Prevalence of and Factors Associated with Alcohol Use Disorder among Medical Students at Kampala International University Western Campus, Bushenyi District South Western Uganda.

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ABSTRACT

The study determined factors associated with alcohol use disorder among medical students at Kampala International University-Western Campus, Ishaka, Bushenyi District. The study employed a quantitative cross-sectional survey, where questionnaires were administered to a sample of 320 medical students where medical students in all academic years and medical courses were represented. Cluster sampling techniques were employed in this research with each class of medical students being regarded as a primary sampling unit. Findings found out that; the prevalence of alcohol use disorder among medical students at Kampala International University-Western Campus indicated that; more agreed to consume alcohol like spirits, beer, wine and local brews. Few started drinking before joining campus, and more started drinking after joining Campus and had spent 1-2 years up to over 3 years consuming alcohol. These were inspired by family members, friends and social gatherings at home as well as social gatherings at the university. These drank daily, weekly, twice a week, thrice a week, and once a month, though many lied about the amount of alcohol they took on a daily basis. More felt angry when some complained of their drinking, though they also felt like cutting down their alcohol intake. The effects of drinking alcohol made them lose valuable items, experienced excessive vomiting, alcohol led to stomach pains/upset, led to accidents and put them into debt. It also led to petty theft, harmed their friends, engaged in unprotected sex, made them lose classes, made them get lower grades and led to injuries.

Keywords: Alcohol use disorder, medical students, Excessive vomiting, Stomach pains/upset, Alcohol misuse and abuse.

INTRODUCTION

Alcohol, also called ethanol or ethyl alcohol is a psychoactive substance with dependence-producing properties [1]. It can also be defined as a colourless volatile flammable liquid synthesized or obtained by fermentation of sugars and starches and widely used, either in its pure form or denatured as a solvent and used in drugs, cleaning solutions, explosives, and intoxicating beverages. (Alcohol - Definition of Alcohol by the Free Dictionary.) It is one of the oldest and most common recreational substances, causing the characteristic effects of alcohol intoxication ("drunkenness"). It also produces happiness and euphoria, decreased anxiety, increased sociability, sedation, impairment of cognitive, memory, motor, and sensory function, and generalized depression of central nervous system function [2]. For a typical adult, consuming 5 or more drinks for males or 4 or more drinks for females was characterized by a blood alcohol concentration (BAC) of 0.08 gram-per cent or above [3]. Binge drinking is recognized as the most common cause of alcohol intoxication which is characterized by the effect of acute consumption of alcohol on different physiologic processes in the body. Alcohol intoxication can also happen following acute intake of light or moderate levels of alcohol, with its main feature being on the central nervous system [4].

The signs of alcohol intoxication can vary from person to person. They tend to be observable and obvious. Someone who is intoxicated may not necessarily display every sign and symptom. However, slurred speech, lack of coordination, unsteady gait, nystagmus, and impaired attention or memory can occur. In severe intoxication, which is characterized by a BAC of 0.08 or more, mental confusion and stupor, difficulty remaining conscious, vomiting, seizures, slowed or irregular breathing, clammy skin or paleness, slow heart rate, loss of gag reflex, unresponsiveness, coma and low body temperatures indicated by chills or shivers can guide to the diagnosis of alcohol intoxication [5]. With repeated alcohol exposure, an interaction between neurobiological mechanisms and behavioural aspects occurs. This leads to a lower effect of alcohol on an individual, a term referred to as Alcohol tolerance. Alcohol tolerance is a measure for inclusion in the key criteria for the diagnosis of Alcohol use disorder [6]. The reduced sensitivity to alcohol is an important component of alcohol abuse, and addiction which results in Alcohol Use Disorder [7].

Alcohol use disorder (AUD) is a medical condition characterized by an impaired ability to stop or control alcohol use despite adverse social, occupational, or health consequences. It's a spectrum of alcohol abuse, alcohol is categorized into mild, moderate, or severe [7].

