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Page | 13 Prevalence and Determinants of Substance Use among Students at Kampala International University Western Campus, Ishaka Municipality Bushenyi District Uganda

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ABSTRACT

During the University period, students experience independence and freedom from direct adult and family supervision, self-decision and intense academic pressures as well as sharing living quarters with people they barely know. They also form new social groups and may be exposed to values different from their parental values. 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 a restricted life monitored by parents to a more self-directed life influenced by the university environment and as such, the risk of substance use was increased in university environments. The study sought to determine the prevalence and establish the determinants of substance use among students at Kampala International University-Western Campus. A cross-sectional observational and analytic study design was utilized. A total of 176 randomly selected participants were recruited in the study. Bivariate and multivariate logistic regression was performed to identify factors associated with substance use. Odds ratios with a 95% confidence interval were computed to determine the level of significance. The majority of the study participants 125 (71.02%) were female participants whereas the minority of participants 51 (28.98%) were males. The majority of study participants 54 (30.68%) of the study participants belonged to the catholic religion. The prevalence of substance use among the study participants was 56.82% (100). The most used substance abuse was alcohol, followed by marijuana and shisha. The substances of abuse least used were cocaine, gasoline, and opium. Poor role modelling by teachers, Stressful finance clearing, too much freedom at campus, and weight management were independently significantly associated with substance use among study participants. This study has shown that the level of substance abuse was high among the students at KIU-WC. Most of the determinants of substance use were due to school-related factors such as stressful financial clearing, poor role modelling by lecturers, and too much freedom on campus. Lecturers should portray a good example to the students since poor role modelling was found to be associated with substance use. Parents should endeavour to provide all the financial needs to their sons and daughters.

Keywords: University environment, Substance abuse, Parents, Students, Alcohol.

INTRODUCTION

Substance abuse and its associated problems are a global concern. A recent WHO estimate shows a burden of worldwide psychoactive substance use of around 2 billion alcohol users, 1.3 billion smokers and 185 million drug users [1]. The World Health Organization has defined substance use as, "persistent or sporadic use inconsistent with or unrelated to acceptable medical practice [2]. The use of these drugs among University students is a global phenomenon eating deep into the fabric of our society [3]. In the past few years, substance and drug abuse has been on the rise in Uganda, and it has engulfed the whole country [4] Drug and substance abuse has been pointed out as one of the reasons for several problems such as a rising crime rate, unrest in schools, dysfunctional families, and poverty [4]. It has also been observed that as a result of substance and drug abuse, the following effects have occurred: domestic violence, risky sexual behaviors and practices including exposure to HIV/AIDS [5]. There seems to be an increased prevalence of substance and drug abuse amongst university students, despite the efforts of the authorities to put their house in order [6]. This study as such sought to find out the prevalence and the

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determinants of substance and drug abuse among students at Kampala International University-Western Campus. The history of the human race has also been associated with substance abuse. For a long time, man has been using herbs, bark leaves and roots to relieve pain and help control diseases and most young people begin their use of drugs with alcohol and cigarettes and later progress to more dangerous substances such as cannabis and cocaine⁷⁷. As we find ourselves at the beginning of a new decade, we are faced with challenges to our survival. Some of the greatest threats to our survival are sweeping epidemics that affect millions of individuals worldwide. Page | 14 Substance Abuse, although often regarded as a personality disorder, may also be seen as a worldwide epidemic with evolutionary genetic, physiological and environmental influences controlling this behavior [8]. Since the early times, herbs, leaves and plants have been used to heal and control diseases. The use of drugs in itself does not constitute any danger, because drugs correctly administered have been a blessing. Aguocha [8] viewed that "chronic use of substances can cause serious, sometimes irreversible damage to adolescent's physical and psychological development. The use of drugs could be beneficial or harmful depending on the mode of use. Drug use has been noted as one of the most pressing health problems among students, who are an important and vulnerable group in society [9]. In 2011, 22.5millionAmericans over 12 years of age (8.7% of the population) reported using illicit drugs, compared to 8.3% in 2002, with the largest increase being for marijuana. Moreover, while drug use remains highest among late teenagers and those in their twenties, an increasing trend has also been noted among Americans in their fifties [10].Recent studies in African countries have shown that the phenomenon of drug use is also common in this continent and is becoming one of the most disturbing health-related problems among youth [7]/ Substances are used and abused widely among African youth. This situation poses serious social and public health problems similar to those in most Western societies [9]. A study among Nigerian high school students indicated that the lifetime prevalence of substance use was 87.3% whereas current use was 69.2% with multiple substance use being 57.4% [8]. The lifetime prevalence rate of any substance use was found to be 69.8% among college students in Kenya [11].Globally, substance use of products such as alcohol, cigarettes, and khat leaves (Catha edulis) has become a major public health concern with accompanying socio-economic problems. Studies show that substance use, particularly in developing countries, has dramatically increased [12]. The Global Burden of Disease Report projected that smoking and alcohol consumption were the 1st and 4th leading risk factors for early death and disability among males [13]. Substance use is harmful leading to decreased academic performance, increased risk of contracting HIV and other sexually transmitted diseases (STDs), or psychiatric disorders such as lethargy, hopelessness, insomnia 147 and depressive symptoms 157. Half of the admissions in the Ugandan National Mental Referral Hospital are young people with alcohol and substance use disorders majority of whom are university students [16]. There is also a growing recognition of the high cost of treatment and of the inability of existing treatment programs to keep up with increasing demand. The main objective of institutions of higher learning in Uganda is to provide education and growth experiences for its students but substance abuse has continued to be a problem in the university campuses that is slowing down their progress and the sustainable development goals number 3 that envisages a healthy population and reduction of the prevalence as well as the impact of alcohol abuse disorders in order to attain the highest possible level of physical, social and mental health [16] Substance use is associated with a plethora of risky behaviors and negative health outcomes including addiction, anxiety disorders, violent behaviors, paranoia, lung disease, hypoxia, heart failure, increased risk of premature delivery, and various sexually transmitted diseases [10]. Understanding the key determinants of substance use among University students is critical in creating targeted interventions and lowering the socioeconomic burden associated with such behaviors. Against this background, this study was conducted to find out the prevalence and determinants of substance use among students attending Kampala International University-Western Campus.

METHODOLOGY Study Design

The study was descriptive and analytic study using cross-sectional survey research design utilizing quantitative methods of data collection. The cross-sectional survey research design was used because the method gathers data from a relatively large number of different categories of respondents at a particular time in a quantitative manner.

