

*Full Length Research Paper*

## **Determinants of Alcohol Use by Students in Medical Training Colleges in South Nyanza Region, Kenya**

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### **Abstract**

Alcohol consumption is a global public health problem accounting for about 6% of mortality and 5% of disability adjusted life year's (DALYs) lost worldwide. An estimated 10-15 % of students in medical training institutions risk alcohol abuse in their lifetime. In Kenya, alcohol abuse is common among college youth though data on alcohol abuse by students in MTCs are still unclear. South Nyanza, the study area is within Nyanza Region in Kenya with high alcohol consumption with prevalence rate of 26.8% among general college students. The study sought to establish what determined alcohol use by students in MTCs in South Nyanza Region. Cross-sectional descriptive study design was used. Five colleges in the region namely: Kendu Mission School and KMTCs (Kisii, Nyamira, Migori, Homa Bay) were included in the study. A sample of 303 MTC students was recruited for the study. The study established that 113 (37.3%) of the respondents indulged in alcohol use because it was readily available within their colleges. Proximity of alcohol selling premises to their colleges was also a reason for alcohol use as reported by 135 (44.6%) of the respondents. Majority of the respondents 100 (33.0%) were introduced to alcohol use by friends. Curiosity was the main reason that made 73(24.1%) of the respondents to use alcohol for the first time. Mentorship from their tutors and peer education can help reduce alcohol use among the college students.

### **Introduction**

Alcohol consumption continues being a global public health and social issue (Ndegwa, S., Munene, A., Oladipo, 2017). It is estimated to account for 6% of mortality and 5% of disability adjusted life year's (DALYs) lost worldwide (Francis, 2015). Globally, it is estimated that 53% of the people aged 15 years and above have ever used alcohol (Francis, 2015).

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Although over a period of time there has been a significant change in the patterns of alcohol use, reports suggest increasing alcohol consumption in the developing countries in the sub-Saharan region (Acuda et al., 2011; Kinoti et al., 2013). It should however not be lost to observers that alcohol is widely available, accepted and its use is legal to adults in these societies (Odeyemi, 2014). This is characterized by heavy alcohol drinking observed among students including those in institutions of higher education. Alcohol consumption by students in institutions of higher learning has been described as widespread, dangerous, and disruptive (Ndegwa, S., Munene and Oladipo, 2017). The increasing consumption of alcohol is a cause for concern with a possible matching rise in alcohol related problems in those regions that are most at risk (Odeyemi, 2014).

The health and social consequences of alcohol consumption include intoxication, dependence and other biochemical effects leading to disease and injury. Liver disease is the most common medical complication of alcohol intoxication (Odeyemi, 2014). According to WHO (2012), close to 320,000 young people aged between 15 and 29 years die from alcohol-related causes. This accounts for 9% of all deaths affecting that age group. Alcohol consumption is also thought to contribute to incidences of rape, crime, pervasive sexual behaviours & addictions, mental health and emotional disorders (Changalwa, 2012). It remains a major threat to the academic performance and the future lives of these college students (Eze, 2015).

The NACADA report (2012) estimates that about 30% of Kenyans aged between 15 - 65 years have ever used an alcoholic drink in their lifetime. However, Changalwa (2012) reported that up to 70% of college students were using alcohol with a notable increasing trend. Nyanza region in Kenya is one of those with a high prevalence of alcohol consumption among students. According to NACADA (2010), alcohol prevalence among students generally was highest in Western 43.3%, followed by Nairobi 40.9% and Nyanza 26.8%. Similar high alcohol consumption levels were reported among non-students with Western leading at 90.1% and followed by Nyanza at 81.5% NACADA (2010).

Considerable variations in determinants of alcohol use exist between countries, regions and institutions of higher learning. Medical training college students fall in the age group whose indicators of alcohol use could be different owing to their clinical exposure and expectation as future health professionals. However, the determinants of alcohol use among medical college students in the Nyanza Region are yet to be established. This study therefore sought to establish what determined the use of alcohol among medical college students in the Nyanza Region. This was to help inform appropriate health behavioural strategies vital for such an age group in this setting and the country at large.

## Materials and Methods

The study design used was cross-sectional, carried out in five MTCs namely; Kenya Medical Training Colleges (KMTCs) Kisii, Nyamira, Homa Bay, Migori and Kendu Bay Mission School. They are located within South Nyanza Region covering four counties i.e. Homabay, Migori, Kisii and Nyamira. A proportionate number of 330 students were recruited based on each college's student population. Systematic random sampling method using class attendance registers was employed to identify respondents following stratification by college, course and gender

Data was collected in the month of May 2015 using a structured self-administered questionnaire. The collected data was uploaded into a computerized database using MS Excel and then exported to Statistical Package for the Social Sciences (SPSS) version 17.0 for analysis. Descriptive statistics was used to analyse the sociodemographic profile and determinants of alcohol use. The analysed data was presented in tables, bar charts and pie charts. Ethical clearance for the study was obtained from Maseno University Ethical Research Committee.

## Results

### Socio-demographic Information of the Respondents.

The socio-demographic information from the respondents including sex, age, religion, marital status, program and year of study, the course undertaken is summarized in Tables 1 and 2.

Table 1: Socio-demographic Information of the Respondents.

Variable	Frequency, n = 303	Percent (%)
Sex		
Male	150	49.5
Female	153	50.5
Age		
18-23	150	49.5
>23-33	153	50.5
Religion		
Christian	295	97.4
Islam	5	1.7
Others	3	1.0
Marital status		
Single	278	91.8
Married	25	8.3

Among the respondents, 153 (50.5%) were females and the mean age was 21.96 years (18-23, SD=0.4). Nearly all respondents were Christians 295 (97.4%) and majority were single 278 (91.8%).

