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Alcohol Use Disorder among University Students in Cameroon and Its Related Harms

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ABSTRACT

Purpose: Underage drinking, particularly heavy episodic bouts of underage drinking and the related consequences is a major social issue plaguing college campuses worldwide. Uncontrolled drinking behavior among college and university students has resulted in the occurrence of fatalities, assaults, unintentional serious injuries road accidents, crime, unprotected sexual activity, and poor school performance. The purpose of this study was to estimate the prevalence of alcohol dependence among Cameroonian university students and to identify the related factors.

Design: A cross-sectional survey was conducted with 600 randomly selected university students in Cameroon.

Setting: The survey assessed students' level of drinking using the 10-item Alcohol Use Disorder Identification Test, a screening test for harmful drinking. Data were collected online and students were asked to respond to the survey via email.

Results: Six hundred students participated in the survey. Among them, 261,(43.6%) were women and 337 (56%) were men and the majority (52.7%) lived with their parents.

The results demonstrated a statistically positive correlation between reason to drink, drinking demands situations, and the Alcohol Use Disorder Identification Test, proving the alternative hypothesis to be true in its form. There was also a strong statistically significant direct relationship between drinking demand and perceived drinking benefits.

Keywords: Alcohol use, harm, schools, policies, prevalence

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Introduction

Uncontrolled episodic drinking has been widely adduced as a public health concern among adolescence and is estimated to have caused about 3 million deaths (5.3% of all deaths) globally^{1,2}. Despite, a decrease in current drinkers (i.e., individuals who drank alcohol in the past 30 days), the prevalence rate is higher in most developed countries than developing countries. According to the global school-based students' health survey, students in Europe, and the West Pacific drank more alcohol in the past 30 days (30% to 70%) compared with students in African countries (10%-30%)³.

Some studies have indicated that students who drink regularly face both social and mental health consequences. They are likely to experience psychological and academic problems⁴. For example, in a study carried out in Australia, it was found that high levels of alcohol consumption was strongly associated with poor academic performance and mental health among university students⁵. Similarly, another study revealed that alcohol consumption may lead to more negative than positive consequences⁶. It has been found that students who drink excessively have a high propensity toward related health risks such as depression,⁷⁻¹⁰ stress¹¹, and anxiety than their counterparts, and non-student peers¹². Evidence also that, drinking raises the risk of diseases such as cancer¹³. The more alcohol students drink, the higher the risk of colorectal, pancreatic and liver cancers¹⁴⁻¹⁶. Excessive drinking may also lead to harm and injuries. In most of the studies, it was found that male students are at greater risk of drinking and driving compared with female students¹⁷⁻²¹. For example, in New Zealand it was found that the risk of drunk driving was 11% among male undergraduate students and 9% among their female counterparts²².

Most countries regard school as a reliable place where preemptive measures can be taken to reduce alcohol-related harms or injuries²³. Universities and colleges that have adopted policies on alcohol are reported to have low alcohol-related harms²⁴⁻²⁵. A survey administ-

ered among students in 2001 and 2003, by the Harvard School of Public Health College, also produced similar findings. This study also revealed that students who were exposed to educational materials, lectures, meetings, or workshops, a special course on alcohol, experienced less harms²⁶. However, some studies have found educational material to be ineffective in reducing alcohol harms by students²⁷. This may be due to the fact that studies that have examined outcomes related to educational material have focused more on abstinence than on harm minimization²⁸ and the difficulties faced by students in understanding the material²⁹.

Alcohol plays a central role in students' lives in most countries, and this is particularly true of Cameroon³⁰. According to the World Health Organization, in Cameroon, 22.6% of females and males aged 15 years or more consume alcohol. This indicates that before students enroll in universities, they are already accustomed to drinking alcohol³¹. Similar to other developing countries, in Cameroon, students are generally aware of the risk of alcohol consumption; their reason for drinking alcohol include "fun, pleasure, and relaxation"; "wanting to facilitate and or fortify their social relationships"; "coping with stress, and boredom"; and "temporary escape from troubling issues"³². Evidence suggests that excessive alcohol consumption by Cameroonian college and university students has a negative influence on their behavior; these students are likely to experience poor academic performance; missed tests and examinations; sexual assault; and poor health such as nausea, hurt, injury, vomiting, and memory loss³³. This study aimed to evaluate the prevalence of alcohol dependence among Cameroonian university students and to identify the associated factors.

