

# The Prevalence of Alcohol Abuse Among Egerton University Students in Njoro-Kenya

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## Abstract

The main objective of higher institutions of learning in Kenya is to provide education and growth experiences for its students but alcohol abuse has continued to be a problem in the university campuses that is slowing down their progress and the Kenya vision 2030 that envisages a healthy population free from the impact of alcohol abuse through the reduction of the prevalence and the impact of alcohol abuse disorders in order to attain the highest possible level of physical, social and mental health. Despite the growing problems of global alcohol abuse, accurate information on the prevalence of alcohol abuse among university students in Kenya is still inadequate. The study therefore aimed to determine the prevalence of alcohol abuse among the Egerton University students. This was a cross sectional study which investigated the prevalence of alcohol abuse among 355 students of Egerton university Njoro campus. Stratified random sampling was utilized to select the study group and the Alcohol Use Disorders Identification Test questionnaire was used to assess the prevalence of alcohol abuse. Data was analysed using SPSS version 18.0. Both descriptive and inferential statistics were used. Data presentation was done using frequency tables, charts and in narratives. The study was cleared by the Kenyatta National Hospital and the University of Nairobi ethics board. The study found out that the prevalence of alcohol abuse among Egerton University students is 21.1 %. The study found significant association between the prevalence of alcohol abuse and the year of study, marital status, family's economic status and the living arrangements (with whom). There was no significant association between the prevalence of alcohol abuse and age, programme of study undertaken and place of residence. It was concluded that alcohol abuse is prevalent among Egerton university students and is associated with year of study, marital status, family economic status and living arrangement. Based on the findings of this study, there is need to detect, strengthen various policies and programmes and accordingly make changes to address the factors that contribute to alcohol abuse in the institutions of higher learning in Kenyan. The findings of the study will help Commission of University Education (CUE) to better understand the current situation and accordingly make changes to address the factors that contribute to alcohol abuse in these institutions.

**Keywords:** Alcohol abuse, prevalence, alcohol, socio demographic factors

## 1. Introduction

The main objective of institutions of higher learning in Kenya is to provide education and growth experiences for its students but alcohol abuse has continued to be a problem in the university campuses that is slowing down their progress and the Kenya vision 2030 that envisages a healthy population free from the impact of alcohol abuse 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 (GOK, 2012). WHO, (2010) stated that “mental health refers to the successful performance of mental function, resulting in production activities, fulfilling relationships with other people and the ability to adapt to change and to cope with adversity”.

It is evident that about 2 billion people globally take alcohol and 76.3 million are diagnosed with alcohol use disorders (WHO, 2004). But in many parts of the world alcohol is used as a socializing agent after work and is profoundly rooted in many cultures worldwide. Currently, changes are noticeable in drinking patterns worldwide that includes rates of alcohol abuse to excess in general population, with substantial sporadic alcohol abuse among young people (WHO, 2009), particularly between 15-24 years of age (Moreira, Smith, Foxcroft, & Moreira, 2009). Globally, 320 000 young people aged 15-29 years die annually, from alcohol-related causes, resulting in 9% of all deaths in that age group (WHO,2011). Dantzer, Wardle, Fuller, Pampalone, & Steptoe (2006) indicated that in USA 40% of adolescents take drugs and 60% consume alcohol while in Asia 48.9% of University students' use drugs, 24% being 1st years while 75.6% are final years and that Ireland had the highest proportions of male and female who abuse alcohol. Dentzer et al (2006) further stated that peer pressure influence young people to use intoxicating substances with alcohol being the most abused which is a common feature among university students globally. In China, Cheng-Ye, Pei-Jin and Yi, (2012) found out that alcohol abuse among university students was prevalent and that 80.8% were lifetime drinkers, 49.3% were current drinkers (drank alcohol in the past 30 days) and 23.5% were binge drinkers (drank five or more drinks in a period of 2 hours). Studies show that alcohol is the most frequently abused intoxicating substance among university students in Africa and it has been blamed for rapid economic, social, and cultural transitions that most

countries in sub-Saharan Africa are experiencing which created a good medium for increased alcohol abuse (John-Lengba, Ezech, Guttella, Kumi - Kyereme, & Neema, (2004).

