



GSJ: Volume 11, Issue 2, February 2023, Online: ISSN 2320-9186

www.globalscientificjournal.com

RELATIONSHIP BETWEEN ALCOHOL USE DISORDER AND DEPRESSION AMONG YOUTH IN KAYOLE – MIHANG'O, NAIROBI COUNTY, KENYA

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ABSTRACT

This study set out to establish the relationship between alcohol use and depression among youth in Kayole and Mihang'o, in Embakasi Nairobi County, Kenya. The study used descriptive correlational research design targeting female and male youth aged 18 to 35 years who had current or previously used alcohol. A sample of 179 respondents obtained by random sampling technique was utilized in the study. Data was collected using socio demographic questionnaire, BDI-II and AUDIT and analysed using SPSS version 24. Results of the study showed that the prevalence of alcohol use was 17.9% and 72% of all respondents have witnessed a friend drink heavily or were part of a group where alcohol was consumed. No significant relationship was found between gender and alcohol use ($r = -.042$, $p > 0.575$) while the relationship between depression and alcohol use was positive and significant ($r = 0.280^{**}$, $p < 0.000$). Psychotherapy is highly recommended for depressed youth as well as rehabilitation for those youth who have developed alcohol use disorder.

1. Introduction

According to Ducci and Goldman (2008), alcohol is the most widely used addictive drug world-wide. Many youth involve themselves in the consumption of alcohol without realizing its short and long-term consequences and its impact on their future. This study sought to establish the relationship between alcohol use disorder and depression among youth. Extant research shows a clinically observed association between alcohol and depression, but its simultaneous outcome is difficult to determine. This is because alcohol is a depressant; its repeated use produces both the subjective feelings of depression and neurovegetative signs such as sleep and appetite disturbance, cognitive impairment, and decreased energy characteristic of the depressed syndrome (Deykin, Levy, & Wells, 1987).

Consumption of alcoholic drinks is viewed by youths as a predominantly social activity which provides an opportunity for entertainment and bonding with friends (MacArthur, Jacob, Pound, Hickman, & Campbell, 2017). Research shows that alcohol consumption in youth begins out of curiosity or due to peer pressure and low self-esteem. Other reasons leading youth towards consumption of alcohol include search for pleasure and satisfaction, emotional pain avoidance, boundaries testing and peer initiation (Medosa, 2016). Parental rules, regulations and expectations which may result in conflicts, may also lead to

alcohol use. According to the National Institute on Drug Use (2018), individuals who use alcohol for the first time may perceive what seems to be positive euphoria. Their first impression is that they have control over the use of alcohol. However, alcohol use may easily take over their life. Alcohol use escalates minor conflicts and exacerbates feelings of irritation and anger, increasingly youth report higher suicides and homicidal cases (Rothman, Linden, Baughman, Kaczmarzsky, & Thompson, 2016). The initial decision to take alcohol is primarily voluntary, regardless of other options which are available in the society. The youth's ability to exert self-control can become impaired leading to sustained alcohol use (National Institute on Drug Use, 2018).

Research shows that experimenting with alcohol is common among youth who appear to overlook the negative consequences of alcohol use to their bodies (Mbuthia, Wanzala, Ngugi, & Nyamogoba, 2017). Alcohol gets into the human body as a drink, it is absorbed into bloodstream from the stomach and small intestine and travels to the brain. Adolescent brains are still developing and the frontal cortex has not yet reached its full maturity (Walter, 2014). Their growing brains when exposed to alcohol may result in permanent neurological changes. The hippocampus is particularly susceptible to negative consequences of excessive alcohol consumption, which affects learning and memory functions as well as emotional behaviour. The hippocampus is responsible for short term memory and learning; alcohol use interferes with the formation and storage of memories as well as learning. This results in under performance in studies and poor commitment in general life activities (Le Maître, Dhanabalan, Bogdanovic, Alkass, & Druid, 2018). Permanent changes in the brain reward system lead to reliance on alcohol consumption for performance. This eventually culminates in addiction and the development of an addictive cycle (Kolb & Wishhaw, 2015).