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Area of Study

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The study was conducted at Kampala International University which is in Ishaka Town, a major town in Bushenyi district, located in the north of Bushenyi district, southwest of Mbarara district and around 78km from Mbarara town which is the biggest city in Western Uganda. Bushenyi district is also located around 361km southwest of Kampala (capital city) by road. Ishaka town's coordinates together with the municipality as all are believed to be 00 32' 40.00"N, 300 8' 16.00"E (Latitude: 0.544445, Longitude: 30.137778).

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Study Population

The study population of this study was the students of Kampala International University-Western Campus

Inclusion criteria

The students of Kampala International University-Western Campus who were full-time students, willing to participate in the study, who had consented, and who were around at the time the study was conducted.

Exclusion

The exclusion criteria for this study were the students of Kampala International University-Western Campus who were time students or were not registered with the university and those who with speech or hearing impediments.

Sample size calculation

The sample size for this study was calculated using Slovin's formula based on the target population of 6,217 students studying at Kampala International University Western Campus.

Slovin's formula is represented by

$$n = \frac{N}{1 + N(0.05)^2}$$

Where;

n= Sample size

N Target population size of 6217)

E = Margin of error (0.05)

using a confidence level of 95% (giving a margin of error of 0.05) and a total population of 6217 students:

6217/I H 6217 * 0.05 * 0.05) =176

The study as such involved 176 participants

Sampling procedures

The sampling technique that was employed was a non-probabilistic sampling technique of convenience sampling to get the participants from whom the data was drawn; only those whom the researcher was able to convince were included in the study.

Data collection techniques/methods and tools

Quantitative methods of data collection were used. Data was gathered from the study participants using closedended questionnaires that required ticking an option from multiple choice.

Data collection tools

The researcher collected data from study participants using a structured self-administered questionnaire. It consisted of three parts: (1) socio-demographic characteristics (2) prevalence of substance use, and (3) determinants of substance use among students. The questionnaires were close-ended and required study participants to make choices among several possible alternatives.

Validity of instruments

To ensure validity of data collection instruments, the data collection instruments were pretested by using a content validity index, the researcher got respondents who were not part of the sample population, gave them questionnaires and measured inter-respondent agreement. The agreement of more than 75% was a measure that the items of the questionnaire could give the true representation of the results of the proposed study.

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Reliability of data collection tool

The researcher ensured the reliability of the data collection tools by using data obtained from a pre-determined questionnaire to determine the Cronbach's coefficient alpha. An index of 0.84 was obtained which indicated that the items of the questionnaire were reproducible and consistent.

Quality control techniques

Page | 16 The researcher ensured quality in the proposed study by, getting orientated about the research, the instruments, and the field procedures required for effective and efficient field data collection. Field testing of the data collection tools was done as part of the overall process of preparation for data collection. The principal investigator monitored and supervised the overall study to ensure research procedures were adhered to. Besides, all completed forms from the field were reviewed daily and on-the-spot feedback was provided with follow-up/callback undertaken, where needed.

Data analysis plan

Data was entered using Microsoft Excel Version 13 and was analyzed using STATA 14.0. Before data entry, the data was coded and cleaned to get any inconsistencies and missing values. Cross-checking was done where necessary. The prevalence of substance use was analyzed in terms of frequency and percentage and information was summarized in the form of tables, pie charts and narrations. Categorical variables were described in terms of frequencies and percentages. A logistic regression model was used to determine independent factors associated with substance use. Variables identified with a P value < 0.2 in univariate analysis were entered into the model. Associations were represented in odds ratio (OR) and adjusted odds ratio (aOR) with 95% confidence intervals (95% CI). A P value < 0.05 was considered as significant.

RESULTS

Socio-Demographic Characteristics of the Study Participants

As presented in table 1 below, a total of 176 participants were sampled from Kampala international University, Ishaka-Bushenyi municipality, Bushenyi district. Majority of the study participants 125 (71.02%) were the female participants whereas the minority of participants 51 (28.98%) were males. In terms of religion, the highest proportion 54 (30.68%) of the study participants belonged to catholic religion followed by 51 (28.98%) were born again Christians, 09 (05.11%) of the study participants were Seventh Day Adventists meanwhile the least number 05 (02.84%) of the study participants belonged to other religions. On assessing the age of study participants, majority 107 (60.80%) of the study participants were in the age group of 25 – 30 Years followed by 51 (28.98%) of the study participants whereas 02 (01.14%) were in the age group of ≤ 41 Years meanwhile minority 01 (0.57%) of the sampled participants were in the age group of 16 – 20 Years and the same number of study participants were in the age group of 35 - 40 Years.

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| Γ | Category | Options | Frequency(N) | 'ercentage (%) |
|-----------|----------------------------------|-----------------|--------------|----------------|
| | Gender of the study participants | Male | 51 | 28.98 |
| Page 17 | | Female | 125 | 71.02 |
| | | Total | 176 | 100.00 |
| | Religion of study participants | Catholic | 54 | 30.68 |
| | | Anglican | 51 | 28.98 |
| | | Muslim | 23 | 13.07 |
| | | Born Again | 34 | 19.32 |
| | | SDA | 05 | 02.84 |
| | | Others | 09 | 05.11 |
| | | Total | 176 | 100.00 |
| | Age of the study participants | 16 – 20 Years | 01 | 00.57 |
| | | 21 – 24 Years | 51 | 28.98 |
| | | 25 – 30 Years | 107 | 60.80 |
| | | 31 – 34 Years | 14 | 07.95 |
| | | 35 – 40 Years | 01 | 00.57 |
| | | ≥ 40 Years | 02 | 01.14 |
| | | Total | 176 | 100.00 |





Figure 1: Bar chart showing distribution of study participants by religion

The Prevalence of Substance use among Students Attending Kampala International University - Western Campus.

To determine the prevalence of Substance use among students attending Kampala International University -Western Campus, the study participants were asked to indicate how frequently they used some of the drugs which

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were put in the questionnaire. Where 4 meant the substance was very frequently used by the study participant, 3 meant the substance was fairly frequently used by the study participant, 2 implied that the substance was used frequently, and 1 showed that the substance was not in use by the study participant. Table 2 below shows the prevalence of substance use among the study participants. It can be observed that the majority of the study participants 100 (56.82%) were involved in substance abuse whereas 76 (43.18%) of the study participants were not abusing any of the substances.