A research done among University students in Ethiopia found that alcohol was the most abused substance, but there was little evidence available about the scale of substance use in the population (Fekadu, Atalay & Charlotte, 2007). In South Africa, a study among university students found that 75% of respondents abused alcohol and 50% moderate to heavy drinkers were young men (Nkhoma & Maforah, 1994). In Malawi, the prevalence of alcohol abuse among university students showed that 54.1% were males and 16.5% were females (Zverev, 2008). Stafstrom & Agarth (2012) 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. Wakgari and Aklilu (2011) had earlier found that 31% of medical students of Addis Ababa University from first year to internship were life-time users of alcohol and 22% reported drinking alcohol in the past year.

Alcohol abuse in the institutions of higher learning in Kenya threatens the achievement of vision 2030 and holistic wellbeing (GOK, 2012). According to NACADA, (2007), the practice of alcohol abuse has developed to a cultural view and tradition rooted in every level of university environment and that practice is handed down through cohorts of alcohol abusers strengthen students' expectation that alcohol is a necessary factor for social success. Hagembe & Simiyu (2006) indicated that in Kenya, the society does not take alcohol abuse as a major problem in spite of the fact that many people suffer from conditions associated with alcohol abuse.

Odek-Ogunde & Pande-Leak (1999) in a study reported a high rate of alcohol abuse among students at a Kenyan private university at 84.2%. Egerton University has no alcohol and drug policy. JKUAT (2011) policy on alcohol and other substances in their institution showed that alcohol is readily available and accessible owing to the number of alcohol selling premises within its community with use of alcohol during staff and student functions.

The widespread of this problem resulted in the creation of NACADA by the government of Kenya in 2012 which formed a policy to manage the problem. This may not be achieved very soon considering the porous boundary that Kenya has and the Police officers who are prone to corruption and can easily be bribed for illicit brew and contra band drugs which slip under their watch. Despite the growing problems of alcohol abuse more broad studies with organized approaches in the world, needs to be revised to produce representative results on alcohol abuse in university settings. Hence the study sought to determine the prevalence of alcohol abuse among Egerton University students with the ultimate aim to improve mental health and to increase pass rate and completion rate among the students. This study used a cross sectional descriptive research design since the data dealt with the effects of natural occurring phenomena (Tuchman, 1978).

## 2. Methodology

The population of this study were undergraduate students at Egerton University Njoro Kenya. The population of the study were undergraduate students in year 1, 2, 3 and 4, both resident and non-resident students. The total population is 9,588 students of Egerton University main campus. All the undergraduate students of Egerton University, Njoro Campus who include first, second, third and fourth years, who are both resident and non-resident. Consent was obtained from the participants.

Purposive and stratified random sampling techniques were used in the study. The institution for the study (Egerton University) was purposively selected because it was convenient for the researcher and inadequate research has been done on alcohol abuse. Using Steins method the sample size of the students was determined. Stephan, (1945) suggested Steins method which is based on the use of preliminary sample (Nassiuma, 2000). Therefore the total sample size estimation was a total of 355 respondents. The study sample was selected using stratified random sampling technique based on records of those students in session at the Registrar Academic Affairs office. Students who consented were stratified into year of their study then proportionately sampled them according to their gender.

Alcohol Use Disorders Identification Test (AUDIT) questionnaire was used to collect data relating to the prevalence of alcohol abuse. The AUDIT instrument was developed by W.H.O and it is a Self – Administered Pencil and Paper Alcohol Screening Questionnaire. It is a 10-question survey that includes questions about the quantity and frequency of current drinking and drinking history. It was considered effective in identifying problem alcohol use as it has good sensitivity and specificity for detecting hazardous and harmful drinking and has been validated for use in a wide range of settings and populations (Coulton, Drummond, James, Godfrey, Bland, Parrot, Peters & Stepwise Research Team, 2006). The questionnaire for the study contained a series of ten AUDIT questions that include three questions on alcohol consumption, four questions on alcohol dependence symptoms, and three questions about alcohol-related problems. A cut-off score of six to eight is recommended for at-risk drinking in college students and young adults. The responses given by respondents for questions 1-10 were scored between 1 to 4 points which were then added up to determine if the individual has alcohol abuse. A total score of 8 or more indicated harmful drinking behaviour.