The rate of absorption differs as a function of the beverage's concentration of alcohol, volume and rate of consumption, the user's weight and if there is food present in the stomach (Walter, 2014). When consumed, alcohol gives one a "high" which is a way that a consumer uses to numb emotional pain, discomfort or disappointments. The same "high" can be seen as pleasurable and satisfying. The desire to continue in the state, leads to repeated consumption. Over time the individual begins to develop tolerance, this is the need to take a slightly larger dose than before to obtain the same euphoria. (Medosa, 2016). The reward pathways in the brain require incremental amounts of alcohol to produce the same level of euphoria. The user begins to spend more time and resources in sourcing and consuming this drug.

Alcohol use disorder is a problematic pattern of alcohol use leading to clinically significant impairment or distress. It is characterized by taking large amounts of alcohol than intended for longer periods. Alcohol use continues despite having persistent psycho-social problems caused or exacerbated by its use. Additional clinical features for alcohol use disorder include recurrent behaviors in alcohol use resulting in failure to fulfill work obligations, cravings and unsuccessful efforts to control or cut down alcohol use. These symptoms should be occurring within a 12-month period to fulfil the criteria for the disorder (American Psychiatric Association, 2013, p. 490).

Research also shows that the propensity to alcohol use is determined by genetic and non-genetic components as aspect that can be conceptualized as a trait. In South Africa, alcohol is reportedly the dominant substance of use whose consumption contributes to a significant health burden in the society in terms communicable and non-communicable diseases. The Northern region accounts for 17% while the Central region has 42% of patients in treatment has alcohol as a primary substance of use (Sacendu, 2016). Uganda reports one of the highest per capita alcohol use rates in sub-Saharan Africa. The prevalence of alcohol use disorders in Uganda, remains unknown in many areas especially in the rural districts (Nalwadda et al., 2018).

According to Mbuthia et al. (2017), alcohol use among youth in colleges and universities in Kenya is a problem of public health concern because at this age it predisposes individuals to alcohol dependence in adult life. As a result, it continues being a major social and public health problem due to its far-reaching impacts on the individuals, families and communities. The Government of Kenya has enacted and reinforces laws that control alcohol use. Whilst this is important, legislation and policy measures alone cannot fully address the reduction of alcohol use. Family and community empowerment and involvement programs are important strategies. Strict reinforcement of laws regulating production, sale and consumption of alcohol will assist the Government of Kenya to address alcohol use (NACADA, 2014).

Globally, 2.3 billion people are current alcohol users (Hammer, Parent, Spiker, & World Health Organization, 2018). Among that population a special observation can be made; adolescents make up more than a quarter (26.5%) of all alcohol users. Adolescents aged 15 to 19 years are current drinkers, numbering 55 million globally. The prevalence rate is highest among youngsters aged 15 to 19 years within the European Region at 43.8%, according to the World Health Organization. This is followed by the region of America with 38.2% and 37.9% in the Western Pacific Region (Hammer et al., 2018). The total alcohol consumption in the world's population among individuals of over 15 years old has risen from 5.5 litres of pure alcohol in 2005 to 6.4 litres in 2010 and remained consistent till 2016 at 6.4 litres per person per week.

Research has shown that by the age of 14, over half of high school students in the USA drink at least occasionally. The rates of both drinking and heavy drinking increases rapidly throughout adolescence such that by ages 17 and 18, more than 30% of males and 15% of females can be classified as heavy drinkers (Bradizza, Reifman, & Barnes, 1999). Further, binge drinking rates in 2017 were 4%, 10%, and 17% for grades 8, 10, and 12, respectively all showing a slight increment from 2016 (Johnston, Malley, Miech, Bachman, & Schulenberg, 2018). In the United States, "8 to 10% of people 12 years of age or older (20 to 22 million people) are addicted to alcohol. The use of alcohol, and illicit drugs in the United States exacts more than \$700 billion annually in costs related to crime, lost work productivity, and health care" (Volkow, Koob, & McLellan, 2016, p. 363). According to O'malley et al. (1998), few Americans are complete abstainers from alcohol use by their late teens. Further, in 2016 the harmful use of alcohol caused 3 million deaths worldwide and 132.6 million disability-adjusted life years (Drahansky et al., 2016; Hammer et al., 2018).

