant association between current use of alcohol and sex $\left(\chi^{2}=12.168, \mathrm{p} \leq 0.001\right)$, where more males than females use alcohol. This
finding is expected as alcohol use is commonly more prevalent among males than females. Usually, these females would indulge in alcohol during dates and meetings withier male counterparts. This finding helps plan interventions to focus on young men during health education and peer education to curb alcohol use.

Even though other factors were not statistically significantly associated with the current use of alcohol among undergraduate students, it is worthy of note that there was a relationship between students using alcohol and the employment/education of parents. More students whose parents were educated had their children use alcohol compared to those whose parents did not get any education. Similarly, more students whose parents were employed were using alcohol compared to those whose parents did not have any jobs. This finding has some Public Health significance as it seems the students whose parents were educated and employed could afford alcoholic drinks and had to access to these. It could be suggested that they may have had earlier exposure to alcohol through their parents who could pay for and store alcohol at home.

It is worthy of note to state that there was a statistically significant association between alcohol use and the level/year of study ( $\chi^{2}=27.258, \mathrm{p} \leq 0.001$ ). More students in higher classes ( $5^{\text {th }}$ year and $4^{\text {th }}$ year) are taking alcohol when compared with new students and lower classes ( $1^{\text {st }}$ year and 2nd year). This may be related to the age factor as more students above 26 years of age use alcohol when compared to those 25 years and lower. This association was not statistically significant but, shows that older adults tend to freely indulge in alcohol use than much younger people. This may be because these undergraduates feel they are grown and mature to live their lives and form habits. It correlates with a higher level in school and older age.

Another finding that will require further evaluation is the fact that more students in the faculty of social sciences use alcohol when compared to students in the faculty of law. This finding, however, was not significant but may not be unconnected to the level of socialization, freedom and interaction in the Faculty of Social Sciences when compared to Law. It is possible that Law students face more stringent rules and control in terms of dressing, studies, presentations, and professional acculturations when compared to Social Science students.

A significant association was also found between alcohol use and respondents' Cumulative Grade Point Average-CGPA ( $\chi^{2}=22.809, \mathrm{p} \leq 0.001$ ) as most students using alcohol had a low CGPA (1.1 to 2.0) when compared to those with higher. This is a clear pointer to the negative effects of alcohol on students' academic performance and their ability to benefit from Tertiary education. Most University rules stipulate that student with such low CGPA may be asked to withdraw if no improvements are observed. The limitation of this study was that responses from respondents were based on self-report and depended on the truthfulness of the respondents. Recall bias could have occurred especially among respondents who have used alcohol at various times. This was managed by reassuring the participants that their responses were confidential.

## 5. Conclusions

The prevalence of current use of alcohol was $33.7 \%$ while two-thirds were not taking alcohol. There was a statistically significant association between current use of alcohol and sex $\left(\chi^{2}=12.168, \mathrm{p} \leq 0.001\right)$ where more males than females use alcohol. Most (44.4\%) undergraduates use alcohol weekly, $11.1 \%$ use it daily, and $14.3 \%$ two times weekly. A majority (52.4\%) take it after lectures and $27.0 \%$ take whenever they like.

There was a statistically significant association between alcohol use and the level/year of study ( $\chi^{2}=27.258, \mathrm{p} \leq 0.001$ ). More students in higher classes ( $5^{\text {th }}$ year and $4^{\text {th }}$ year) are taking alcohol when compared with new students and lower classes ( $1^{\text {st }}$ year and 2nd year). A significant association was also found between alcohol use and respondents' Cumulative Grade Point Average-CGPA ( $\chi^{2}=22.809, \mathrm{p} \leq 0.001$ ), as the majority of students using alcohol had a low CGPA (1.1 to 2.0) when compared to those with higher.

## Recommendations

The University and Government should make efforts to engage the students in campaigns and health education on the problems of alcohol use while in school. Males and students in $1^{\text {st }}$ and $2^{\text {nd }}$ years should be targeted specially and made to form peer support and education team to help disseminate health information. This will ensure they don adopt the trend in higher classes. The findings from this study and other local studies show the need for a comprehensive alcohol demand-reduction program in universities. Policies that will target reducing students' access to alcohol like restricting the establishment of alcohol outlets in and around university premises, and limiting operational hours of these sales outlets.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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