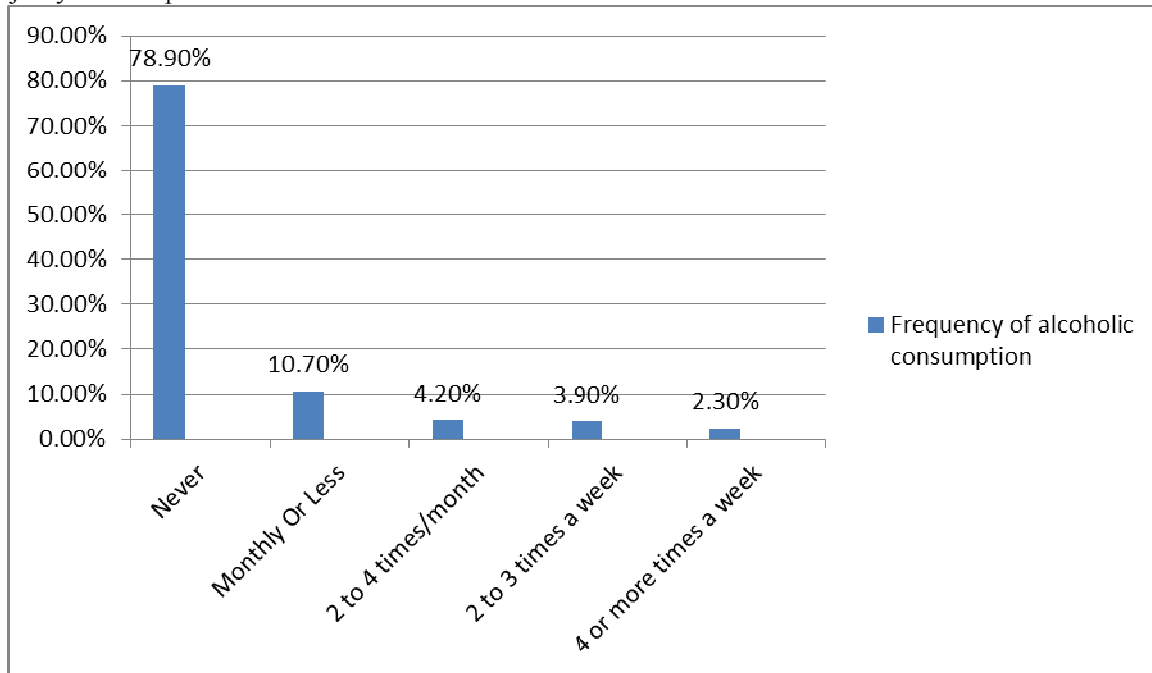
Descriptive statistics namely frequencies, percentages was used to analyse the data. Frequency tables represent the most commonly used method in presenting data in descriptive research (Kathuri & Pals, 1993). The analysis was done using Statistical Package for Social Sciences (SPSS) version 18.0.

### 3. Results

#### 3.1 Prevalence of Alcohol Abuse Among students.

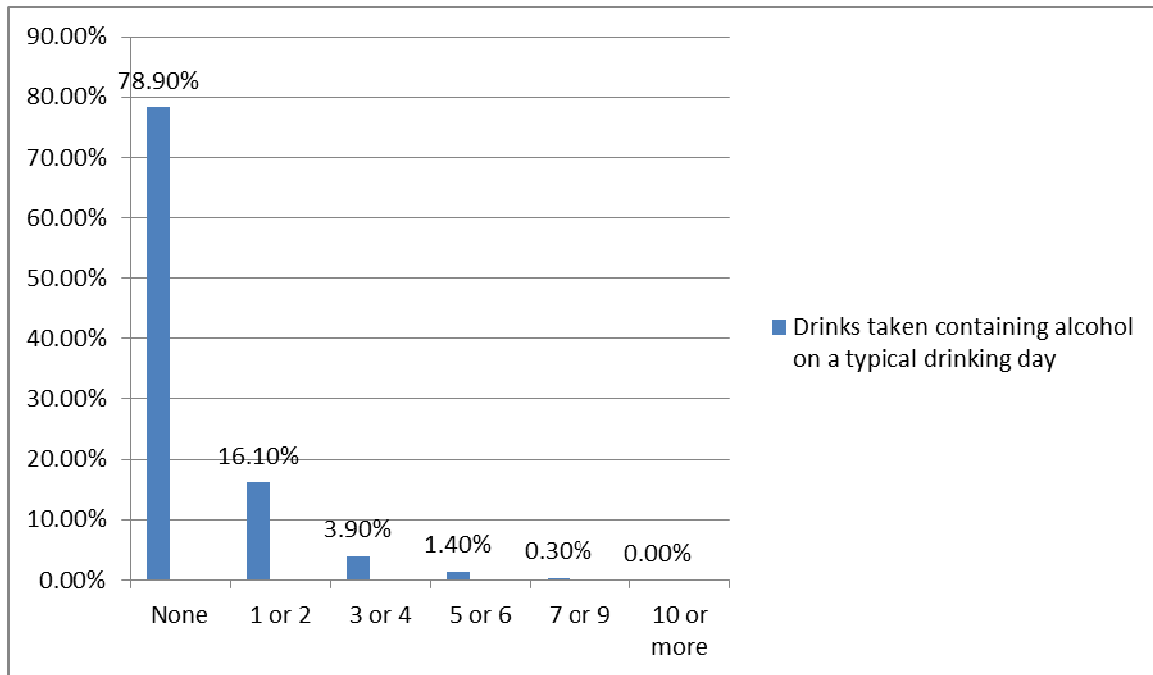
The study sought to examine the prevalence of alcohol abuse among Egerton university students.