According to Hanna et al. (2001), alcohol consumption among youth may lead alcohol dependence in adult life. This makes it a major concern for the society. Excessive alcohol consumption is observed among the first-year undergraduate students, in Kenya, who are more vulnerable due to their limited experience with alcohol and the first-time freedom from the parental restraint (Mbuthia, Ngugi, & Nyamogoba, 2017). Findings from another study done in Kenya by Illeskov and Chakua (2013) on alcohol use among individuals in the private sector within a 12-month period, revealed that 49.4% men used alcohol compared to 17.7% women. Further, 43.5% of the respondents were aged 25-35 years, followed by participants aged 36 years and above who made up 38.8% while 18-24-year-old constituted 34.4% of the users.

In addition, GOK (2012) states that "alcohol use 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 use and reduction of the prevalence". According to Boitt (2016), who studied the prevalence of alcohol use among Egerton University students in Kenya, the majority of the respondents (78.9%) had never consumed a drink containing alcohol. This was followed by 10.7% who reported consuming once monthly or less. Another 4.2% reported consuming a drink two to four times per month,

followed by 3.9% of the respondents who took alcoholic drinks 2-3 days a week. Only a paltry 2.3% of respondents confirmed taking an alcoholic drink four times a week. Accurate information on the prevalence of alcohol use among youths in Kenya is still unknown.

Historically, it has been conceived that the use of alcohol is primarily as a problem of men; while women drink less alcohol and have fewer alcohol-related problems than men. Women appear to be less likely than men to manifest certain risk factors for alcohol and are more likely to have protective factors against these problems (Nolen-Hoeksema, 2004; Walter, 2014). Women's drinking patterns are factors of cultural norms and practices of their ethnic groups, as well as other environmental and biological factors (Collins & Mcnair, 2002). Other studies report different findings that indicate that alcohol use severely impacts the wellbeing of women as well, they show similar behaviours and symptoms as men (Wallace et al., 2003). Travers and Mahalik (2019) state that female youths are at greater risk for depression than males, and high school students in upper grades use alcohol at higher rates than students in lower grades (Milot et al., 2019). Findings from a study by Windle (2003) revealed that almost as many females as males consume alcohol, but that males have a higher prevalence than females. Foster, Hicks, Iacono and McGue (2015) argue that in comparison to women, men consume alcohol more frequently and in greater quantities, reporting higher rates of alcohol use. Most of the research found on girls' alcohol use and on gender differences in alcohol use has been done in the USA and mainly on white populations. Fewer studies were found that studied alcohol use among non-white girls, and gender differences in alcohol use within non-white populations (Wallace et al., 2003). Limitations to generalizability of these studies are related to the fact that there are ethnic diversities and cultural differences among non-white populations world over.

The depressant action of alcohol over a long period time of time, permanently changes the brain activity with regards to production and action of neurotransmitters resulting in persistent depressive moods. Youths get into alcohol use to feel good about themselves however, they may become disappointed over unresolved life issues, which may include familial, social, peer pressure, or romantic relationship issues. Alcohol produces intense feelings of pleasure when an individual begins to consume it. This euphoria produced by alcohol is followed by the depressant action on the brain which slows down neuronal activities. The reverse may also hold true where individuals experiencing stress and depression may turn to alcohol in order to lift their spirits and improve their mood. Forthwith, feel less depressed and by calming themselves feel less anxious and stressed out. In order to sustain this feeling of elation, stress thus contributes to continued use of alcohol or relapse for those who are in the process of recovering from chronic alcohol use (National Institute on Drug Use, 2018). Studies have shown that there is a link between alcohol use and loss of inhibition (NACADA, 2012). According to Bradizza et al. (1999) there is a relationship between reasons for drinking and the amount of alcohol consumed.

The Diagnostic Statistical Manual (DSM-5) provides the diagnostic criteria for alcohol use disorder if they have a problematic pattern of alcohol use leading to clinically significant impairment or distress, as manifested by at least two symptoms, occurring within a 12-month period (American Psychiatric Association, 2013). Alcohol is often taken in larger amounts or over a longer period than was intended, there is a persistent desire or unsuccessful efforts to cut down or control alcohol use, craving, or a strong desire or urge to use alcohol, recurrent alcohol use resulting in a failure to fulfil major role obligations at work, school, or home, continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol important social, occupational, or recreational activities are given up or reduced because of alcohol use, recurrent alcohol use in situations in which it is physically hazardous and alcohol use is continued despite knowledge

of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol (American Psychiatric Association, 2013).