The average per capita alcohol consumption varies widely across the world. The global average consumption was 6.18 litres per person in the latest year available, which equals 53 bottles of wine per person older than 15 years or around 1 litre of wine per week. Europe has the highest alcohol intake worldwide at around 15 litres per person per year which is equal to around 2 bottles of wine per person per week [8]. In Africa, alcohol consumption is particularly low in North Africa and the Middle East. There is no data about the level of alcohol use in sub-Saharan Africa. However, in East Africa, by 2014, 23.7 litres of pure alcohol were consumed per capita by drinkers annually in Uganda. Rwanda and Burundi followed each registering 22.0 liters per capita per year, followed by Kenya with a registered 18.9 liters while Tanzania consumed only 18.4 liters (Uganda Leads East Africa in Alcohol Consumption - The East African, 2014.). The prevalence of alcohol use is higher among university students compared to non-university-going youth [9]. There is no data about the prevalence of and factors associated with alcohol use disorder among medical students at Kampala International University-Western Campus. This study will be both a quantitative and qualitative cross-sectional survey, using the questionnaire method specifically the closed and structured questionnaire. The cluster and simple random sampling method will be used to select the participants. The research is aimed at determining the prevalence of and factors associated with alcohol use disorder among medical students at Kampala International University Western Campus. There is recognizable evidence that Alcohol prevention programs in Uganda are few and the restricting of advertising alcohol beverages is a challenge. The epidemiological shape of alcohol use is a problem hence to examine the factors associated with alcohol use disorder is also a difficult and a complex-burden. This, if possible would have prevented or controlled alcohol misuse, especially among medical students. Alcohol use by university students can become problematic which is an important public health issue, due to its multiple and wide range of effects on physical, psychosocial, and mental health. However, there is little evidence on the prevalence of and factors associated with alcohol use disorder among medical students in Uganda. Therefore, it was very important to conduct this research on the prevalence of and factors associated with alcohol use disorder among medical students at Kampala International University-Western Campus.

METHODOLOGY

Study Design
The study was a quantitative cross-sectional survey. Questionnaires were administered to a sample of medical students. This was done in such a way that medical students in all academic years and medical courses were represented.

Area of Study
The study was carried out at Kampala International University Western Campus in Ishaka, Bushenyi District, South-Western Uganda, among the medical students there. Some of the economic activities in this area are alcohol selling in bars, restaurant businesses, agriculture and boutiques. The people in this area are very hospitable. The university also offers other courses like Bachelor of Clinical Medicine, Engineering, and Bachelor in Nursing among others. There are about one thousand students in the university. The mode of training of the students is lecturing.

Study Population
The study population included all medical students at Kampala International University Western Campus in Ishaka, Bushenyi District, and South-Western Uganda.

Inclusion Criteria:
- All medical students at Kampala International University Western Campus who were willing to participate.
- Medical students who were available at the time of data collection.

Exclusion Criteria:
- Medical students who had been discontinued from school at the time of the study.
- Medical students who wanted to be motivated before they respond to the questionnaire.

Sample Size Determination:
The sample size for the study was determined taking the following factors into consideration: Using a study done in Uganda by Kamulegeya et al among adults, with a finding of 31% prevalence of Alcohol Use Disorder among Students at Makerere University, and at 95% confidence interval and a margin of error of 5%, the sample size was calculated using the Yamane sample size proportion [10]. The sample size was calculated using Yamane's 1967 formula. The sample size was determined by the Yamane formula;

$$N= \frac{Z^2 P(1-P)N}{Z^2 P(1-P)+Ne^2} \quad \text{(Yamane, 1967)}$$

Where Z=the standard Normal Deviation set at 1.96 and it corresponds to a 95% confidence level.
P=proportion of the population with particular characteristics estimated at 31% =0.3.
N= Target population or required sample size. On average, the medical school has 12000 medical students and the population sample, N, will be 12000 medical students.
e= expected error estimated at 0.05
Therefore,

$$N= \frac{1.96^2(0.31)(1-0.31)(12000)}{1.96^2 X\ 0.31\ (1-0.31)+12000\ X\ 0.05^2}$$

$$N= \frac{3.8416(0.31)(0.69)(12000)}{3.8416(0.31)(0.69)+12000 X 0.0025}$$

$$N= \frac{9860.62}{(0.823+30)}$$

$$N= \frac{9860.62}{(30.823)}$$

N =320 students.
Therefore,
n = 320 medical students (minimum sample size) Taking into consideration a 5 % non-respondents and errors (16 students), a sample of 336 medical students will be used in the study.
Therefore, 336 questionnaires were distributed.