Methodology

Materials and methods

All students attending state universities in Cameroon were invited to participate in this study. An anonymous online survey was administered to the students from October 16 to

January 28, 2019. A representative sample of 600 respondents aged 18 years or more from undergraduate and graduate academic levels was used. Of the 600 respondents, 261 (43.6%) were men and 337 (56.4%) were women. Students aged between 21 and 25 years made up the largest group (303; 50.7%), followed by students aged between 18 and 20 years (254; 41.0%), and students aged 26 years or more (50; 8.3%).

The survey included items on participants' alcohol consumption habits, assessing their harmful drinking using the 10 item Alcohol Use Disorder Identification Test (AUDIT), a screening test for harmful drinking. The at-risk subsample consisted of respondents with a score of 8 or more.

Results

Prevalence of Alcohol Use

Table 1 presents the characteristics of the Cameroonian university students. The study group comprised of 600 college and university students, 261 (43.6%) were women and 337 (56%) were men. The majority of the students (52.7%) lived with their parents.

The age of onset of alcohol use was as early as 9 (03), for a small percentage of the respondents, and there was a sudden increase in alcohol use (34%) during adulthood (i.e. 19 years or more). With respect to alcohol use within 30 days, a large number of the respondents indicated that they had consumed alcohol 3 to 5 times in an event; with males consuming 6 to 7 (25.1%) drinks, which was slightly higher than females (17.1%).

With regard to alcohol policy perception, a greater proportion of the respondents (48.1%) indicated that they were aware that alcohol was not allowed to be consumed on campus by either students or staff. However, about 23.4% of students had engaged in binge drinking.

According to Bosco, Aguinis, Singh, Field, and Pierce (2015), "for the behavioral sciences, correlation coefficients of .10, .30, and .50, irrespective of sign, are by convention, interpreted as small, medium, and large

coefficients, respectively" (p. 432). In order to analyze the relationship between extra activity, alcohol education, opinion on the school alcohol policy (SAP), alcohol benefits and harms, perception of alcohol use, alcohol abstinence belief, alcohol and driving, and the AUDIT, the Pearson's product moment correlation coefficient was used.

School life alcohol consumption ($r = .189, p < .01$), was most strongly related to drinking benefit, drinking harms, discipline from school, opinion on and AUDIT score, but there was also a negative correlation with opinion on (SAP) School Alcohol Policy. School information was most strongly related to alcohol information. There was also a negative correlation with opinion on the (SAP). Drinking demand was most strongly related to drinking benefit. There was also a small negative correlation with discipline from school. Drinking situation was most strongly related with opinion on drinking and driving. Opinion on drinking and driving was most strongly related to perception of alcohol use ($r = .576, p < .01$), and discipline from school ($r = .500, p < .01$). These findings suggest that these variables play an important role in AUDIT score (Table 2).

Table 3 shows the correlation between school information and school education to be the highest. Reason to drink and opinion on SAP was high with AUDIT being the highest ($r = .535, p < .01$). Drinking situation and victimization from drunken persons was strongly related. Opinion on drunken driving was the highest with victimization from drunken persons ($r = .658, p < .01$), discipline from school ($r = .497, p < .01$), and Audit ($r = .411, p < .01$). School life alcohol consumption was the highest with AUDIT score, victimized drunken persons, and drinking benefits.

These findings suggest that the more students are provided with information on school policy and the more alcohol education is taught, the less the reason to drink. School discipline and alcohol education are major factors in a student' alcohol drinking behavior, both on campus and off campus.