Alcohol use disorder is defined by the behavioral and physical symptoms which can include withdrawal, tolerance and craving for alcohol. The diagnosis may be specified as; in early remission, in sustained remission or in a controlled environment. Early remission refers to when the criteria were previously met but none have been met in the last three months but less than 12 months. Sustained remission refers to when an individual had met the criteria for alcohol use disorder, but for a period of 12 months or longer none of the criteria have been met apart from craving which may be met. When alcohol access is restricted an additional specifier is used; in a controlled environment. Coding for alcohol use disorder is based on current severity where two to three symptoms is coded as mild, four to five as moderate and six or more symptoms as severe (American Psychiatric Association, 2013).

According to WHO (2019), alcohol use is a risk factor for depression and that depression is a risk factor for harmful use of alcohol. Alcohol use among the youth is a growing global health concern positively associated with depression resulting to high suicide risk (Yap et al., 2017). Depression is characterized by sadness, suicidal thoughts, changes in sleep and appetite, difficulty concentrating as well as loss of pleasure in normal activities. Alcohol use may contribute to higher levels of depression and research shows increase in prevalence among youths in society today. There is a potential risk of alcohol use among the youth directly linked to parental provision of alcohol at home, favourable parental attitudes towards alcohol use and parental drinking (Danielson, Overholser, & Butt, 2003).

Alcohol use has been linked with both depression and suicide among youth outpatients (Danielson et al., 2003). The distinction between depression as a primary disorder and as a consequence of substance use may become distorted after many years of alcohol use, resulting in a state of chronic disability in which it is impossible to unravel the sequence of symptom evolution (Deykin et al., 1987). Findings from a study by Drahansky et al. (2016) revealed that alcohol use causes significant loss of productivity, health concerns, emotional instability, career-oriented failures, and socioeconomic problems

Alcohol use and depression share a multifactorial association where one could lead to the other. In their view Becker and Grilo (2007) state that alcohol use among youths predisposes them to develop a major depressive episode within 3 years after high school. Danielson et al. (2003) on the reverse note that youths with depression were more likely to develop alcohol use problems at an earlier age as compared to non-depressed youths. In their study Vaughn et al. (2015) youths reported getting into alcohol use for varied reasons however, they may become depressed due to unresolved life issues precipitating chronic alcohol use. Youths suffering from anxiety, stress and depression may start using alcohol in order to feel less anxious, stressed out or depressed, these factors become key in continued alcohol use and the development of alcohol use disorder (NACADA, 2012).

Genetic makeup encompasses the whole lifespan. According to Mies et al. (2018), alcohol use disorder is a factor of the environmental-genetic interaction (GxE), interaction studies using polygenic risk score (PRS) show that polygenic risk for alcohol problems obtained from genome-wide results, was more clearly indicated under conditions of low parental knowledge and high peer deviance in adolescents. GxE are defined as when the effect of the environment on the phenotype varies by genotype or when the expression of a genotype or gene differs across environment. Environmental restrictions on alcohol availability and promoting abstinence are theorised to dampen the expression of genetic influence on alcohol consumption behavior. Contrarily, in more permissive settings, individual's alcohol consumption will show the full range of their genotypes. Another mechanism is where social context acts as a stressor, this leads to the behavioral expression of genetic predisposition on risk of alcohol use and alcohol use disorders. The individual with

genetic risk is thus rendered more sensitive to the pathogenic effects of stressors from the environment (Young-Wolff, Enoch & Prescott, 2012). The quality of interaction between an individual who has the genetic predisposition and the social environment that determine the behaviour patterns and emotional reactions defines outcomes related to their alcohol use (Marlatt & VandenBos, 1997).

Methodology

The study uses the following methodology:

Research Design

In this research, descriptive correlational research designs was used to measure two variables which are alcohol use and depression. It is important to note that descriptive research typically involves measuring a variable or set of variables as they exist naturally. The purpose of the correlational study was to establish whether a relationship exists between variables and to describe the nature of the relationship (Gravetter & Forzano, 2010).

Population

This study was done among youth living in Kayole and Mihang'o wards, located in Embakasi constituency, Eastlands, who may have been exposed to alcohol. There is a large population of youth in the area. Mihang'o ward has an estimated population approximately 22,936, in a square kilometer of approximately 14.90 (Sq. Km), whereas Kayole is made up of four wards. Kayole North has a population of approximately 37,580 and in an area of Sq. Km. 4.60. Kayole Central has a population of approximately 37,580 in an area of Sq. Km. 1.20 (Appendix 1V). The target population for the said research shall be taken from age group starting from 19 up to 35.