Sampling Method.
Cluster sampling techniques were employed in this research with each class of medical students being regarded as a primary sampling unit. Cluster Sampling is a technique used in dividing the population under study into groups known as clusters and then randomly selecting some of the groups, and then collecting data from all members of the selected groups. A single sequential list

was compiled of all the thirty (30) classes of KIU-WC medical school based on the courses offered. The courses offered include; Bachelor of Medicine and Bachelor of Surgery, Bachelor of Pharmacy, Diploma in Pharmacy, Diploma in Clinical Medicine, Bachelor of Clinical Medicine, and Bachelor of Nursing. Sixteen (16) classes were selected from the list of medical courses in the university by random sampling. All the students in the selected 16 classes were invited to participate in the study. The psychometric tool; the AUDIT which helped to determine alcohol use disorder and the closed and structured questionnaire.

Data Collection Procedure.

The measurement tool for the study was a self-administered closed and structured questionnaire, available in the English language. It included questions related to socio-demographic and economic factors associated with alcohol use, means of getting alcohol, peer alcohol use and so on. A letter of introduction was sent to the Deans of respective faculties for the introduction. These letters were sent before the study commences. During a visit to the faculties, the Deans were briefed on the research purpose and what the study aimed to achieve. A total of 336 questionnaires were administered. Selected participants were taken through the questionnaire as a group. The sitting arrangement was done in such a way as to discourage communication and any form of discussion. Each participant was given a pen before the start of the study and a notebook after completion. Deans of faculties were given letters of appreciation. Each question was explained in English to ensure that participants understand clearly what the question meant. Deans and Lecturers were not allowed to sit in the classroom during the time when students were completing the questionnaire, and questionnaires were given to individual participants to ensure privacy.

Data Analysis

Data from the questionnaire was analyzed using SPSS 20.0 software and the results of the prevalence of alcohol use disorder among medical students in KIU-WC were presented in frequency tables and descriptive analyses. Descriptive statistics were used to ascertain information about factors associated with alcohol use disorder among medical students at KIU-WC; tests of association and correlation between explanatory variables and the outcomes of interest were done using Chi-square tests.

Data Management

All questionnaires were collected from participants and checked for completeness, accuracy and any irregularities; all data collected was kept by the researcher for analysis and report writing. At the data analysis stage, data was again checked for completeness and consistency.

Quality Control

Points to be noted and assessed included; the availability of the sample needed for the full study, the desire of the students to participate, the clarity of the language used and the time needed for administering the questionnaire. Also, training of the data collection team, pre-testing of the questionnaire and proper data storage and management were emphasized.

RESULTS

Response rate

From a total of 336 respondents, only 300 were returned, this accounted for more than 50% of the targeted respondents, enough to fulfil the objectives of the study.

Table 1: Response rate

Distributed questionnaires	Returned questionnaires
336	300

Source: Primary Data, (2022)

Background information about respondents

Here, the researcher presents the number of people who were involved in the study, and their categories in terms of age, gender, and marital status among others. These are presented as follows

Background information of respondents

Table 2: Background information of respondents

Age	Frequency	Valid Percentage
15-20	60	20
21-30	140	47
31-40	90	30
Above 41	10	3
Gender		
Male	135	45
Female	165	55
Religion		
Catholic	87	29
Anglican	84	28
SDA	20	7
Born again	69	23
Moslem	40	13
Others	-	-
Course		
BMS	55	18
Pharmacy	65	21
Nursing	70	23
Clinical medicine	80	27
Others	30	11
Year of Study		
First-year	115	38
Second year	75	25
Third year	40	14
Fourth-year	40	14
Fifth year	30	10

Source: Primary Data, (2022)

Response according to age

The demographics; and the age of respondents indicated that; 60(20%) were aged between 15-20 years, followed by majority 140(47%) who were aged between 21-30. also, 90(30%) were aged between 31-40 and only 10(3%) were aged above 41 years.

Gender of respondents

According to gender, 135(45%) were males, followed by the majority 165(55%) who were females. This indicated that alcohol consumption at among medical students at Kampala International University-Western Campus affected both males and females.