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| Table 2: Prevalence of Substance use among the study participants | | | | | | |
|---|-----------|------------|--|--|--|--|
| Substance Use | Frequency | Percentage | | | | |
| Yes | 100 | 56.82 | | | | |
| No | 76 | 43.18 | | | | |



Figure 2: Pie chart showing Prevalence of Substance use among the study participants

Table 3 below shows the level of use of the difference substances by the study participants. Majority of the study participants 133 (75.57%) were using alcohol very frequently meanwhile the minority of study participants 08 (04.55%) did not use alcohol. Tobacco was used very frequently used by majority of the study participants 34(19.32%) whereas minority 24 (13.64%) of the study participants were not using tobacco. For Marijuana, majority 70 (39.77%) of the study participants reported that marijuana was very frequently used, while 16(9.09%) of the study participants reported that marijuana was not in use. Shisha, it was reported by 55 (31.25%) of the study participants was used, whereas minority 35 (19.89%) of the study participants were not using shisha. Majority (n=73, 41.48%) of the study respondents reported that kuber was not in use, while the minority (n=09, 05.11%) reported that kuber was very frequently used. On the other hand, Miraa was reported by 18(10.23%) of the respondents as very frequently used, while 56(31.82%) of the respondents reported that it was not in use. Majority of study participants 96 (54.55%) were very frequently using codeine as opposed to the minority 06 (03.41%) of participants who were not using codeine. The majority of study participants 121 (68.75%) of the study participants indicated that opium was not in use, while the least number 01 (00.57%) indicated that opium was frequent. Gasoline was reported not to be in use by the study participants, while 153(86.93%) of the respondents reported that gasoline was not in use. Finally, the data collected revealed that the majority 112 (63.64%) of the study participants indicated that cocaine was not in use, while 08(13.64%) of the respondents reported that cocaine was very frequently used.

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| Г | Substance | Table 3: Level of use of the di | fferent substances | bareanta as (9/) |
|-----------|-----------|---------------------------------|---------------------------|------------------|
| | Substance | Options | Frequency(\mathbf{N}) | ercentage (%) |
| Dago 10 | Alcohol | Very frequently used | 08 | 04.55 |
| Page 19 | | Fairly frequently used | 22 | 12.50 |
| | | Used frequently | 13 | 07.39 |
| | | Not in use | 133 | 75.57 |
| | Tobacco | Very frequently used | 34 | 19.32 |
| | | Fairly frequently used | 57 | 32.39 |
| | | Used frequently | 61 | 34.66 |
| | | Not in use | 24 | 13.64 |
| | Marijuana | Very frequently used | 35 | 19.89 |
| | | Fairly frequently used | 50 | 28.41 |
| | | Used frequently | 52 | 29.55 |
| | | Not in use | 39 | 22.16 |
| | Shisha | Very frequently used | 47 | 26.70 |
| | | Fairly frequently used | 39 | 22.16 |
| | | Used frequently | 55 | 31.25 |
| | | Not in use | 35 | 19.89 |
| | Kuber | Very frequently used | 09 | 05.11 |
| | | Fairly frequently used | 27 | 15.34 |
| | | Used frequently | 67 | 38.07 |
| | | Not in use | 73 | 41.48 |
| | Miraa | Very frequently used | 18 | 10.23 |
| | | Fairly frequently used | 53 | 30.11 |
| | | Used frequently | 49 | 27.84 |
| | | Not in use | 56 | 31.82 |
| | Codeine | Very frequently used | 06 | 03.41 |
| | | Fairly frequently used | 22 | 12.50 |
| | | Used frequently | 52 | 29.55 |
| | | Not in use | 96 | 54.55 |
| | Opium | Very frequently used | 01 | 00.57 |
| | | Fairly frequently used | 18 | 10.23 |
| | | Used frequently | 36 | 20.45 |
| | | Not in use | 121 | 68.75 |
| | Gasoline | Very frequently used | 00 | 00.00 |
| | | Fairly frequently used | 05 | 02.84 |
| | | Used frequently | 18 | 10.23 |
| | | Not in use | 153 | 86.93 |
| | Cocaine | Very frequently used | 08 | 04.54 |
| | | | | |

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|----------------------------|------------------------|-----|-------------|
| | Fairly frequently used | 24 | 13.64 |
| | Used frequently | 32 | 18.18 |
| | Not in use | 112 | 63.64 |

The Determinants of Substance Use among the Students at Kampala International University-Western Campus. Page | 20 As presented in Table 4 below, the majority of the study participants 153 (86.93%) said that peer pressure is not influential in determining substance abuse whereas the minority 02 (01.14%) of the study participants said peer pressure is very influential in determining substance abuse. Family background was cited by the majority 77 (43.75%) of study participants as not influential to substance abuse meanwhile the minority 09 (05.11%) said family background is very influential to substance abuse. 56 (31.82%) of the study participants mentioned that lack of appropriate laws is fairly influential to substance abuse whereas 29 (16.48%) said lack of appropriate laws are very influential. When asked about weight management, 90 (51.14%) of the study participants said it was very influential while 16 (09.09%) said it was not influential. On the other hand, curiosity was mentioned by 62 (35.23%) of the study participants as not being influential whereas 14 (07.95%) said it was very influential. Tendency to seek excitement was cited by 88 (50.00%) of the study participants as not influential to substance use whereas 04 (02.27%) mentioned it as very influential. 123 (69.89%) of the study participants said night clubbing was not influential to substance abuse meanwhile 04 (02.27%) of the study participants said night clubbing was very influential to substance use. Poverty was mentioned by 67 (38.07%) of the study participants as being very influential to substance use meanwhile 22 (12.50%) said it was not influential to substance use. When the study participants were asked about school environment, majority 63 (35.80%) said it was fairly influential to substance use meanwhile minority 22 (12.50%) said it was very influential to substance use. Majority of the study participants 129 (73.30%) strongly disagreed that they knew about drugs from their friends while the minority 03 (01.70%) were undecided. Majority 117 (66.48%) of the study participants strongly disagreed that they had some friends who were taking drugs whereas 02 (01.14%) of the study participants were undecided whether they had some friends who were taking drugs. On the statement of using substances to belong to friends, the majority of the study participants 92 (52.27%) strongly agreed whereas the minority 03(01.70%) were undecided. 123 (69.89%) of the study participants strongly agreed that they had parents who also use substances contrary to the 07 (03.98%) of the undecided study participants.117 (66.48%) of the study participants strongly agreed that they had cultures which allow the taking of substances with a minority 05 (02.84%) being undecided. On the other hand, the majority of the study participants 68 (38.64%) strongly agreed that they had the perception that using substances makes people cool as opposed to the 17 (09.66%) of the undecided study participants. Lastly, the majority of the study participants 85 (48.30%) strongly agreed that they used substances to cope with stress meanwhile 13 (07.39%) agreed with the statement and 13 (07.39%) were undecided.