Table 1 Demographic Characteristic of study group

Variables	Frequency	%
Gender		
Male	260	43.6
Female	337	56.4
Age		
18-20	245	41.0
21-25	303	50.7
≥26	50	8.3
School policy alcohol use on campus		
Staff and students prohibited	250	41.8
Prohibited to all students regardless of age	12	0.2
Underage 19 years prohibited	41	6.9
Allowed above 19 years age	54	9.0
No school drinking policy	43	7.2
No idea about the school policy	198	33.1
Typical Heaviest Consumption		
4 drinks	59	9.9
5 drinks	37	6.2
6 drinks	50	8.4
7 drinks	59	9.9
8 drinks	39	6.5
9 drinks	30	5.0
≥10 drinks	158	26.4
Not applicable	166	27.7
Duration to consume your drinks		
1 hour or less	34	5.7
2 hours	140	23.4
3 hours	151	25.3
4 hours	75	12.5
5 hours	29	4.8
≥6 hours	15	2.5
Not Applicable	154	25.8
Occasions Had a Drink in the Last 30 Days		
1-2 times	159	26.6
3-5 times	167	27.9
6-9 times	97	16.2
10-19 times	58	9.7
20-39 times	9	1.5
40 times	1	0.2
None	107	17.9
Typical consumption male students		
1-2 drinks	34	5.7
3-4 drinks	112	18.7
5-6 drinks	150	25.1
7-8 drinks	150	25.1
≥9 drinks	109	18.2
None	43	7.2
Typical consumption female students		
1-3 drinks	155	25.9
4-5 drinks	215	36.0
6-7 drinks	103	17.2
8-9 drinks	22	3.7
≥10 drinks	53	8.9
None	50	8.3
Started drinking regularly		
9 years old	2	0.3
10-12 years old	5	0.8
13-15 years old	6	1.0
16-18 years old	39	6.5
≥ 19years old	204	34.1
Never	342	57.2
College accommodation		
Dormitory	163	27.3
Parent's house	315	52.7
Other accommodation	120	20.0

Table 2 Correlation Matrix of Drinking Demand, Reasons to Drink, Extra - curricular Activities, Perception of Alcohol Benefits and Harms, and Alcohol Dependence (Total)

Variables	School Information	Reason To Drink	Drinking Demand	Drinking Situation	Opinion Drunk Driving	Alcohol Abstinence Belief	School Life Alcohol
Extra Activity	.119**	.048	.055	.073	.144**	.065	.189**
Alcohol Education	.573**	.045	.047	.050	.066	.043	.035
Opinion On SAP	.159**	-.272**	.019	-.007	-.024	.040	-.209**
Drinking Benefit	.022	.385**	.134**	.048	.092*	.068	.293**
Drinking Harms	.077	.279**	.164**	.195**	.402**	-.005	.290**
Discipline From School	.002	.053	-.054	.050	.500**	.040	.230**
Victimized Drunken Person	.050	.176**	.166**	.205**	.576**	.069	.357**
AUDIT	.019	.457**	.136**	.078	.351**	.024	.441**

* $p < .05$, ** $p < .01$, SAP: School Alcohol Policy**Table 3 Correlation Matrix of Extra Activity, Alcohol Education, Opinion On SAP, Alcohol Benefits and Harms, Perception of Alcohol Use, Alcohol Abstinence, Alcohol and Driving, School Life Alcohol Consumption and AUDIT (Males)**

Variables	School Information	Reason To Drink	Drinking Demand	Drinking Situation	Opinion Drunk Driving	Alcohol Abstinence Belief	School life Alcohol
Extra Activity	.081	.192**	.203**	.028	.212**	.022	.238**
Alcohol Education	.548**	.085	.080	.177**	.118	.080	.015
Opinion On SAP	.104	-.170	.007	-.020	-.057	.045	-.218**
Drinking Benefit	.046	.355**	.217**	.092	.135*	.063	.273**
Drinking Harms	.135*	.198**	.135*	.182**	.357**	-.052	.337**
Discipline From School	.065	.079	-.062	.011	.497**	-.054	.298**
Victimized Drunken Person	.099	.162**	.173**	.144**	.658**	.063	.372**
AUDIT	.042	.351**	.104	.098	.411**	-.015	.451**