Religion of respondents

Responses according to religion indicated that; majority, 87(29%) were Catholics, followed by 84(28%) who were Anglican. 20(7%) were seventh day Adventists, and 69(23%) were born again Christians, while only 40(13%) were Muslims. This indicated that despite religious affiliations, alcohol consumption among medical students at Kampala International University-Western Campus cut across all religious affiliations.

Course of study of respondents

Responses on the course of study of respondents indicated that 55(18%) were taking BMS, followed by 65(21%) who were taking Pharmacy. 70(23%) were taking Nursing, while majority 80(27%) were taking clinical medicine course and only 30(11%) were taking other courses.

Academic years of respondents

On the academic year of respondents, responses from majority of respondents 115(38%) were in first year, followed by 75(25%) who were in their second year, while 40(14%) who were in third year with 40(14%) who were in fourth year and 30(10%) were in their fifth year. This indicated that most students took alcohol in their first and second years.

The prevalence of alcohol use disorder among medical students at Kampala International University-Western Campus, Bushenyi District.

Findings from the prevalence of alcohol use disorder among medical students at Kampala International University-Western Campus indicated that alcohol use disorder was characterized by an impaired ability to stop or control alcohol use despite adverse social, occupational, or health consequences. This was either mild, moderate, or severe.

Table 3: The prevalence of alcohol use disorder among medical students at Kampala International University-Western Campus, Bushenyi District

Descriptive Statistics

	Agree	Not sure	disagree	Mean	Std. Deviation
Consumption of alcohol	159 (79.5%)	28(14%)	13(6.5%)	2.73	.57336
Types of alcohol taken	155(77.5)	10(5%)	35(17.5%)	2.53	.87115
When drinking started	163 (81.5%)	14(7%)	23(11.5%)	2.70	.66499
Time spent consuming alcohol	79(39.5%)	23(11.5%)	98(49%)	1.90	.93828
Who inspired you to drink	165(82.5%)	3(1.5%)	31(15.5%)	2.67	.73088
how often do you drink	59(32.6%)	5(2.8%)	117(64.6)	1.68	.93516
Do you lie about the amount of alcohol you take on a daily basis	141(70.5)	35(17.5%)	24(12%)	2.59	.69656
Do you fill angry when someone complains about your drinking?	155(77.5)	10(5%)	35(17.5%)	2.53	.87115
do you feel like cutting down your alcohol intake	163 (81.5%)	14(7%)	23(11.5%)	2.70	.66499
Valid N (listwise)	300				

Source: Primary Data, (2022)

The above table reveals the findings on the prevalence of alcohol use disorder among medical students. According to the findings, the Consumption of alcohol was determined by the type of alcohol consumed by malnutrition. This is evidenced by a mean 0f 2.73 which is close to 3(representing agree). Respondents believed that the more types available on the market, the more consumption rates of alcohol, presented by the mean of 2.53. When drinking started was also considered a contributing factor to alcohol consumption whereby it was believed that those who started long ago faced it hard to leave drinking. A mean of 2.70 and a standard deviation of .66499 were recorded. Respondents believed that those who started drinking before joining campus were too addicted than those who had started drinking after joining campus. When asked about time spent drinking, respondents agreed that they had spent between 1-2 years, 2-3 years as well as over 3 years. This is evidenced by the computed mean of 2.70 which can be rounded to 3 representing agreement as per the table. It was believed that those who had spent 3 years were many. This makes the time spent consuming alcohol important to the rate of alcohol consumed. On the time spent while consuming alcohol, it was

found that it's not clear whether this is significant. The mean of 1.90(rounded to 2) reflects the uncertainty of the Respondents on this particular issue. Respondents generally believed that alcohol consumption depended on a number of factors. On who was inspired to drink, the mean of 2.67(rounded to 3) confirms the agreement it is believed that students drinking was inspired by fellow students. Besides friends, other factors like social gatherings and family members were in line with inspiring many to drink. On how often you drink, it was also not clear whether this was true or not based on the mean of 1.67 (which can be rounded to 2 which implies not sure. However, a close look at the percentages shows that 117 respondents (64.6%) disagreed with this notion implying that they believe that many drank at different intervals of the day and night. On whether they lied about the amount of alcohol they took on a daily basis, the majority of the respondents 141(70.5%) agreed. This indeed tallied with the mean of 2.58(rounded to 3) which represents agreement on the 1-3 scale used. This implies that most respondents lied about the amount of alcohol consumed. In responses on whether respondents felt angry when someone complained about their drinking, a mean of 2.53 indicated a massive agreement among those who drank that they felt angry when someone complained about their drinking behaviours. This indeed tallied with the mean of rounded to 3 which represented agreement on the 1-3 scale used. On how they felt like cutting down their alcohol intake, this was evidenced by the computed mean of 2.70 which can be rounded to 3 representing agree as per the table. It's believed that those who were taking alcohol were not ready to reduce their intake.