Sampling Design

This study used simple random sampling a probability sampling design where each individual in the population has an equal chance of being selected (Gravetter & Forzano, 2010).

Sample Size

Mugenda and Mugenda (2003) argues that when the population is less than 10,000 a sample size of between 10% and 30% is a representation of the target population and henceforth 10% is adequate for analysis. The sample size of this study was 145 participants. The research allowed an extra 10 participants in order to cater for attrition, this brought the total sample to 155 participants.

Individuals were accessed via online communication and physical. Having agreed and given informed consent, questionnaires were administered to them. The online questionnaires were distributed to the respondents via a Google link and Whatsapp groups. Research instruments were social demographic questionnaire, BDI-II and AUDIT assessment tools. Two Catholic Churches; Divine Word Parish, Kayole and St. Mary Immaculate Parish, Mihang'o were selected by the researcher and used as a point of reference for the participants in this research.

Data were analysed from SPSS version 24 using correlation. Objective (1), (2), (3) and (4) were studied. This is in view of finding out whether there is a relationship between alcohol use and depression among youths. There were hard copies of the questionnaire which were not properly filled, they were not included in the research. Hence, only 179 both online and hard copies were entered into SPSS.

RESULTS AND FINDINGS

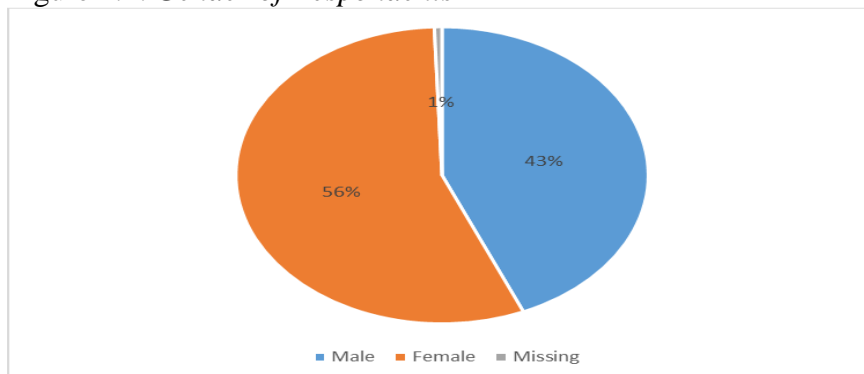
Response Rate

The researcher distributed 200 questionnaires out of which only 179 were filled and returned presenting a 90% response rate.

Gender

Results in Figure 4.1 shows that 56% of the respondents were female, 43% male and 1% did not reveal their gender.

Figure 4.2: *Gender of Respondents*



4.3 Age

Figure 4.2 show that 49% of the respondents were between 20 and 25 years. Additionally, 24% of the respondents were between 26-30 years, 12% between 18-19 years, 8% between 31-35 years, 7% above 35 years while 1% of the respondents did not indicate their age.

Figure 4.3: *Age of Respondents*

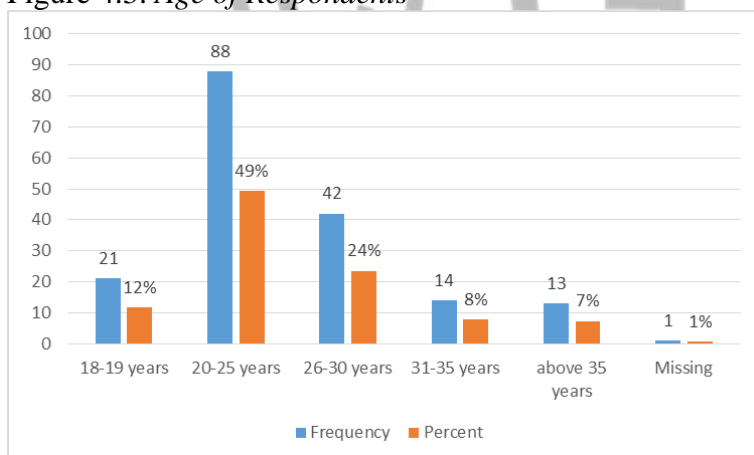


Table 4.1: *Reasons for Drinking Alcohol*

	Frequency	Percent
At a Party	25	13
In a club	9	9
Addicted	26	13
Depression	6	3
Peer pressure	14	7
Irresponsible drinking	14	7
Leisure activities	7	6