| Table 4: F | Frequency table for determinant | s of substance use | |
|--|---------------------------------|--------------------|----------------|
| Category | Options | Frequency(N) | Percentage (%) |
| Peer Pressure | Very influential | 02 | 1.14 |
| | Fairly influential | 15 | 08.52 |
| | Influential | 06 | 03.41 |
| | Not influential | 153 | 86.93 |
| Family Background (Parents Also Drink) | Very influential | 09 | 05.11 |
| | Fairly influential | 53 | 30.11 |
| | Influential | 37 | 21.02 |
| | Not influential | 77 | 43.75 |
| Lack Of Appropriate Laws | Very influential | 29 | 16.48 |
| | Fairly influential | 56 | 31.82 |
| | Influential | 38 | 21.59 |
| | Not influential | 53 | 30.11 |

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|---|--------------------|-----|-------------|
| Weight Management | Very influential | 90 | 51.14 |
| | Fairly influential | 23 | 13.07 |
| | Influential | 47 | 26.70 |
| | Not influential | 16 | 09.09 |
| Curiosity | Very influential | 14 | 07.95 |
| | Fairly influential | 50 | 28.41 |
| | Influential | 50 | 26.41 |
| | Not influential | 62 | 35.23 |
| Tendency To Seek Excitement | Very influential | 04 | 02.27 |
| | Fairly influential | 50 | 28.41 |
| | Influential | 34 | 19.32 |
| | Not influential | 88 | 50.00 |
| Night Clubbing | Very influential | 04 | 02.27 |
| | Fairly influential | 35 | 19.89 |
| | Influential | 14 | 07.95 |
| | Not influential | 123 | 69.89 |
| Poverty | Very influential | 67 | 38.07 |
| | Fairly influential | 26 | 14.77 |
| | Influential | 61 | 34.66 |
| | Not influential | 22 | 12.50 |
| School Environment | Very influential | 22 | 12.50 |
| | Fairly influential | 63 | 35.80 |
| | Influential | 37 | 21.02 |
| | Not influential | 54 | 30.68 |
| Knowing about substances from friends | Strongly agree | 13 | 07.39 |
| | Agree | 04 | 02.27 |
| | Undecided | 03 | 01.70 |
| | Disagree | 27 | 15.34 |
| | Strongly disagree | 129 | 73.30 |
| Having some friends who take substances | Strongly agree | 12 | 06.82 |
| ~ | Agree | 03 | 01.70 |
| | Undecided | 02 | 01.14 |
| | Disagree | 42 | 23.86 |
| | Strongly disagree | 117 | 66.48 |
| Using substances to belong to friends | Strongly agree | 92 | 52.27 |
| | Agree | 24 | 13.64 |
| | Undecided | 03 | 01.70 |
| | Disagree | 91 | 11.93 |
| | Strongly disagree | 36 | 20.45 |
| Having parents who also take substances | Strongly arree | 109 | 60.80 |
| maying parents who also take substances | | 120 | 00.00 |

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|----------|--|-------------------|-----|-------------|
| | | Undecided | 07 | 03.98 |
| | | Disagree | 15 | 08.52 |
| | | Strongly disagree | 15 | 08.52 |
| C | Culture which allows taking of substances | Strongly agree | 117 | 66.48 |
| | | Agree | 24 | 13.64 |
| <u>-</u> | | Undecided | 05 | 02.84 |
| | | Disagree | 16 | 09.09 |
| | | Strongly disagree | 14 | 07.95 |
| Р | erception that using substances makes people | Strongly agree | 68 | 38.64 |
| C | ool | Agree | 29 | 16.48 |
| | | Undecided | 17 | 09.66 |
| | | Disagree | 31 | 17.61 |
| | | Strongly disagree | 31 | 17.61 |
| C | Coping with school stress | Strongly agree | 85 | 48.30 |
| | | Agree | 13 | 07.39 |
| | | Undecided | 13 | 07.39 |
| | | Disagree | 21 | 11.93 |
| | | Strongly disagree | 44 | 25.00 |
| Т | Ceachers buying drugs for students | Strongly agree | 55 | 31.25 |
| | | Agree | 39 | 22.16 |
| | | Undecided | 09 | 05.11 |
| | | Disagree | 31 | 17.61 |
| | | Strongly disagree | 42 | 23.86 |
| S | tressful finance clearing | Strongly agree | 18 | 10.23 |
| | | Agree | 37 | 21.02 |
| | | Undecided | 24 | 13.64 |
| | | Disagree | 44 | 25.00 |
| | | Strongly disagree | 53 | 30.11 |
| Е | Cxam failure | Strongly agree | 13 | 07.39 |
| | | Agree | 19 | 10.80 |
| | | Undecided | 17 | 09.66 |
| | | Disagree | 57 | 32.39 |
| | | Strongly disagree | 70 | 39.77 |

Bivariate Logistic Regression of Determinants of substance use

Table 5 below shows bivariate logistic regression to establish demographic determinants of substance use among students attending Kampala International University - Western Campus. Results of the analysis showed that 3 variables were statistically associated with substance use among the study participants. Lack of appropriate laws was found to be significantly associated with substance use; study participants said lack of appropriate laws was not influential to substance use were 2.61 times more likely to use substances than their counterparts who said lack of appropriate laws was very influential to substance use (cOR2.61, 95%CI 1.03 - 6.62, P=0.04). Weight management was found to be significantly associated with substance abuse; study participants who confessed that weight management was not influential to drug abuse were 16.40 times more likely to use substances as compared to study participants who mention that weight management was very influential to substance abuse (cOR16.40,

