Prevalence of Alcohol Use Disorders among Patients in the Psychiatry Unit of Kampala International University Teaching Hospital in South Western Uganda

Atoo, Gilbert

Faculty of Allied Health Sciences, Kampala International University, Uganda.

ABSTRACT

Globally, the World Health Organization (WHO) estimated that, there are 2 billion people worldwide who consume alcoholic beverages. The burden of alcohol use is a public health concern. In South, East and West Africa, prevalence of alcohol abuse ranges between 10%-70%. Uganda has previously reported that, annual per capital alcohol consumption was 23.7 litters. The objective of this study was to determine the prevalence of alcohol use disorders among patients attending psychiatry unit of KIU-TH. The researcher used a retrospective study in patients admitted at KIU-TH psychiatry unit within a period of six months from January, 2017 to June, 2017. From the results of this study, mental health problems were on the increase and up to 34% of admissions were due to alcohol related mental disorders, 70.6% are new admissions. Alcohol induced psychosis is the most prevalent diagnosed alcohol related mental illness with 41.2%, followed by Alcohol abuse with 23.5%, then alcohol withdrawal with 17.6%. Stress was the number one factor associated with alcohol use mental disorder with 70.6%. However, when treated, alcohol related mental disorders has a good prognosis of 82.6%. It is recommended that KIUTH in collaboration with the University section should create awareness of alcoholism as a mental health disorder that can be managed and treated. Youths should abstain from alcohol completely or limit their intake of alcohol. Alcohol sale and use should be strictly limited to few licensed shops.
Keywords: Alcohol, Youth, psychiatry, mental disorders

INTRODUCTION

Alcohol use disorders are conditions that affect a person's thinking, feeling or mood and may affect his or her ability to relate to others and function on a daily basis as a result of alcohol use or its long term effects [1, 2, 3, 4, 5]. It's a diagnosis of mental pattern that causes either suffering or poor ability to function in daily life. Eg alcohol induced psychosis, withdrawal syndromes, dependence etc [6, 7, 8, 9]. Globally, the estimates by the World Health Organization (WHO) indicate that, there are 2 billion people worldwide who consume alcoholic beverages [10, 11, 12, 13, 14]. And the burden of alcohol use is a public health concern [2]. Alcohol consumption is a major cause of premature mortality in countries covered by world health organization despite the unique social profile of these regions [3, 15, 16]. The excessive use of alcohol is a major global contributing factor to death and injury to the drinker through health impacts, such as liver cirrhosis, alcohol dependence, injuries and cancer [4, 5, 6, 7, 8]. Roberts *et al* researched and found out that alcohol consumption is linked to health outcomes such as house hold economic status, fear of crime and may be also an important in understanding alcohol consumption in the region [9, 10, 11, 12, 13, 14, 15, 16]. Although alcohol consumption is largely socially acceptable in many societies, it has substantial effects on the health and well-being of individuals and the community as a whole [17, 18, 19, 20]. Of the estimated 2 billion people who consume alcohol globally, almost 80 million have diagnosable alcohol-use disorders [21, 22, 23].

According to the World Bank, the total population of sub-Saharan Africa in 2014 was about 973 million people. Almost half (43%) of the people living in that region were under 14 years old [17]. In South, East and West Africa, prevalence of alcohol abuse ranges between 10%-70%, making it a serious factor influencing the social, economic, and cultural and religious [18]. In Uganda, 19.47 litters of pure alcohol are consumed per capita each year. This is nearly 4 times higher than the worldwide average and 5 times higher than the Africa region average, making Uganda ranked number 1 from 189 WHO member states in level of alcohol consumption [19]. Uganda has previously been reported to have one of highest levels of alcohol consumption in the East African region, with an annual per capita alcohol consumption of 23.7 litters [19].

Alcohol induced psychiatric disorders may be initially indistinguishable from independent psychiatric disorders they mimic. However what differentiates these two is that alcohol induced psychiatric disorders typically improve on their own within several weeks of abstinence with only supportive care.