* $p < .05$, ** $p < .001$, SAP: School Alcohol Policy**Table 4 Correlation Matrix of Extra Activity, Alcohol Education, Opinion On SAP Alcohol Benefits and Harms, Perception of Alcohol Use, Alcohol Abstinence Belief, Alcohol and Driving, School Life Alcohol Consumption and AUDIT (Females)**

Variables	School information	Reason To Drink	Drinking Demand	Drinking Situation	Opinion Drunk Driving	Alcohol Abstinence Belief	School Life Alcohol
Extra Activity	.147**	-.075	-.083	.097	.064	.098	.132*
Alcohol Education	.596**	.018	.024	-.055	.017	.015	.060
Opinion On SAP	.207**	-.352**	.035	.025	.021	.037	-.193**
Drinking Benefit	-.002	.411**	.045	-.017	.029	.073	.311**
Drinking Harms	.030	.343**	.190**	.212**	.463**	.032	.246**
Discipline From School	-.040	.039	-.047	.047	.537**	.103	.185**
Victimized Drunken Person	-.009	.183**	.149**	.250**	.443**	.075	.324**
AUDIT	-.004	.535**	.155**	.028	.286**	.053	.427**

* $p < .05$, ** $p < .001$, SAP: School Alcohol Policy

As shown in table 4, the correlation between school information and school education was the highest. Drinking situation and victimized drunk persons were strongly related. Opinion on drunken driving was the highest with discipline from school ($r = .537, p < .01$), drinking harms ($r = .463, p < .01$) and victimized drunken persons ($r = .443, p < .01$). School life alcohol consumption was the highest with AUDIT score, victimized from drunken persons, and drinking benefits. These findings suggest that the more school information is given and alcohol education is taught, the less the reason to drink. School discipline and alcohol education play a big role in students drinking alcohol in school and outside school.

Discussion

The findings of this study suggest that the above-described variables are strongly linked AUDIT score. Thus, the level of excessive alcohol consumption by students at most of the universities in Cameroon is extremely high. The findings are in line with previous research, indicating that youth are more inclined to "problem" drinking³⁴.

The study also reveals that poor implementation of alcohol policies predicts students' daily drinking. Most Cameroonian university students are aware of the current policies that prohibit alcohol use on campus. Despite, their knowledge of restrictive university alcohol policies, and the dangerous consequences, they continue to engage in risky behavior such as drunk driving. This demonstrates that most students in Cameroon not only violate these policies, but also minimize the harm or injury that may be caused by excessive alcohol consumption. This is consistent with a study that showed that students' perception of a lax in the enforcement of alcohol policy predicts an increase in self-reported drinking³⁵, and a ban on alcohol may lead to unintended consequences³⁶.

The findings of this study indicate that students are exposed and sufficiently equipped with alcohol education materials; however, the study also revealed substantial evidence of how the potential value of such information is ignored by

students' continuous excessive alcohol consumption. Most of the education received does not focus on individual alcohol behavior. Students use alcohol in a variety of settings, such as school parties, sports and cultural events either individually, or influenced by peers³⁶⁻³⁷. Their alcohol use is not solely influenced by knowledge, and, as indicated by the theory of planned behavior (TPB) that behavior is also influenced by attitude and intention³⁸.

On the other hand, the findings of this study did not support the view that harsh sanctions norms for both men and women predict less drinking. Though students are aware of the benefits of the rules, because they consider themselves to be adults. This is consistent with the suggestion that students view drinking as normal behavior and a way of identifying with their peers³⁹.

Study Limitations

This study had one limitation. It did not include all university students in Cameroon. Alcohol dependence among students at private universities was not examined, because most of the respondents came from state universities.

However, this is the first study on university students alcohol dependence conducted in Cameroon, and the findings can serve as a basis for the development of government policy aimed at preventing alcohol use disorder among this population.

Conclusion

There was a statistically positive correlation between reason to drink, drinking demand situations and AUDIT score, proving there was also a strong statistically significant direct relationship between drinking demand and perceived drinking benefits.

Further studies are needed to evaluate more possible factors that predispose Cameroonian students to alcohol dependence in order for health practitioners to develop more interventions that promote lifestyle modification.

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