The socio-demographic factors associated with the prevalence of alcohol use disorder among medical students at KIU-WC

Table 4: Socio-demographic factors associated with the prevalence of alcohol use disorder among medical students at KIU-WC

Construct	Agree	Not sure	Disagreed	Mean
Loss of valuable items	116(58%)	71(35.5%)	13(6.5%)	2.51
Excessive vomiting	80(40%)	60(30%)	60(30%)	2.10
Stomach pains/upset	132(66%)	5(2.5%)	63(31.5%)	2.34
Accident	174(87.0%)	13(6.5%)	13(6.5%)	2.80
Debt	132(66%)	5(2.5%)	63(31.5%)	2.34
petty theft	116(58%)	71(35.5%)	13(6.5%)	2.51
harm to others	132(66%)	5(2.5%)	63(31.5%)	2.34
having unsafe sex	80(40%)	60(30%)	60(30%)	2.10
missing classes	174(87.0%)	13(6.5%)	13(6.5%)	2.80
Valid N (listwise)				

Source: Primary Data, (2022)

The first construct as shown in the table above was looking at socio-demographic factors associated with the prevalence of alcohol use disorder among medical students at KIU-WC. Findings indicate that 116 respondents representing 58% agreed that alcohol leads to loss of valuable items. 35.5% were not sure and 13(6.5%) disagreed. These statistics match with the mean of 2.51 which once rounded off gives 3 which represents agreement. Based on the mean and the number of respondents who answered in affirmation, it should be noted that alcohol leads to a number of people selling off what belongs to them mainly to consume it. On whether alcohol led to excessive vomiting, 80 respondents (40%) agreed, 60 (30%) respondents were not sure and 60(30%) disagreed. A mean of 2.1 was got which implies not sure. This could be attributed to the fact that most respondents disclosed that as a result of alcohol, some vomited. However, despite not knowing this status some 80 respondents believe that alcohol consumption may not necessarily lead to vomiting.

On the issue of whether alcohol consumption leads to Stomach pains/upset, the biggest acceptance rate of all points under test was got here where 174(87.0%) of the participants responded in affirmation. Though 13(6.5%) respondents were not sure and 13(6.5%) disagreed, the biggest per cent of acceptance tallies with the mean of 2.8 in the table which reflects that alcohol consumption generally made some respondents' stomachs receive pain. Findings on whether alcohol consumption leads to leads to accidents, 174(87%) agreed and 13(6.5%) were not sure and 13(6.5%). This acceptance tallies with the mean of 2.80 in the table which reflects that alcohol consumption generally made respondents get accidents. On whether alcohol led to increased debts, 132 respondents (66%) agreed, 5(2.5%) respondents were not sure and 63(31.5%) disagreed. A mean of 2.34 was got which implies not sure. This could be attributed to the fact that most respondents disclosed that as a result of alcohol, many were falling into debt. Findings from 116(58%) agreed that mass alcohol consumption led to involvement in the theft of petty items, 71(35.5%) respondents were not sure and 71(35.5%) disagreed. A mean of 2.51 was got which implies being sure. This could be attributed to the fact that most respondents disclosed that as a result of alcohol, many looked for ways of survival and resorted to selling off their petty belongings. On whether alcohol consumption makes takers harm others, the biggest acceptance rate of respondents 132(66%) agreed that alcohol consumption made alcohol takers harm others through fighting, Though, 5(2.5%) respondents were not sure and 63(31.5%) disagreed, the biggest per cent of acceptance tallies with the mean of 2.34 in the table which reflects that alcohol consumption generally made some respondents' harm others. On whether alcohol led to having unprotected sex, 80 respondents (40%) agreed, 60(30%) respondents were not sure and 60(30%) disagreed. A mean of 2.10 was got which implies not sure. This was attributed to the fact that many respondents did not disclose whether they had UN-protected sex. Lastly, 174(87.0%) agreed that alcohol consumption made many of them miss classes because they are drunk according to 174(87.0%). On the other hand, respondents 13(6.5%) disagreed and 13(6.5%) were not sure. A mean of 2.51 was got which implies being sure. This was attributed to the fact that most respondents disclosed that as a result of alcohol, many could sleep for longer hours mainly in the morning to recover from hangovers.