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95%CI 2.08 - 129.42, P=0.01). Then finally curiosity was found to be a determinant of substance abuse; study participants who mentioned that curiosity was not influential to substance abuse were 3.83 times more likely to use substances than their counterparts who said that curiosity was very influential to substance abuse (cOR3.83, 95%CI 1.15 - 12.75, P=0.03)Knowing about substances from friends was found to be significantly associated with substance use; study participants who strongly disagreed that they counterparts who strongly agreed with the statement (cOR 3.56, 95%CI 1.04 - 12.16, P=0.04). Having some friends who take substances also had a statistical association with substance use; those who strongly disagreed that they had some friends who were using Page | 23 substances were 11.71 times more likely to abuse substances than those who strongly agreed (cOR 11.71, 95%CI 2.44 - 56.25, P=0.01). The variable of using substances to belong to friends was found to be statistically associated with substance use; those who strongly disagreed with the statement were 13.68 times more likely to use substances compared to those who strongly agreed with the statement (cOR 13.68, 95%CI 3.91 - 47.82, P<0.01). A culture which allows the taking of substances had a significant association with substance use; study participants who strongly disagreed that their culture allows the taking of substances were 5.32 times more likely to abuse substances than their counterparts who strongly agreed with the statement (cOR 5.32, 95%CI 1.14 - 24.84, P=0.03). Another variable found to be statistically associated with substance use was Perception that using substances makes people cool; those who strongly disagreed with the statement were 12.55 times more likely to use substances than those who strongly agreed with the statement (cOR 12.55, 95%CI 3.48 - 45.32, P<0.01). Lastly, study participants who strongly disagreed that they used substances as a way of coping with stress were 11.79 times more likely to use substances than study participants who strongly agreed that they used substances to cope with stress (cOR 11.79, 95%CI 3.48 - 45.32, P<0.01) Teachers buying drugs for students was found to be statistically associated with substance use; study participants who strongly disagreed that teachers buying drugs for students contribute to substance use were 4.09 times more likely to use substances than those who strongly agreed with the same statement (cOR 4.09, 95%CI 1.65 - 10.13, P=0.002). Stressful finance clearing has significant association with substance use; those who were undecided whether stressful finance clearing contributes to substance use were 6 times more likely to use substances than those who strongly agreed (cOR 6.00, 95%CI 1.56 – 23.07, P=0.01) meanwhile study participants who strongly disagreed with the statement of stressful finance clearing were 3.58 times more likely to use substance than those who strongly agreed (cOR 3.58, 95%CI 1.16 -11.07, P=0.03). Finally, the variable of exam failure was found to be significantly associated with substance use; study participants who strongly disagreed that exam failure contributed to substance use were 3.49 times more likely to use substances than their counterparts who strongly agreed with the statement (cOR 3.49, 95%CI 1.02 -11.90, P=0.04).

| Variable | Category | Substance Use | 2 | Cor | 95% Ci | ie |
|----------------------------|--------------------|---------------|---------|------|--------------|------|
| | | NO | YES | | | |
| | | (n=76) | (n=100) | | | |
| Gender | Male | 22 | 29 | 1 | - | - |
| | Female | 54 | 71 | 0.99 | 0.52 - 1.93 | 0.99 |
| Religion | Catholic | 23 | 31 | 1 | - | - |
| | Anglican | 22 | 29 | 0.98 | 0.45 - 2.12 | 0.96 |
| | Muslim | 06 | 17 | 2.10 | 0.18 - 6.16 | 0.18 |
| | Born Again | 20 | 14 | 0.52 | 0.22 - 1.24 | 0.14 |
| | SDA | 03 | 02 | 0.49 | 0.08 - 3.21 | 0.46 |
| | Others | 02 | 07 | 2.60 | 0.49 - 13.68 | 0.26 |
| Family Background (Parents | Very influential | 05 | 04 | 1 | - | - |
| Also Drink | Fairly influential | 19 | 34 | 2.24 | 0.54 - 9.34 | 0.27 |
| | Influential | 18 | 19 | 1.32 | 0.31 - 5.71 | 0.71 |
| | Not influential | 34 | 43 | 1.58 | 0.39 - 6.34 | 0.52 |
| Lack Of Appropriate Laws | Very influential | 16 | 13 | 1 | - | - |
| | Fairly influential | 23 | 33 | 1.77 | 0.71 - 4.37 | 0.22 |
| | Influential | 20 | 18 | 1.11 | 0.42 - 2.92 | 0.84 |
| | Not influential | 17 | 36 | 2.61 | 1.03 - 6.62 | 0.04 |

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|---|--------------------|----|----|---------|---------------|-------|
| Weight Management | Very influential | 47 | 43 | 1 | - | - |
| | Fairly influential | 07 | 16 | 2.50 | 0.94 - 6.66 | 0.07 |
| | Influential | 21 | 26 | 1.35 | 0.67 - 2.75 | 0.40 |
| | Not influential | 01 | 15 | 16.40 | 2.08 - 129.42 | 0.01 |
| Curiosity | Very influential | 08 | 06 | 1 | - | - |
| | Fairly influential | 25 | 25 | 1.33 | 0.40 - 4.40 | 0.64 |
| | Influential | 27 | 23 | 1.14 | 0.34 - 3.75 | 0.21 |
| | Not influential | 16 | 46 | 3.83 | 1.15 - 12.75 | 0.03 |
| Night Clubbing | Very influential | 02 | 02 | 1 | - | - |
| | Fairly influential | 17 | 18 | 1.06 | 0.13 - 8.38 | 0.96 |
| | Influential | 06 | 08 | 1.33 | 0.14 - 12.37 | 0.80 |
| | Not influential | 51 | 72 | 1.41 | 0.19 - 10.35 | 0.73 |
| Poverty | Very influential | 32 | 35 | 1 | - | - |
| | Fairly influential | 10 | 16 | 1.46 | 0.58 - 3.69 | 0.42 |
| | Influential | 23 | 38 | 1.51 | 0.75 - 3.06 | 0.25 |
| | Not influential | 11 | 11 | 0.91 | 0.35 - 2.40 | 0.86 |
| School Environment | Very influential | 10 | 12 | 1 | _ | - |
| | Fairly influential | 27 | 36 | 1.11 | 0.41 - 2.95 | 0.83 |
| | Influential | 19 | 18 | 0.79 | 0.27 - 2.27 | 0.66 |
| | Not influential | 20 | 34 | 1.42 | 0.52 - 3.87 | 0.50 |
| Knowing about substances | Strongly agree | 09 | 04 | 1 | _ | - |
| from friends | Agree | 04 | 00 | Omitted | _ | _ |
| | Undecided | 03 | 00 | Omitted | - | - |
| | Disagree | 10 | 17 | 3.83 | 0.93 - 15.72 | 0.06 |
| | Strongly disagree | 50 | 79 | 3.56 | 1.04 - 12.16 | 0.04 |
| Having some friends who | Strongly agree | 10 | 02 | 1 | _ | _ |
| take substances | Agree | 01 | 02 | 10.00 | 0.58 - 171.20 | 0.11 |
| | Undecided | 00 | 02 | Omitted | | |
| | Disagree | 30 | 12 | 2.00 | 0.38 - 10.51 | 0.41 |
| | Strongly disagree | 35 | 82 | 11.71 | 2.44 - 56.25 | 0.01 |
| Using substances to belong to | Strongly agree | 51 | 41 | 1 | _ | _ |
| friends | Agree | 19 | 19 | 1.94 | 0.51 - 3.05 | 0.63 |
| | Undecided | 01 | 09 | 9.49 | 0.99 - 98.41 | 0.46 |
| | Disagree | 09 | 19 | 1.66 | 0.64 - 4.39 | 0.30 |
| | Strongly disagree | 03 | 33 | 13.68 | 3.91 - 47.82 | <0.01 |
| Having parents who also take | Strongly agree | 60 | 63 | 1 | _ | _ |
| substances | Agree | 04 | 19 | 9.86 | 0.87 - 9.35 | 0.08 |
| | Undecided | 09 | 05 | 2.30 | 0.44 - 12.74 | 0.81 |
| | Disarree | 05 | 10 | 1.90 | 0.69 - 5.90 | 0.96 |
| | Strongly disagree | 05 | 10 | 1.90 | 0.62 - 5.90 | 0.20 |
| Cultura which allows taking | Strongly agree | 55 | 69 | 1 | | - |
| of substances | Agree | 10 | 19 | 1 | - 0.87 - 9.14 | 0.79 |
| | Undecided | 12 | 12 | 0.69 | 0.37 = 2.14 | 0.19 |
| | Diagama | 01 | 10 | 3.55 | 0.58 - 52.71 | 0.26 |
| | Disagree | 06 | 10 | 1.48 | 0.50 - 4.33 | 0.48 |
| | Surongly disagree | 02 | 12 | 5.32 | 1.14 - 24.84 | 0.03 |
| The perception that using substances makes people cool | Strongly agree | 39 | 29 | 1 | - | - |
| | Agree | 15 | 14 | 1.26 | 0.52 - 3.00 | 0.61 |
| | | | | | | |