Figure 1 below shows that majority of the respondents (78.9%) claimed to have never taken a drink containing alcohol. This was followed by 10.7% who said monthly or less, another 4.2% said that they took it 2 to 4 times/month, followed by 3.9% of the respondents who took alcoholic drink 2-3 days a week. The least majority were respondents who confirmed took an alcoholic drink 4 times a week at 2.3%.



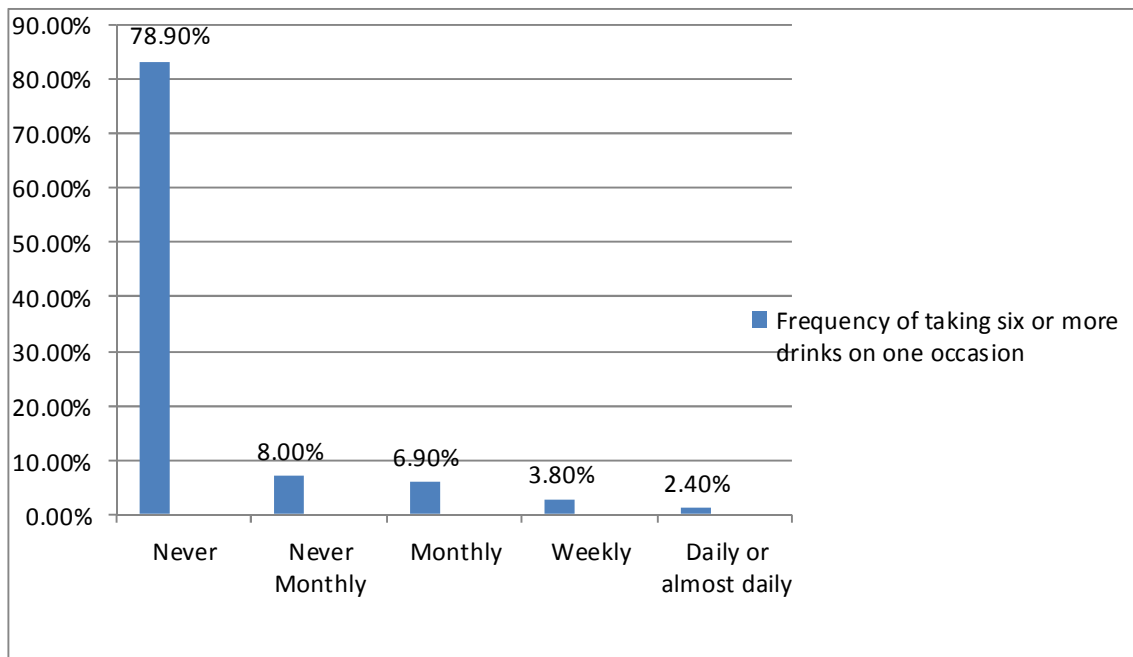
**Figure 1: Frequency of Alcoholic Drink Consumption**

Figure 2 below indicates that majority of the respondents (78.9%) never took alcoholic drinks on a typical day. Another 16.1% took 1-2 alcoholic drinks on a typical drinking day followed by 3.9% who took 3-4 alcoholic drinks on a typical day. 1.4% consumed 5-6 alcoholic drink and finally 0.3% who consumed 7-9 alcoholic drink on a typical day when drinking.