Table 5: Economic factors associated with alcohol use disorder among medical students at KIU-WC

Descriptive Statistics

Construct	Agree	Not sure	Disagree	Mean	conclusion
How do you fund your alcohol consumption?	81(40.5%)	38(19%)	81(40.5%)	2.00	Un decided
What is your source of income?	40(20%)	10(5%)	150(75%)	1.4500	Disagree
What is your estimated income in a month?	140(70%)	28(14%)	32(16%)	2.5400	Agree
What is your estimated income in a month?	154(77%)	28 %(14%)	32(16%)	2.6550	Agree
What is your estimated monthly expenditure?	50(25%)	10(5%)	140(70%)	1.4500	Disagree
Are you experiencing financial difficulties because of persistent drug purchases?	154(77%)	28(14%)	32(16%)	2.6550	Agree
Valid N (list-wise)	200				

Source: Primary Data, (2022)

The table above shows economic factors associated with alcohol use disorder among Medical students at KIU-WC. According to the findings, it is not clear whether how they funded their alcohol consumption. The mean of exactly 2.0 was derived which is the exact grade was not sure according to the scale used. This implied that there was no consensus on what was used to fund alcohol consumption. These funded it using their own funds, their friends' incomes and other sources like parents among others. Respondents' also disagreed with the sources of income as they were not working, but got money from their parents. With the mean of 1.45 which once rounded off gives 1. This somehow relates to the earlier response that alcohol consumption is not necessarily about funding. These disclosed that; alcohol was funded by their parents, through funding organizations which were funding them to pay for their upkeep.

On the other hand, respondents believe that the estimated income in a month was very low. A mean of 2.54 represents that the income levels per month influence alcohol uptake, which is evidenced by the mean response of 2.65(close to 3). Findings indicated respondents' estimated income in a month, 20(6%) disclosed it was below 100,000/=, 100(34%) disclosed it was between 100,000-300,000/=, 100(34%) disclosed it was between, 300,000-500,000/= and another 100(34%) were above 500,000/=. When asked on what is your estimated monthly expenditure the mean of exactly 1.4500 was derived which is the exact grade on not sure according to the scale used. This implied that there was no consensus on what was used to fund alcohol consumption on a monthly income basis. These disclosed that; it was below 100,000/=, majority 160(53%) disclosed that it was (between 100,000 - 300,000/=)

and 100(34%) disclosed that it was above 500,000/=. Asked whether respondents were experiencing financial difficulties because of persistent drug purchases. A mean of 2.54 represents that financial difficulties because of persistent drug purchases influence alcohol uptake, which is evidenced by the mean response of 2.65(close to 3). Respondents were experiencing financial difficulties because of persistent drug purchases.

The relationship between factors associated with alcohol use disorder among medical students at KIU-WC

To examine the relationship between factors associated with alcohol use disorder among medical students, the researcher adopted regression analysis. Regression is a mathematical function that predicts the effect of the independent variable on the dependent variable. In this study, the researcher took medical students as the independent variable and alcohol use disorder as the dependent variable. The study used regression coefficients to understand the change in medical students for a very unit-change in alcohol use disorder and R-Square to determine the portion of alcohol use explained by medical students. The following table shows the summary of the regression model.

Table 6: Model Summary Model

	R	R Square	Adjusted R Square	Std. The error in the Estimate
1	.418(a)	.174	.169	.75501

A Predictor: (Constant), alcohol use disorder

The relationship between alcohol use among medical students (r = .418; p-value < .05) appears to be moderate. This suggests that making alcohol consumption accessible was associated with an average change in behaviour among medical students. In practice, alcohol consumption is likely to change among medical students on average. The study indicates a p-value which is less than 0.05. This suggests that the average relationship between alcohol consumption and medical students is likely to be found in over 95% of the study sample. Therefore, the statistic is relevant and significant.