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|----------------------------|-------------------|----|----|-------|--------------|--------|
| | Undecided | 06 | 11 | 2.47 | 0.82 - 7.44 | 0.11 |
| | Disagree | 13 | 18 | 1.86 | 0.79 - 4.40 | 0.16 |
| | Strongly disagree | 03 | 28 | 12.55 | 3.48 - 45.32 | < 0.01 |
| Coping with school stress | Strongly agree | 46 | 39 | 1 | - | - |
| | Agree | 07 | 06 | 1.01 | 0.31 - 3.26 | 0.99 |
| | Undecided | 07 | 06 | 1.01 | 0.31 - 3.26 | 0.99 |
| | Disagree | 12 | 09 | 0.88 | 0.34 - 2.32 | 0.80 |
| | Strongly disagree | 04 | 40 | 11.79 | 3.88 - 35.89 | < 0.01 |
| Teachers buying drugs for | Strongly agree | 29 | 26 | 1 | - | - |
| students | Agree | 20 | 19 | 1.06 | 0.47 - 2.41 | 0.89 |
| | Undecided | 03 | 06 | 2.23 | 0.51 - 9.83 | 0.29 |
| | Disagree | 15 | 16 | 1.19 | 0.49 - 2.87 | 0.70 |
| | Strongly disagree | 09 | 33 | 4.09 | 1.65 - 10.13 | 0.002 |
| Stressful finance clearing | Strongly agree | 12 | 06 | 1 | - | - |
| | Agree | 20 | 17 | 1.70 | 0.53 - 5.50 | 0.38 |
| | Undecided | 06 | 18 | 6.00 | 1.56 - 23.07 | 0.01 |
| | Disagree | 19 | 25 | 2.63 | 0.84 - 8.29 | 0.10 |
| | Strongly disagree | 19 | 34 | 3.58 | 1.16 - 11.07 | 0.03 |
| Exam failure | Strongly agree | 08 | 05 | 1 | - | - |
| | Agree | 11 | 08 | 1.16 | 0.28 - 4.92 | 0.84 |
| | Undecided | 08 | 09 | 1.80 | 0.41 - 7.81 | 0.43 |
| | Disagree | 27 | 30 | 1.78 | 0.52 - 6.10 | 0.36 |
| | Strongly disagree | 22 | 48 | 3.49 | 1.02 - 11.90 | 0.04 |

Page

cOR= Crude odds ratio. CI Confidence interval. The P-value is significant at a 0.05 level

Multivariate Logistic Regression to Identify Factors Independently Associated with Substance Use among the University Students at Kampala International University-Western Campus.

Table 10 shows multivariate logistic regression to identify factors independently associated with substance use among the University students at Kampala International University-Western Campus. Factors with a p-value less than 0.20 with a bivariate logistic regression analysis were considered for multivariate analysis. Through a stepwise logistic regression with the removal of the least significant variable in each step, Weight Management, Poor role modelling by teachers, Stressful finance clearing and too much freedom at campus remained significantly associated with substance use among study participants. Study participants who confessed that weight management was not influential to substance use were 61.6 times more likely to abuse substances than those who said weight management was very influential (AOR 61.6, 95%CI 2.71 - 1381, P=0.01). Students who disagreed that Poor role modelling by teachers contributes to substance use were 5.31 times more likely to abuse substances than their counterparts who strongly agreed to the same statement (AOR 5.31, 95%CI 1.25 - 22.59, P=0.02). Students who were undecided as to whether stressful finance clearing contributes to substance use were 17.08 times more likely to abuse substances than the students who strongly agreed to the same statement (AOR 17.08, 95%CI 2.51 - 116.4, P=0.004). Lastly, study participants who disagreed that too much freedom at campus contributes to substance use were 88% protected from substance abuse compared to the study participants who strongly agreed that too much freedom at campus contributes to substance use (AOR 0.12, 95%CI 0.02 - 0.65, P=0.01).

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| Table 6: Multivariate Logistic Regression to Identify Factors Independently Associated with Sub- | stance |
|--|--------|
| Use among the University Students at Kampala International University-Western Campus. | |