**Figure 2: Drinks taken containing alcohol on a typical drinking day.**

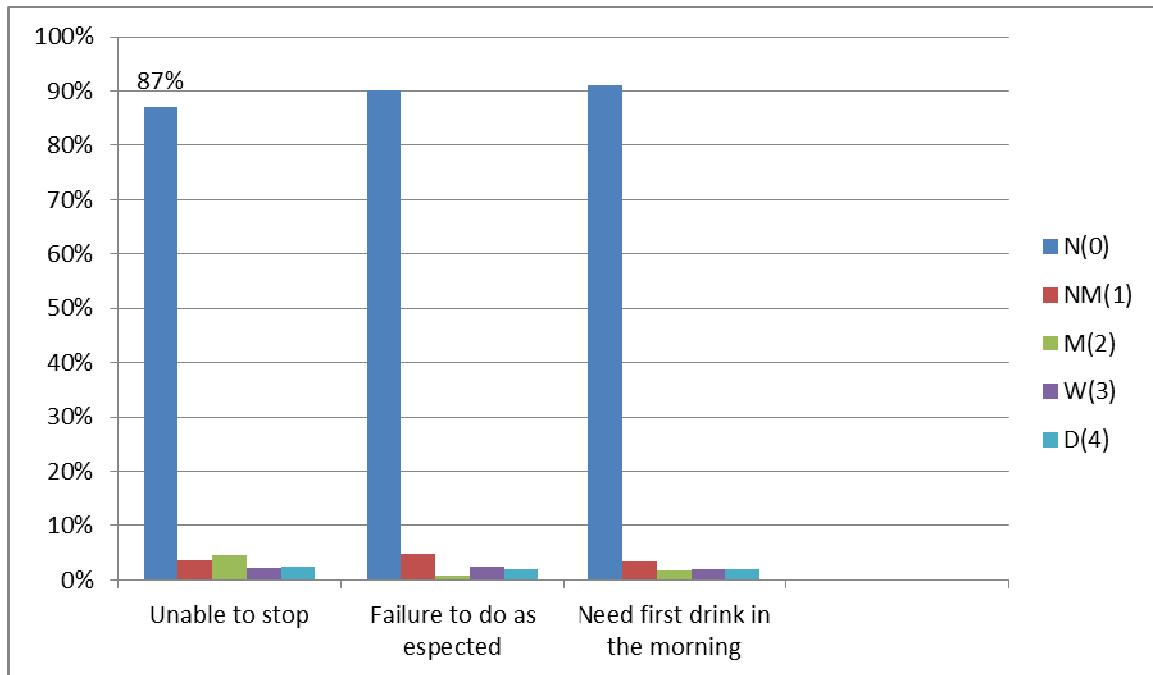
Figure 3 below shows that majority (78.9%) of the respondents have never taken six or more drinks on one occasion. Another 8% of the respondents confirmed to have taken 6 or more drinks in one occasion but never monthly. These were followed by 6.9% monthly, 3.8% weekly and 2.4 % daily or almost daily.



**Figure 3: Frequency of taking six or more drinks on one occasion**

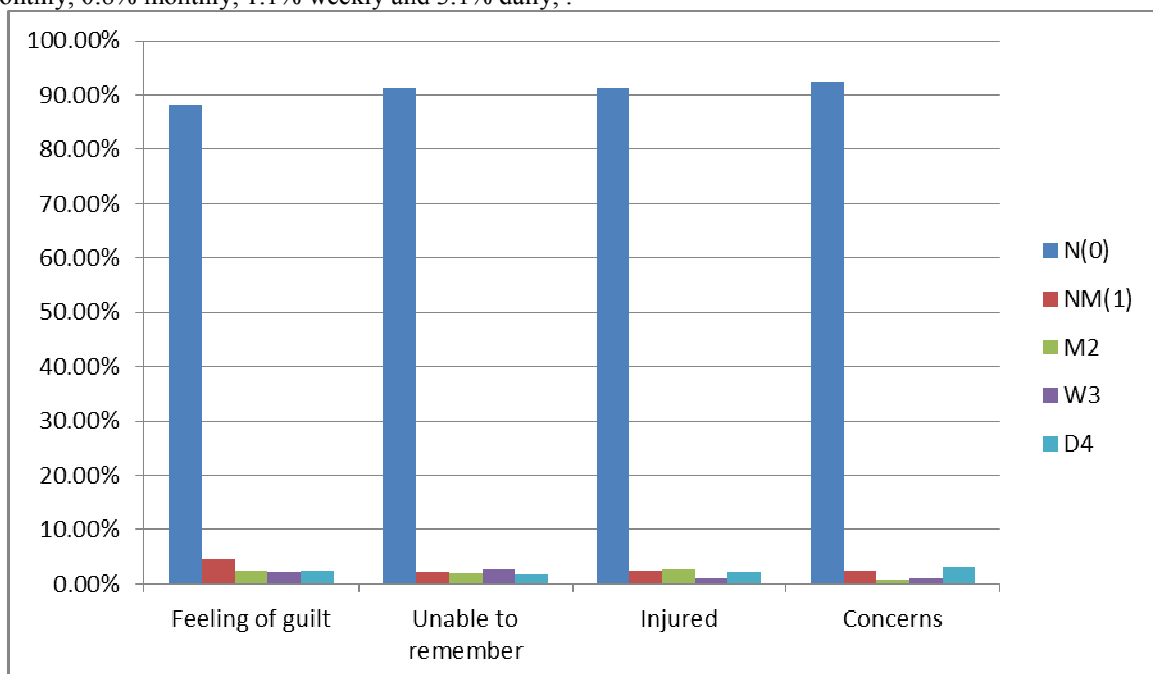
Figure 4 shows that a majority 87.0% of the respondents during the last one year have never felt they were unable to stop drinking once they started. 4.5% felt less than monthly they were unable to stop drinking while 3.7% were unable to stop drinking on a monthly basis while 2.3 and 2.5 were unable to stop on weekly and daily respectively. (90.1%) of the respondents never failed to do what was normally expected from them because of drinking in the last year. 2.5% and 2.0 % of the respondents failed to do what was normally expected from them because of drinking weekly and daily respectively. Majority of the respondents (91.0%) did not need a first drink in the morning to get them going after a heavy drinking session in the last year. 2.0% of the respondents needed a first drink in the morning both weekly and daily respectively.