Social events	9	9
Drugs use	3	3
Missing	66	30
Total	179	100

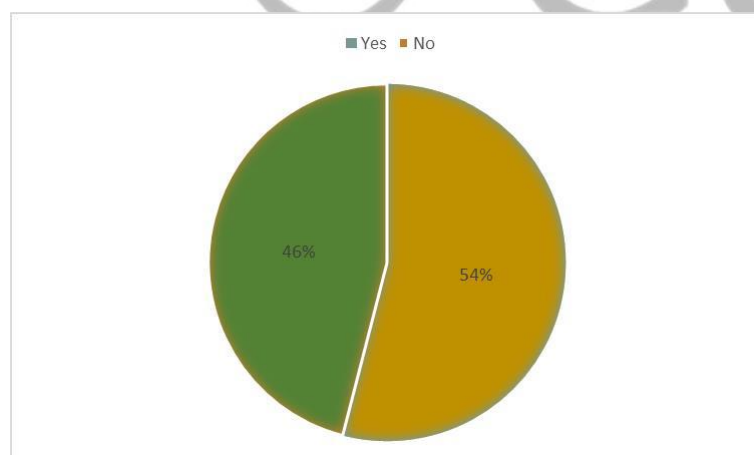
Table 4.2: *Factors Which Lead to Alcohol Use*

	Frequency	Percent
Peer pressure	19	18
Betrayal	10	5
Bad company	1	1
Depression	11	6
leisure	36	18
Stress	53	26
Pleasure	8	6
Social events	10	5
Missing	31	15
Total	179	100

4.3.6 Having Consumed Alcohol since Childhood

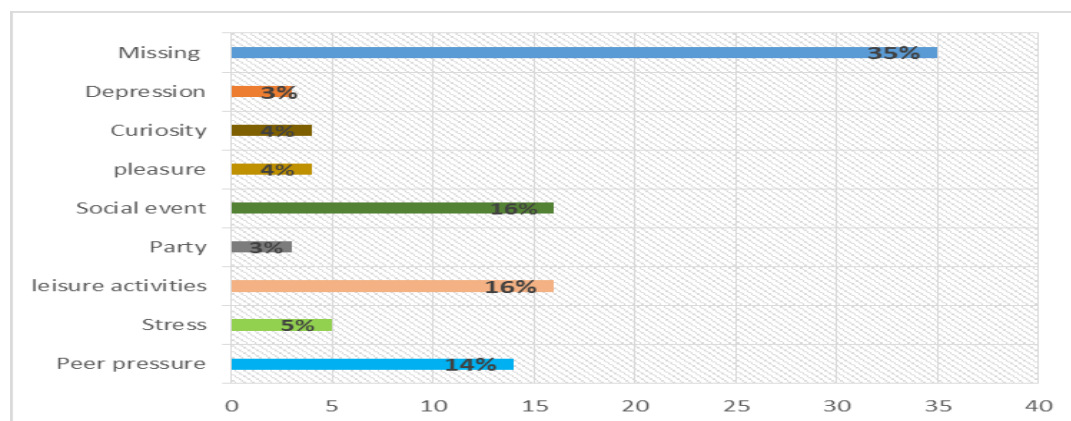
It was established that 54% of respondents had never drunk alcohol since childhood while 46% of respondents noted that they have.

Figure 4.4: *Drink Alcohol since Childhood*



Additionally, the study sought to establish individual motivations for drinking. Study results revealed 16% respondents were motivated to drink due to social events, 16% due to leisure activities, 14% due to peer pressure, 4% due to pleasure, another 4% due to curiosity, 3% due to depression, 4% due to curiosity and 35% did not answer the question.

Figure 4.5: *Motivation of Drinking 45*



4.7 Relationship between Depression and Alcohol Use

A correlation analysis was done between depression (BDI-II) and alcohol use (AUDIT). The findings showed a positive and significant relationship between depression and alcohol use ($r=0.280^{**}$, $p<0.000$). This shows that the more depressed youths are, the more they become addicted to alcohol.