DISCUSSIONS

Biodata of respondents

Response according to age indicated that; 60(20%) were aged between 15-20 years, followed by the majority 140(47%) who were aged between 21-30. also, 90(30%) were aged between 31-40 and only 10(3%) were aged above 41 years. On gender, 135(45%) were males, followed by the majority 165(55%) who were females. Religion of respondents indicated that; the majority, 87(29%) were Catholics, followed by 84(28%) who were Anglican. 20(7%) were seventh day Adventists, and 69(23%) were born again Christians, while only 40(13%) were Muslims. Courses of study of respondents indicated that 55(18%) were taking BMS, followed by 65(21%) who were taking Pharmacy. 70(23%) were taking Nursing, while majority 80(27%) were taking clinical medicine course and only 30(11%) were taking other courses.

Academic years of respondents showed that the majority of respondents 115(38%) were in their first year, followed by 75(25%) who were in their second year, while 40(14%) were in the third year 40(14%) who were in the fourth year and 30(10%) were in their fifth year.

The prevalence of alcohol use disorder among medical students at Kampala International University-Western Campus, Bushenyi District.

According to the findings, the Consumption of alcohol was determined by the type of alcohol consumed by malnutrition. This is evidenced by a mean 0f 2.73 which is close to 3(representing agree). Respondents believed that the more types available on the market, the more consumption rates of alcohol, presented by the mean of 2.53. Findings on when drinking started indicated that it was

believed to have started long ago with a mean of 2.70 and a standard deviation of .66499. On the time spent drinking, they had spent between 1-2 years, 2-3 years as well as over 3 years evidenced by the computed mean of 2.70. On the time spent while consuming alcohol, it was not clear whether this is significant with the mean of 1.90(rounded to 2) reflecting the uncertainty of the respondents on this particular issue. On who was inspired to drink, the mean of 2.67(rounded to 3) confirms the agreement it is believed that students drinking was inspired by fellow students, and on how often you drink, it was not clear based on the mean of 1.67 (which can be rounded to 2 which implies not sure. However, a close look at the percentages shows that 117 respondents (64.6%) disagreed with this notion implying that they believe that many drank at different intervals of the day and night. On whether they lied about the amount of alcohol they took on a daily basis, the mean of 2.58(rounded to 3) represents an agreement on the 1-3 scale used, as a mean of 2.53 indicated a massive agreement to those who drank that they felt angry when someone complained on their drinking behaviours. On how they felt like cutting down their alcohol intake, a mean of 2.70 which can be rounded to 3 representing agreement as per the table.

The socio-demographic factors associated with the prevalence of alcohol use disorder among medical students at KIU-WC

58% agreed that alcohol leads to loss of valuable items with a mean of 2.51 which once rounded off gives 3 which represents agree, followed by a mean of 2.1 which was got and it implied not sure. On whether alcohol consumption leads to Stomach pains/upset, the biggest acceptance rate of all points under test was got here where 174(87.0%) of the participants responded in affirmation. The biggest per cent of acceptance tallies with the mean of 2.8 in the table which reflects that alcohol consumption generally made some respondents' stomachs receive pain. On whether alcohol consumption leads to leads to accidents, 174(87%) agreed and

13(6.5%) were not sure and 13(6.5%). The mean of 2.80 reflects that alcohol consumption generally made respondents get into accidents, as for whether alcohol led to increased debts, a mean of 2.34 was got which implies not sure. 116(58%) agreed that mass alcohol consumption led to involvement in the theft of petty items, 71(35.5%) respondents were not sure and 71(35.5%) disagreed with a mean of 2.51 was got which implies being sure. In responses on whether alcohol consumption makes takers harm others, the biggest acceptance rate of respondents 132(66%) agreed that due to alcohol consumption made alcohol takers harm others through fighting, with a mean of 2.34 in the table which reflects that alcohol consumption generally made some respondents' harm others. 80 respondents (40%) agreed, and 60(30%) respondents were not sure, with a mean of 2.10 was got which implies not sure. 174(87.0%) agreed that alcohol consumption made many of them miss classes because they are drunk according to 174(87.0%). A mean of 2.51 was got which implies being sure.