Key: N=Never, NM=Never monthly, M=Monthly, W=Weekly, D/AD =Daily or almost daily



**Figure 4 Alcohol Drinking Behaviour**

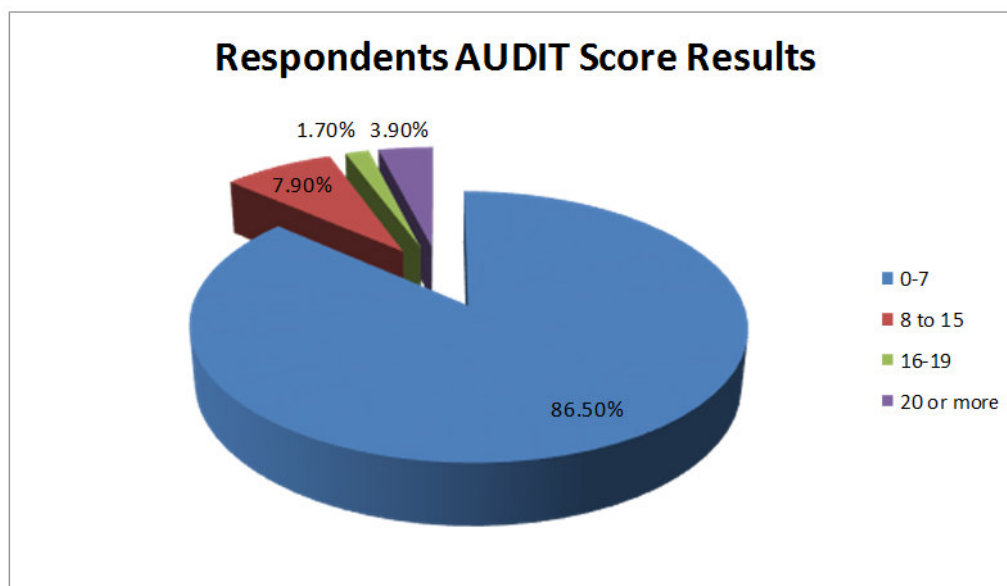
Figure 5 below shows that (88.2%) of the respondents have never had a feeling of guilt or remorse after drinking in the last year. 4.5% felt guilty but not often, 2.5% felt guilt every month, 2.3% felt guilt weekly while 2.5% felt deep remorse on daily basis. (91.3%) of the respondents were able to remember what happened the night before because they had been drinking. 8.8% either lost their memory a number of times in the year (2.3%), monthly (2.0%), weekly (2.8%), and even some daily (1.7%). 91.3% never got injured as a result of drinking, 2.5% - injured but not frequent, 2.8% monthly, 1.1% weekly and 2.3% daily. Finally whether a relative, friend, or a health worker been concerned about their drinking or suggested they cut down, Never 92.4%, 2.5% less than monthly, 0.8% monthly, 1.1% weekly and 3.1% daily, .