Specific Objective of the Study
The objective of the study was to determine the prevalence of alcohol use disorders among patients attending psychiatry unit of KIU-TH.

METHODOLOGY

Study Design
This was retrospective study among patients admitted in KIU-TH psychiatry unit in a period of six months from Jan/2017-June/2017.

Study Site
The study was carried out at Kampala International University Teaching Hospital-psychiatry unit. The hospital is located in Ishaka Bushenyi municipality, south-western Uganda along Mbarara kasese road. KIU-TH psychiatry unit is located east of the hospital from the main hospital gate and it's about 350 meters from the gate. The facility is fenced and has security guard full time. The unit has all categories of medical staffs and medical students.

Study Tools
Semi-structured questionnaires was designed and distributed to the research assistants during data collection

Study Population
The study included all the patients who were admitted in KIU-TH psychiatry unit irrespective of the age and sex in a period of six months from Jan/ 2017 -June/ 2017.

Study variables.
Dependent variables included the psychosis. Independent variable included socio-demographic data, and types of alcohol that cause alcohol related mental disorder amongst patients in psychiatry unit of KIUTH.

Selection Criteria
Inclusion criteria
1 Patients in Kampala International University Teaching Hospital-psychiatry unit.
2 Patients with complete records.

Exclusion criteria
Patients with incomplete data was not picked
Outpatient department was left out

Sampling Technique
Systematic simple random sampling was used to pick the files from the study population using the formula K= (population size/sample size) i.e. Total number of patients in psychiatry unit kiu-th divided by the number of patients sampled [picked].
Where K represents the file picked,
  K =200/100 K= 2 this means that from the total 200 files with *odd numbers* were picked until a sample size saturation of 100 files is reached.

Ethical Considerations
An introductory letter from the faculty of allied health science was obtained to introduce the researcher to the relevant authority at the psychiatry ward KIUTH .Patient's records was handled with outmost confidentiality and used for study purpose only. No information in the patients file was photocopied. The information was hand written and there was no use of any electronic transfer

accessible to the public and Patient's file was not used outside the hospital premises.

Data Collection Tools

Data collection form was designed and was used to enter raw information from the patient's records. The form contained alcohol use disorders and alcohol induced disorders using DSM V diagnostic criterion. It also included demographic data as well as factors associated with alcohol use disorders and types and quantity of alcohol consumed

Data Generation Procedure

After seeking permission from the KIUTH record department, all files stored within six months (from Jan 2017 to June2017) was separated. But of these files which meet the required inclusion criteria was selected for the study. The relevant data from the selected files was entered into the data form until the required sample size was met.

Data Analysis

Data was entered manually into Microsoft excel 2007 and the Results were presented in form of tables, charts and figures.