Economic factors associated with Alcohol use disorder among Medical students at KIU-WC

It was not clear how they funded their alcohol consumption with a mean of exactly 2.0 derived which is the exact grade not sure according to the scale used. Respondents disagreed with the sources of income as they were not working, but got money from parents. With the mean of 1.45 which once rounded off gives 1. Respondents believed that estimated income in a month was very low with a mean of 2.54 representing that the income levels per month influence alcohol uptake, which is evidenced by the mean response of 2.65(close to 3). They earned a monthly income in a month (between 100,000-300,000/=), 100(34%) disclosed it was between, 300,000-500,000/= and another 100(34%) were above 500,000/=. The mean of exactly 1.4500 was derived which implied that there was no consensus on what was used to fund alcohol consumption on a monthly income basis. This was below 100,000/=, majority

160(53%) disclosed that it was (between 100,000-300,000/=) and 100(34%) disclosed that it was above 500,000/=. On whether respondents were experiencing financial difficulties because of persistent drug purchases, a mean of 2.54 represents that financial difficulties because of persistent drug purchases influence alcohol uptake, which is evidenced by the mean response of 2.65(close to 3).

The relationship between factors associated with alcohol use disorder among medical students at KIU-WC

The relationship between alcohol use

among medical students (r = .418; p-value < .05) appears to be moderate. The changes in programmers aimed at making alcohol consumption in accessible are associated with an average change in the number of medical students. In practice, alcohol consumption is likely to change among medical students on average. The study indicates a p-value which is less than 0.05. This suggests the average relationship between alcohol consumption and medical students is likely to be found in over 95% of the study sample. Therefore, the statistic is relevant and significant.

CONCLUSIONS

Conclusively, the prevalence of alcohol use disorder among medical students at Kampala International University-Western Campus indicated that; more agreed to consume alcohol like spirits, beer, wine and local brews. Few started drinking before joining campus, and more started drinking after joining Campus and had spent 1-2 years up to over 3 years consuming alcohol. These were inspired by family members, friends and social gatherings at home as well as social gatherings at the university. These drank daily, weekly, twice a week, thrice a week, and once a month, though many lied about the amount of alcohol they took on a daily basis. More felt angry when some complained of their drinking, though they also felt like cutting down their alcohol intake. The effects of drinking alcohol made them lose valuable items, experienced excessive vomiting, alcohol led to stomach pains/upset, led to accidents and put them into debt. It also led to petty theft, harmed their friends, engaged in UN-protected sex, made them lose classes, made them get lower grades and led to injuries [14]-[16]. The health effects of alcohol taking, included; Anorexia, Insomnia, depression, dental caries, increased sexuality, risk of liver infection, and has led to depressive feelings and diarrhoea. In conclusion, the socio-demographic factors associated with the prevalence of alcohol use disorder among medical students at Kampala International University indicated that; some students were staying alone, and

many had roommates. These had a number of roommates between 1 to four, living in campus hostels, and in off-campus hostels staying in Kizinda, Ishaka, Basaja, Lagos, Bwegiragye and in Abuja. Some took alcohol to relieve stress, because friends, to become happy, to relieve anxiety, and to pass the time. This made them lose consciousness after taking alcohol, skip classes, felt more isolated, [either] socially [or from their own feelings of joy or happiness, and developed depression or chronic fatigue. Alcohol plaid a significant role to feel happy or contented, and took more alcohol between 500 millilitres, to more than 1000 millilitres, in a nutshell, economic factors associated with alcohol use disorder among medical students at Kampala International University-Western Campus indicated that; alcohol consumption was funded using their own funds, friends' incomes and other sources like from parents. 10(3%) disclosed that they were self-sustainable, and 270(91%) were funded from their parents. More earned (between 100,000/=, up to 500,000/=), though their monthly expenditure, was below (100,000 to above 500,000/=) and they were experiencing financial difficulties because of persistent drug purchases.

Recommendations

Similar studies should include students in other classes of people like adolescents and old professionals in the community. The mesmerizing nature of alcohol use on our social media should be checked. The influence of peer pressure should also be

tackled especially in our education cycle institutions to reduce its negative effects on adolescents by focusing on its positive side effects. Parents should use this opportunity to moderately give their children just the amount that they need. Parents should also live a model life worthy of emulation by their children and neighbours. Finally, the youth should have life skills both in schools and in the community to give them less time to indulge in risky behaviours such as alcohol misuse and abuse.

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