**Figure 5: Consequences**

As shown in Figure 6 below most of the respondents (86.5%) were at low risk level of alcohol abuse with scores of between 0-7 in the AUDIT. But considering the fact that the respondents are students in university it was worrying to find that 7.9% were at risky or hazardous level with scores between 8-15, 1.7% of the respondents on high risk or harmful level with scores between 16-19 and finally 3.9% of the respondents were at a high risk and definite harm of alcohol abuse as they scored 20 and above. About 14 % showing indications of

alcohol use disorders.



**Figure 6: Respondent AUDIT Score results**

#### 4.1 Discussion

##### 4.1.1 Prevalence of alcohol abuse

The prevalence of alcohol abuse was measured by alcohol consumption indicators. The study found that 21.1% had taken alcohol drink on monthly or less with 16.9% confirming to have taken 6 or more drinks in one occasion. This implies that the prevalence of alcohol abuse among Egerton university students is 21.1% and that most of the students do not abuse alcohol as many could have expected but also some of students are on high risk as shown by the findings which indicated that 7.9% scored between 8-15 indicating risky level, 1.7% scored between 16-19 showing harmful level and 3.9% scored between 20 and above which indicate a high risk and definite harm of alcohol abuse. The rates of the prevalence of alcohol abuse among Egerton University students could be relatively lower in comparison to other parts of the world and compared with the Kenyan general population. In line with this study was the study by NACADA (2007), which found the prevalence of current alcohol abuse of the general population to be about 13%. The low prevalence in the current study could be attributed to government's reinforcement of rules and regulations governing use of alcohol and creation of alcohol abuse awareness by the Egerton University counselling department. In contrast, most studies found high prevalence of alcohol abuse among university students for example a baseline survey conducted in June 2010 revealed that 33% of the student's abuse alcohol (JKUAT, 2011). In addition a South African study found an alcohol abuse prevalence rate of 39.1% (Madu & Matla, 2003). Odek-Ogunde & Pande-Leak (1999) reported highest rates of alcohol abuse among students at a Kenyan private university at 84%. In Malawi, the prevalence of alcohol abuse among university students was 54.1 % (Zverev, 2008). In Ethiopia a research article indicated that alcohol was most used by university students at 50.2% (Gezahegn, Andualem & Mitiku, 2014). Gezahegn, Andualem & Mitiku, (2015) found a prevalence rate of 50.2% at Hamaraya University in Ethiopia and 56.7% at Addis Ababa (Eshetu & Gedif, 2006). Atwoli, Mungla, Ndung'u, Kinoti & Ogot (2011) in a study done among college students in Eldoret revealed a prevalence rate of 51.9%. The differences noted in the prevalence rates could have been due to differences in instruments used which in this study was the AUDIT whereas in the other studies they used CAGE.

#### 4.2 Conclusion

The prevalence of alcohol abuse among Egerton University students is low at 21.1% as compared to other findings as in the foregoing discussion. However, there is evidence that some of the students are at high risk of harmful alcohol abuse.

The following recommendations emanated from the analysis results of the study: Detection of the students at risk and remedial measures to be undertaken in university; restricting availability of alcohol around the learning institution; sensitising lectures and fellow students to detect problems among their colleagues, The government should reinforce the regulation of the sale of alcohol through licensing, packaging, pricing, restricting the age of consumers and regulating opening hours for the selling points. This will ensure that the selling points are located away from university premises, Small portable packages are abolished and consumers below the age of 18 are barred from accessing to alcohol and finally the university management and student

counsellors' team needs to strengthen more the orientation programmes. From the research findings and conclusions the researcher recommends a similar study targeting all students in public universities in Kenya.