Table 2: Education Information of the Students

Variable	Frequency n=300	Percent (%)
Program the students		
Clinical medicine	83	26.9
Nursing sciences	175	56.8
Laboratory sciences	27	8.8
Physiotherapy	12	3.9
Community Nutrition	11	3.6
Year of study		
First	80	26.0
Second	116	37.7
Third	77	25.0
Fourth	35	11.4

Among the reasons that determined alcohol use by students of the medical training colleges, the following findings were reported;

### a. Availability of alcohol

Majority of the respondents 113 (37.3%) reported that they indulged in alcohol use because it was readily available within their colleges. Proximity of alcohol selling premises to their colleges was also reported to be a reason for alcohol use by 135 (44.6%) of the respondents.

### b. Alcohol use by the respondents

Majority of the respondents (n=159, 52.5%) reported having ever used alcohol while in college. Eighty three (27.4%) of the respondents reported that they were still using alcoholic at the time of the study as summarised in Table 3.

Table 3: Alcohol use by students in medical Training Colleges.

Variable		Ever users N=303		Current users N=303	
		Frequency	Percentage	Frequency	Percentage
Alcoholic drinks usage	Yes	159	52.5	83	27.4
	No	144	47.5	220	72.6

### c. The person introducing the students to alcohol use

Majority of the respondents 100 (33.0%) were introduced to alcohol use by friends. Family members 5 (1.7%) also introduced some as summarised in Figure 1

Figure 1: The person who introduced students to alcohol use

### d. Reason for alcohol use

Curiosity (n=73, 24.1%) was the main reason that made the respondents to use alcohol for the first time. This was followed by having fun (n=37, 12.2%) and encouragement by friends (n=35, 11.6%) as summarized in Figure 2.

Figure 2: Reasons for using alcohol

### e. The number of alcoholic drinks taken by students

Majority of the respondents 46 (15.2%) reported having a single bottle of alcohol drink at a time. Those who reported having three to four bottles of alcoholic drinks were 40 (13.2%) and others as summarized in Table 4

Table 4: The number of alcoholic drinks taken by students

The number of alcoholic drinks taken by students (units)	Frequency	Percentage
1 unit	46	15.2
2 units	24	7.9
3-4 units	40	13.2
5-9 units	16	5.3
10 and more units	8	2.6
Not applicable	169	55.8

## f. Perceived interventions to alcohol use by the students

The respondents' perceived greater education of young people on alcohol use (n=156, 51.5%), establishment of youth groups and clubs (n=54, 17.8%), establishment of recreational facilities (n=57, 18.8%), the passage of stricter laws against alcohol (n=16, 5.3%), greater parental/tutor guidance (n=15, 5.0%) and others as shown in Figure 3.

Figure 3: The respondents' perception intervention to solve substance problem

## Results

Majority of the respondents had ever used alcohol and some were still using alcohol at the time of the study. This was possible given that alcohol was readily available to the college students. The rampant use of alcohol among these college students could also be expected given that most of them could have been 18 years or older which is a legally accepted age for alcohol use according to the Kenya Alcoholic Drinks Control Act 2010. The findings are also consistent with the reported prevalence of alcohol use in Nyanza region (NACADA, 2010).

Ready availability of alcohol to the college students was a determinant to their alcohol use. This could have been occasioned by the close proximity of the alcohol selling premises to some of these colleges as reported by some of the respondents. This is consistent with findings in a study conducted among university students in Kenya that reported a direct influence between alcohol use and where the students resided (Ndegwa Munene and Oladipo, 2017).

Majority of the college students reported that their friends were the first to introduce them to alcohol use. This shows the power of peer influence as a major determinant in alcohol use especially among youths. This finding was consistent with other related studies that reported peer influence playing a major role in the use of drugs (Pillai et al., 2014; "type": "article-journal", "volume": "4", "uris": ["http://www.mendeley.com/documents/?uuid=0c008cd6-fa58-4ed8-886c-86d259d2a927"]], "mendeley": {"formattedCitation": "(Pillai et al., 2014 Ndegwa Munene and Oladipo, 2017)."

College duration to youthful students is mentioned as the period of increased vulnerability to stress and risk-seeking behaviours (Whitesell et al., 2013). This could explain why curiosity and being encouraged by friends as the main reasons which made students to use alcohol for the first time. The influence of peers on adolescent substance use often exists in the form of deviant peer relationships, wherein an adolescent associate with a group of people who use substances, or in the form of perceived popularity (Whitesell et al., 2013).

The study also reported that some of the students were engaging in binge drinking. This exposes the students to the negative health effects of alcohol use including impaired cognitive development, liver diseases and others (Whitesell et al., 2013, Odeyemi, 2014). Any level of alcohol use that exposes the college students to medium and high levels of negative effects of alcohol is considered a major public health problem and is common in college campuses (Iconis, 2014; Ndegwa Munene and Oladipo, 2017).

Majority of the respondents suggested greater education of young people on alcohol use as the perceived intervention to the existing problem. It is possible that most of the college students are gullibly inducted into alcohol abuse due to misconceptions or ignorance from the effects of alcohol use. They would therefore immensely benefit from sustained education and mentorship while in college. This is consistent with findings from a study in USA which established that to alleviate alcohol use among college students, peer mentoring and educational programs are important mitigating activities (Iconis, 2014).

## Conclusion

The determinants attributed to alcohol use among medical college students established in this study included proximity of alcohol premises to the colleges, ready availability of alcohol in the colleges and peer influence from friends. Effective mentorship from their tutors and peer education is recommended to help reduce alcohol use among the college students.

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