RESULTS

The pie chart below shows that 34 (34%) of all patients diagnosed and admitted in the psychiatry unit of KIU-TH within a specific study period with alcohol related mental disorder. Other mental illness takes 66 patients (66%).This implies at least 1/3 of all patients in the unit are diagnosed with alcohol related mental disorder. This implies that prevalence of alcohol use disorders is 34% with prevalence rate of 0.34 per 100 patients.
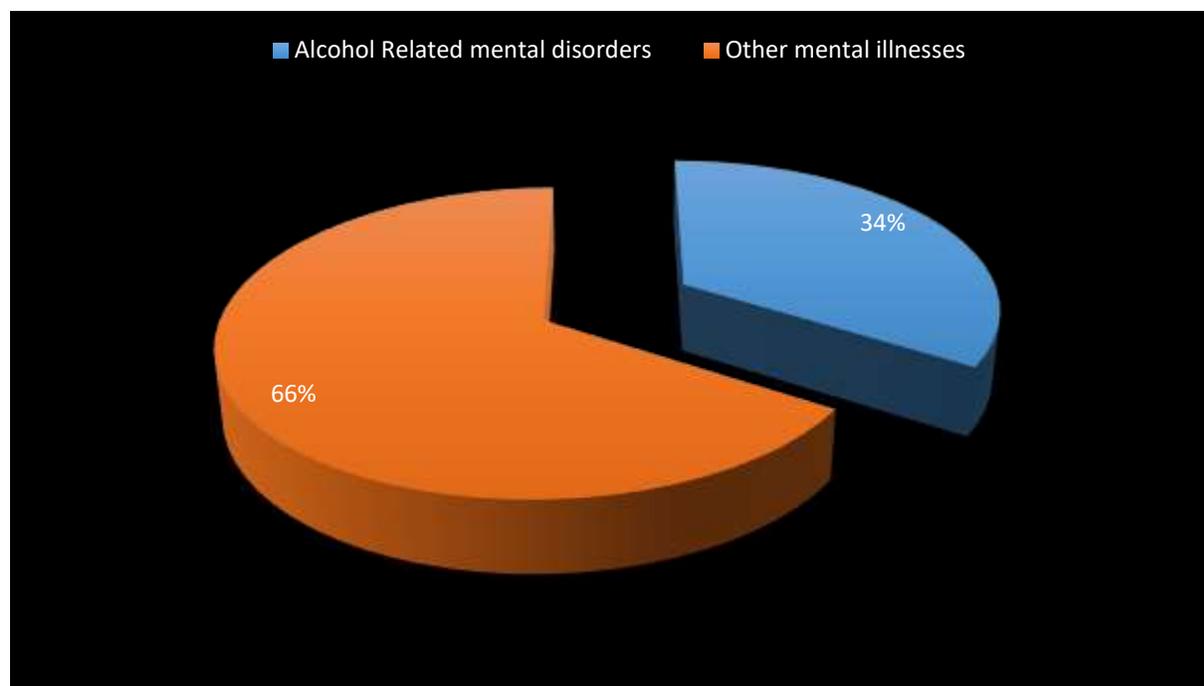

Fig 1. Pie chart showing prevalence of alcohol related mental disorders in the psychiatry unit of KIU-TH in south-western Uganda

The table below shows that alcohol abuse is diagnosed frequently with 8 patients (72.7%) at least twice higher than alcohol dependence with only 3 patients (27.3%)

Table 1: showing prevalence of alcohol abuse and alcohol dependence

Items	Number of patients	Percentages
Dependence disorder	3	27.3
Abuse	8	72.7

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From the table below, it is noted that alcohol induced psychosis is the most diagnosed amongst patients in the unit with 14 patients (60.9%) of all patients with alcohol induced disorders. Alcohol withdrawal syndrome followed with 6 patients 26.1%, mood disorders with 2 patients (8.7%) and intoxication 4.3%.with 1 patient.

Table 2: showing prevalence of alcohol induced disorders

Items	Number of patients	Percentages (%)
Mood disorder	2	8.7
Withdrawal	6	26.1
Psychosis	14	60.9
intoxication	1	4.3

From the table below it is seen that, alcohol induced psychosis is the leading alcohol induced disorder with 14 patients (41.2%) followed by alcohol abuse with 8(23.5%), withdrawal, dependence, mood disorders and intoxication respectively has seen from above.

Table 3: showing prevalence of alcohol use and alcohol induced disorders combined

Items	Number of patients	Percentages (%)
Mood disorder	2	5.9
intoxication	1	2.9
withdrawal	6	17.6
Psychosis	14	41.2
Alcohol abuse	8	23.5
Alcohol dependence	3	8.8