| Variable | Category | Substance Use | | Aor | 95% Ci | P Value |
|--|--------------------|---------------|---------|-------|--------------|---------|
| | | NO | YES | | | |
| | | (n=76) | (n=100) | | | |
| Lack Of Appropriate Laws | Very influential | 16 | 13 | 1 | - | - |
| | Fairly influential | 23 | 33 | 1.24 | 0.28 - 5.47 | 0.77 |
| | Influential | 20 | 18 | 0.60 | 0.11 - 3.20 | 0.55 |
| | Not influential | 17 | 36 | 1.49 | 0.29 - 7.58 | 0.63 |
| Weight Management Curiosity Culture which allows | Very influential | 47 | 43 | 1 | - | - |
| | Fairly influential | 07 | 16 | 2.34 | 0.47 - 11.66 | 0.30 |
| | Influential | 21 | 26 | 1.02 | 0.31 - 3.34 | 1.00 |
| | Not influential | 01 | 15 | 61.16 | 2.71 - 1381 | 0.01 |
| | Very influential | 08 | 06 | 1 | - | - |
| | Fairly influential | 25 | 25 | 0.98 | 0.12 - 7.89 | 0.99 |
| | Influential | 27 | 23 | 1.57 | 0.21 - 11.42 | 0.66 |
| | Not influential | 16 | 46 | 1.45 | 0.19-11.12 | 0.72 |
| | Strongly agree | 55 | 62 | 1 | - | - |
| the taking of substances | Agree | 12 | 12 | 0.10 | 0.01 - 1.27 | 0.08 |
| substances | Undecided | 01 | 04 | 0.03 | 0.01 - 1.97 | 0.10 |
| | Disagree | 06 | 10 | 0.99 | 0.11 - 9.06 | 0.99 |
| | Strongly disagree | 02 | 12 | 0.09 | 0.01 - 2.28 | 0.14 |
| Perception that using | Strongly agree | 39 | 29 | 1 | - | - |
| substances makes | Agree | 15 | 14 | 0.98 | 0.22 - 4.38 | 0.98 |
| 1 1 | Undecided | 06 | 11 | 4.00 | 0.58 - 27.52 | 0.16 |
| | Disagree | 13 | 18 | 1.13 | 0.20 - 6.47 | 0.89 |
| | Strongly disagree | 03 | 28 | 4.13 | 0.67 - 25.58 | 0.13 |
| Poor role modelling | Strongly agree | 14 | 11 | 1 | - | - |
| by teachers | Agree | 14 | 16 | 3.27 | 0.73 - 14.76 | 0.12 |
| | Undecided | 11 | 09 | 2.71 | 0.58 - 12.68 | 0.21 |
| | Disagree | 17 | 23 | 5.31 | 1.25 - 22.59 | 0.02 |
| | Strongly disagree | 20 | 41 | 2.95 | 0.78 - 11.18 | 0.11 |
| Teachers buying drugs for students | Strongly agree | 29 | 26 | 1 | - | - |
| | Agree | 20 | 19 | 0.59 | 0.18 - 2.03 | 0.41 |
| | Undecided | 03 | 06 | 0.74 | 0.12 - 4.74 | 0.75 |
| | Disagree | 15 | 16 | 0.98 | 0.27 - 3.57 | 0.98 |
| | Strongly disagree | 09 | 33 | 1.18 | 0.34 - 4.07 | 0.79 |
| Stressful finance clearing | Strongly agree | 12 | 06 | 1 | - | - |
| | Agree | 20 | 17 | 3.69 | 0.73 - 18.67 | 0.11 |
| | Undecided | 06 | 18 | 17.08 | 2.51 - 116.4 | 0.004 |
| | Disagree | 19 | 25 | 3.47 | 0.74 - 16.38 | 0.12 |

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|----------------------------|---|---|---|---|--|--|--|
| | Strongly disagree | 19 | 34 | 3.47 | 0.81 - 14.82 | 0.09 | |
| 27 Exam failure | Strongly agree | 06 | 09 | 1 | - | - | |
| | Agree | 07 | 05 | 0.23 | 0.03 - 1.73 | 0.15 | |
| | Undecided | 04 | 09 | 1.03 | 0.13 - 8.07 | 0.98 | |
| | Disagree | 42 | 19 | 0.12 | 0.02 - 0.65 | 0.01 | |
| | Strongly disagree | 17 | 58 | 1.48 | 0.32 - 6.9 | 0.62 | |
| | Strongly agree | 08 | 05 | 1 | - | - | |
| | Agree | 11 | 08 | 0.80 | 0.12 - 5.29 | 0.82 | |
| | Undecided | 08 | 09 | 1.93 | 0.29 - 12.71 | 0.49 | |
| | Disagree | 27 | 30 | 1.77 | 0.32 - 9.71 | 0.51 | |
| | Strongly disagree | 22 | 48 | 2.49 | 0.46 - 13.29 | 0.29 | |
| | nttps://www.eejournals Too much freedom at campus Exam failure | https://www.eejournals.org Too much freedom at campus | https://www.eejournals.org Too much freedom at campus Strongly agree 06 07 07 Undecided 04 Disagree 42 Strongly disagree 17 Exam failure Strongly agree 08 Agree 11 Undecided 08 Disagree 27 Strongly disagree 22 | https://www.eejournals.org Strongly disagree 19 34 Too much freedom at campus Strongly agree 06 09 Agree 07 05 Undecided 04 09 Disagree 42 19 Strongly disagree 17 58 Exam failure Strongly agree 08 05 Agree 11 08 Undecided 08 09 Exam failure Strongly agree 27 30 Strongly disagree 22 48 | https://www.eejournals.org Strongly disagree 19 34 3.47 Too much freedom at campus Strongly agree 06 09 1 Agree 07 05 0.23 Undecided 04 09 1.03 Disagree 42 19 0.12 Strongly disagree 17 58 1.48 Exam failure Strongly agree 08 05 1 Qree 11 08 0.80 19 Disagree 27 30 1.77 Strongly disagree 22 48 2.49 | Inttps://www.eejournals.org Open Access Strongly disagree 19 34 3.47 0.81 – 14.82 Too much freedom at campus Strongly agree 06 09 1 - Agree 07 05 0.23 0.03 – 1.73 0.13 – 8.07 Undecided 04 09 1.03 0.13 – 8.07 Disagree 42 19 0.12 0.02 – 0.65 Strongly disagree 17 58 1.48 0.32 – 6.9 Exam failure Strongly agree 08 05 1 - Agree 11 08 0.80 0.12 – 5.29 Undecided 08 09 1.93 0.29 – 12.71 Disagree 27 30 1.77 0.32 – 9.71 Strongly disagree 22 48 2.49 0.46 – 13.29 | |

AOR= Adjusted odds ratio. CI Confidence interval. P Value significant at 0.05 level