Table 4.11: Relationship between BDI-II Depression and Alcohol Use AUDIT

AUDIT	Pearson Correlation	1	.280**
Sig. (2-tailed)		.000	
Depression	Pearson Correlation	.280**	1
Sig. (2-tailed)		.000	

4.7.2 Regression Analysis of Depression and Alcohol Use

Regression analysis revealed that the R² was 0.079 which indicates that 7.9% of alcohol use is determined by depression as shown in Table 4.14.

Table 4.12: Relationship between Depression and Alcohol Use Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.042 ^a	.002	-.004	.38105	.002	.315	1	176	.575

a. a. Predictors: (Constant), Gender

4.7.3 Depression and Alcohol Use (ANOVA)

An ANOVA analysis was done in this study to look at the relationship between depression and alcohol use at 95% confidence level and the F value was 14.934 (F value=14.934, $P<0.000$).

Table 4.3: Depression and Alcohol Use (ANOVA)ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.061	1	2.061	14.934	.000 ^b
	Residual	24.154	175	.138		
	Total	26.215	176			

a. Dependent Variable: AUDIT

b. Predictors: (Constant), Depression

Discussion

The findings reveal that 146 (82%) of the respondents did not use alcohol whereas individuals who used alcohol totaled to 32 (17.9%) respondents. On the contrary, a large percentage of participants stated that they had witnessed their friends drinking heavily or being part of the drinking company. This was reported by 72% of the respondents. This is an avenue of exposure to alcoholic drinks. Based on responses, it is noted that when a drinking friend became totally addicted, irresponsible and lazy, they show uncouth behavior such as using abusive language, urinating on his trousers. Their friends also observe certain changes such as loss of body weight, a day will not pass without drinking, using alcohol until he loses his life or risking the loss of their lives and those of others in their company, behaving indecently and other peculiar acts such as breaking up relationships on account of alcohol, going to night clubs for alcohol drinks, depression and challenges of life, heavy alcohol drinking whole night long, drink for fun or when one is idle, drink until he could not move or talk, drinking every day. These are symptoms of alcohol use among youths. This is to confirm what Hammer et al., (2018) found that many youths are using alcohol and are current drinkers, amounting to 155 million youths in the world. This is to affirm on what the GOK (2012), stated that alcohol use has continued to be a problem in the university campuses that is slowing down their progress and the Kenya vision 2030.

Findings showed that 82% (146) of the respondents did not use alcohol of which 33% (66) who are the majority were between 20-25 years. This study findings are similar to a study done by Boitt (2016) which confirmed in a study whereby he was assessing the prevalence of alcohol use among Egerton university students in Kenya is that 78.9 % of the respondents (78.9%) claimed to have never taken a drink containing alcohol. And only 2.3% respondents who confirmed took an alcoholic drink. This was also followed by 10.7% who were having alcohol drinks monthly or less, another 4.2% who were taking alcohol 2 to 4 times/month. Finally, 3.9% of the respondents had alcoholic drink 2 to 3 days a week (Boitt, 2016). This agrees with this current research's findings. Furthermore, Boitt (2016) found that the prevalence of alcohol use among Egerton University students was 21.1%.

Findings revealed that there is a correlation between depression and alcohol use. It is noted that the findings demonstrated that there is a positive relationship between Depression and alcohol use disorder ($r=0.280^{**}p<0.000$). This agrees with WHO (2019) who affirmed the relationship between depression and alcohol use. Stating that the associations between patterns of alcohol use and depression have close links. There is some evidence that alcohol misuse is a risk factor for depression and that depression is a risk factor for harmful use of alcohol.

In conclusion, this study has shown that there is a correlation between alcohol use disorder and depression. Youths who are depressed and frustrated with their lives are more inclined into drinking alcohol and other illicit drugs heavily. Majority of them talked about stress, loneliness, peer pressure, bad company, bad influence from friends, stress from home

and school environment, lack of purpose in life, becoming high, being idle, being around friends and groups who drink, being pressured by some family even after rejecting their proposals, betrayal, boredom, losing someone they cared about, sadness, giving in to pressure, eagerness to taste alcohol and experience what others are feeling and many others. Youths got into alcohol use and findings showed that depressed and frustrated youths are more inclined to use alcohol as a way to deal with their frustrations. This study revealed that there is a correlation between alcohol use disorder and depression. However, the participants showed low in terms of alcohol use prevalence.

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