## References

- Atwoli, L., Mungla P. A., Ndung'u, M. N., Kinoti, K. C., & Ogot, E. M. (2011). *Prevalence of substance use among college students in Eldoret, western Kenya*, BMC Psychiatry <http://www.biomedcentral.com/1471-244X/11/34>
- Cheng-Ye, J., Pei-Jin, H., & Yi, S. (2012). *The Epidemiology of Alcohol Consumption and Misuse among Chinese College Students*. *Alcohol and Alcoholism*, 47(4), 467-472
- Choudhrey, V., Agardh, A., Stafstrom, M., & Ostergren, P. (2014) *Patterns of Alcohol Consumption and Risky Sexual Behaviour: a cross sectional among Uganda university students*. BMC Public Health 2014, 14:128 doi:10.1186/1471-2458-14-128
- Coulton, S., Drummond, C., James, D., Godfrey, C., Bland, JM., Parrot, S., Peters, T., & Stepwise Research Team. (2006). *Opportunistic screening for alcohol use disorders in primary care: comparative study*. British Medical Journal, 332: 511–517.
- Dantzer, C., Wardle, J., Fuller, R., Pampalone., & Steptoe. (2006). *International study of heavy drinking: attitudes and socio-demographic factors in university students*. Journal of American College Health, 55: 83–89.
- Fekadu, A., Atalay, A., & Charlotte, H. (2007), "Alcohol and drug abuse in Ethiopia: past, present and future," *African Journal of Drug & Alcohol Studies*, vol. 6, no. 1, pp. 39–53.
- Fernandez, A. A., Perez, M. A., Martinez, I. M., Bustillo, A. M., Barbado, H. FJ., De La Cruz, L. J., Diaz, P. R., Gutierrez, R. E., Delgado, P. C., Radondo, R. J., Ramon, G., & Jose, R., (2009). "Chronic fatigue syndrome: aetiology, diagnosis and treatment". Journal of BMC Psychiatry, 9 Suppl 1: S1.
- Gezahegn, T. A., & Mitiku, T. H. (2014). *Substance Use and Associated Factors among University Students in Ethiopia*: Journal of Addiction Volume 2014, Article ID 969837, 8 pages <http://dx.doi.org/10.1155/2014/969837> Hindawi Publishing Corporation. Harar, Ethiopia
- GOK. (2012). *The Mental Health Policy*, Ministry of Medical Services. The Government Printing Press, Nairobi.
- Hagembe, O. N. B., & Simiyu, S. (2006). *Programme Coordinator of Public Awareness NACADA*. Nairobi, Kenya.
- JKUAT. (2011). *Policy on Alcohol, Drug, and Substance Abuse*, WI-2-2-5-1. Nairobi.
- John-Lengba, J., Ezech, A., Guttella, G., Kumi-Kyereme, A., & Neema, S. (2004). "Alcohol, drug use, and sexual-risk behaviours among adolescents in four sub-Saharan African countries," Los Angeles, California, USA.
- Kathuri, N. J., & Pals, D. A. (1993). *Introduction to Education Research*. Njoro, Kenya: Egerton University Press.
- Madu, S. N., & Matla, M. P. (2003). *Illicit drug use, cigarette smoking and alcohol drinking behaviour, among a sample of high school adolescents in the Pietersburg area of the Northern Province, South Africa*. J Adolescents, 26:121-136.
- Moreira., Smith, LA., Foxcroft, D., & Moreira M, T. (2009). "Social norms interventions to reduce alcohol misuse in university or college students". *Cochrane Database of Systematic Reviews* (3): CD006748.
- NACADA. (2007). *Rapid situation assessment of drug and substance abuse*. Nairobi, Kenya.
- Nassiuma, D. K. (2000). *Survey Sampling: Theory and Methods*, Nairobi University Press.
- Odek-Ogunde, M., & Pande-Leak, D. (1999). *Prevalence of Substance Use among Students in a Kenyan University: A Preliminary Report*. East Afr Med J. 76(6):301-6.
- Stafstrom, M., & Agarth, A. (2012). *Socio-economic determinants for alcohol consumption and heavy episodic drinking in a Ugandan Student Population*: Int. J Alcohol Drug Re 1(1): 57-67.
- Tuckman, B. N. (1980). *Conducting Educational Research*, New York, Harvcourt Brace Javonovich , Inc.
- Wakgari, D. & Aklilu, A. (2011). *Substance use and its predictors among undergraduate medical students of Addis Ababa University in Ethiopia*. BMC Public Health. 11,660. doi:10.1186/1471-2458-11-660
- World Health Organization, (2004). *Global Status Report on Alcohol*. 20 Avenue Appia, 1211 Geneva, Switzerland.
- World Health Organization. (2009). *Mental Health, resilience and inequalities*. Publications WHO Regional Office for Europe Scherfigsvej 8DK-2100 Copenhagen, Denmark. (<http://www.euro.who.int/pubrequest>).
- World Health Organization. (2010). *Equity, social determinants and public health programmes*, ISBN 978 92 4 156397 0 (NLM classification: WA 525) Avenue Appia, 1211 Geneva 27, Switzerland.
- World Health Organization. (2011). *Global Status Report on Alcohol and Health*; WHO: Geneva, Switzerland.
- Zverev, Y. (2008). *Problem drinking among university students in Malawi*. Coll. Anthropol. 32, 27–31.