Page |

DISCUSSION

The Prevalence of Substance use among Students Attending Kampala International University - Western Campus Stafstrom & Agarth [17] found out that almost half of the students in Mbarara University in Uganda were current alcohol users, and a quarter of them had engaged in heavy episodic drinking unlike in the present study where majority of the students most frequently abused gasoline. Alcohol was the most used substance in the previous study probably because it is cheaper than the other substances. A study done among students in selected Universities in Kampala Uganda found out that, 55.2% were using substances which is in line with the finding of the present study where 56.82% of the study participants were substance users. A possible reason for the agreement of study findings could be because both studies were conducted in the same country [18]. A crosssectional survey done in Selected Secondary Schools in Uganda revealed that about 70.1% had ever used substances. Only 39.1% abused substances and this figure is low when compared to the prevalence found in the present study [16]. The reason for the discrepancy could be because the previous study was done among secondary students. The results of this study also indicate that Alcohol is the most used substance followed by Marijuana, Shisha and the least substance used is Gasoline. These findings are in agreement with earlier studies on substance and drug abuse among students, such as the one done in Kampala and Wakiso schools which found that Alcohol and cannabis(marijuana) were the most commonly abused substances and drugs among students [19]. Another recent study done to find out the prevalence and risk factors for substance and drug abuse among university students in South Western, Nigeria noted that the above drugs were some of the most commonly abused drugs among students [20]. The above findings for the commonly abused substances and drug abuse among students at Kampala International University-Western Campus can be attributed to the fact that these drugs, most especially alcohol, are readily available and can be conveniently purchased at a cheap price which university students can afford. Alcohol isn't illegal and can be obtained from shops, bars, and restaurants. Despite the ban on selling Waragi in sachets by the government of Uganda, the students still buy this sachet alcohol cheaply since it is now packed in small plastic bottles at less than the same price and quantity as the banned sachet Waragi. A good section of the students whom the researcher interacted with also claimed they are more open to using marijuana since they believe it is not as harmful as tobacco and alcohol. They also think it is "hip and trendy" to smoke or take marijuana. Even with the ban on shisha, the drug is still sold in bars all over the country $\lceil 19 \rceil$. Students, especially females, indulge themselves in these drugs.

Determinants of Substance Use among the University Students at Kampala International University-Western Campus.

The second specific objective of this study was to determine the determinants of substance use among the university students at Kampala International University-Western Campus. After adjusting for confounders, weight management, Poor role modelling by teachers, Stressful finance clearing and too much freedom at campus were found to be independent determinants of substance use among the study participants. Study participants who confessed that weight management was not influential to substance use were 61.6 times more likely to use substances than those who said weight management was very influential (AOR 61.6, 95%CI 2.71 - 1381, P=0.01). The finding of the study is in line with the finding of a descriptive cross-sectional study which employed a

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quantitative method of data collection was used which involved 100 study participants from a population of students in selected universities in Uganda. Results of the study revealed that weight management was found to be significantly associated with substance use ($X^2=6.626$. P-value=0.010) [18]. When university students at Bishop Stuart University and Mbarara University of Science and Technology were asked about the perceived factors that influenced them to use substances, some of them cited that the desire to manage their weight forced them into using substances to remain attractive $\lceil 21, 22 \rceil$. This finding is in line with the finding of the present study and the Page | 28 possible reason for agreement of the study finding could be because both studies were conducted in the same geographical region. In a research that was carried out in Nigeria by Abbot et al. [19], it was found that being a desire to manage weight was associated with a high risk of substance abuse. This finding is consistent with what was found in the present study. Similarly, a study among Egerton University Students in Njoro-Kenya found a significant association between the prevalence of substance use and the need for weight management [23]. This finding is in agreement with the findings of the present study. The result of this study is consistent with what was found by Zarin et al. in their study conducted to find out the prevalence and socio-demographic determinants of substance abuse among degree and college students of Meerut city. They found that substance use was statistically associated with weight management [24].. According to Shek and Lin [25], significant changes in problem behavior occur over brief periods in early adolescence, especially during the transition to middle school. The literature addressing gender identity, peer relationships and rural communities indicate that students attending rural, middle schools are particularly at risk for illegal drug use and peers are likely to play a pivotal role in the behavior. Poor role modelling by teachers (AOR 5.31, 95%CI 1.25 - 22.59, P=0.02); Students who disagreed that Poor role modelling by teachers contributes to substance use were 5.31 times more likely to abuse substances than their counterparts who strongly agreed to the same statement. Drug use is spreading like a mushroom and invading every level of each nation like home, educational institution and affecting individuals of all classes. Everywhere the target group is our young population between the ages of 18 to 30. This is the period of life for exploration and experimentation - the means by which 'young people learn who they are and what they want to do with their lives', and trying out new things and making first-time choices $\lceil 25 \rceil$. It is the responsibility of the teachers or the lecturers to show good example to the students by being good role models but when they exhibit poor role modeling it can be dangerous to the students. Engagement in substance use can have negative implications for young adults. Previous research has shown that substance use at young ages is associated with decreased educational attainment and labor market productivity [26]. Binge drinking in particular has been linked to driving under the influence of alcohol (DUI) and accidental deaths in college-age students. As illicit drugs are illegal the use of these substances places young adults at risk of involvement in the criminal justice system. Thus, substance use can have substantial negative consequences for young adults [19]. Such consequences could be curbed if the teachers and lecturers exhibit good role modeling. Stressful finance clearing (AOR 17.08, 95%CI 2.51 -116.4, P=0.004); Students who were undecided as to whether stressful finance clearing contributes to substance use were17.08 times more likely to use substances than the students who strongly agreed to the same statement. The result of this study is in line with the finding of a study conducted among students in Woreta Town, Northwest Ethiopia which found that stressful finance clearing was significantly associated with substance use [27]. When university students at Bishop Stuart University and Mbarara University of Science and Technology were asked about the perceived factors that influenced them to use substances, they cited the stressful finance clearance process they were subjected to by the university accounts department forced them into using substances to vent their disappointment, at exam time, this stressful clearance they were subjected to made some of them miss out on exams $\lceil 24 \rceil$. This finding is consistent with the finding of the present study and the possible reason for the consistency could be because of the similarity of the study sites and similarity of the study designs used in the 2 studies. Too much freedom at campus (AOR 0.12, 95%CI 0.02 - 0.65, P=0.01); study participants who disagreed that too much freedom at campus contributes to substance use were 88% protected from substance abuse compared to the study participants who strongly agreed that too much freedom at campus contributes to substance use. When students find too much freedom at campus, it makes them vulnerable to experiment substances. They try to remove depression using drugs as a tool. Failed relationships and broken hearts are also major inducements of substance abuse in young people and all these result from too much freedom at campus. Young people belonging to the higher class of the society take alcohol and other drugs to maintain their status in the friend circles [28]. A

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cross-sectional study carried out with students from urban and rural public schools in a countryside city in Goiás, Brazil revealed that too much freedom at campus (adPR = 1.60) was associated with substance abuse among the study participants [29]. A validated questionnaire was used in a cross-sectional survey which was conducted among 230 undergraduate and postgraduate medical students in a private medical college. Results showed that freedom on campus was significantly associated with substance abuse among the study participants [1]. A study done among university students in Turkey revealed that studying being given a lot of freedom at campus, was significantly positively associated with substance abuse among the study participants [30]. The findings of the 2

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previous studies above are all consistent with the findings of the present study.

CONCLUSION

This study has shown that the level of substance use is high among the study participants which is a clear indication that the university administration has to come up with strategies to curb the vice. The study concluded that the determinants of substance abuse were weight Management, poor role modelling by teachers, stressful finance clearing and too much freedom on campus.

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