The bar graph below shows that Most of the diagnosed and admitted patients in the unit were new admissions with 24 (70.6%) of patients, 10 (29.4%) patients were relapses. This means that 2/3rd of the patients admitted were new cases.
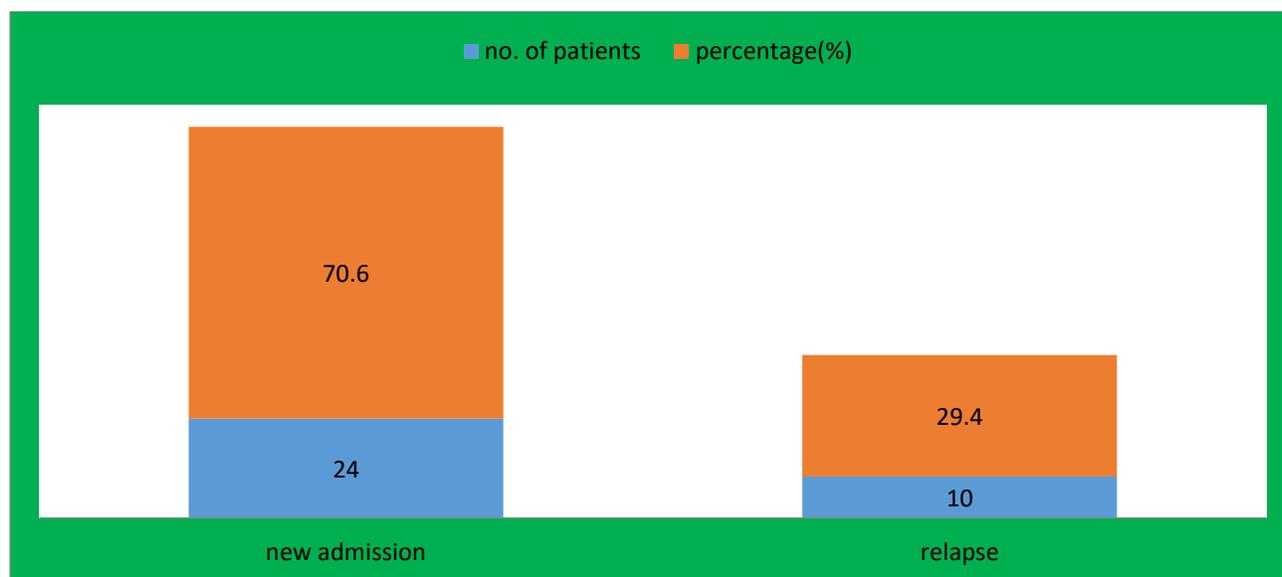

Fig 2. A bar graph showing new admissions and relapses

From the table below, we see that the most dangerous types of alcohol which cause

mental disorders is Sackets with 42% followed by beer with 32% and mukomboti and Ekikanja with 24% and 2% respectively.

Table 4: showing types of alcohol which cause mental disorder

Types	Percentages (%)
Beer	32
Sackets	42
Mukomboti	24
Ekikanja	2

As seen from the table below, 24 patients was diagnosed and admitted with alcohol related mental disorders use alcohol because of stress .family history of alcohol use followed with 6 patients, family history of mental illness had1 patient, peer influence had 2 patients and employment status was the last with 1 patient. This observation is not a surprise because a combination of all the above factors leads to stress.

Table 5: showing number of patients and factors associated with alcohol use

Factors	Number of patients	Percentages (%)
Stress	24	70.6
Family hx of alcohol use	6	17.7
Peer pressure	2	5.9
Employment status	1	2.9
Family hx of mental illness	1	2.9

From the table below, it shows that most patients admitted in the unit with diagnosis of alcohol use disorders are in their 20s, 30s and 40s with15 patients (44 .1%), 8 patients (23.5%) and 4 patients (11.8%) respectively. The majority of patients are in the age range of 20-29 followed by age range of 30-39 then followed by patients in their 40s. There are few patients seen below age of 20 and above age of 60.

Table 6. Showing Age Distribution Amongst Patients Diagnosed With Alcohol Related Mental Disorders In Psychiatry Unit Of   KIU-TH South Western Uganda.

AGE(yrs.)	FREQUENCY OF PATIENTS	PERCENTAGE (%)
<20	2	5.9
20-29	15	44.1
30-39	8	23.5
40-49	4	11.8
50-59	3	8.8
>60	2	5.9

From the pie chart below, it clearly states that males are the majority of patients with 32 patients (94%) being diagnosed with alcohol related mental disorders and females make up 6% with only 2 patients
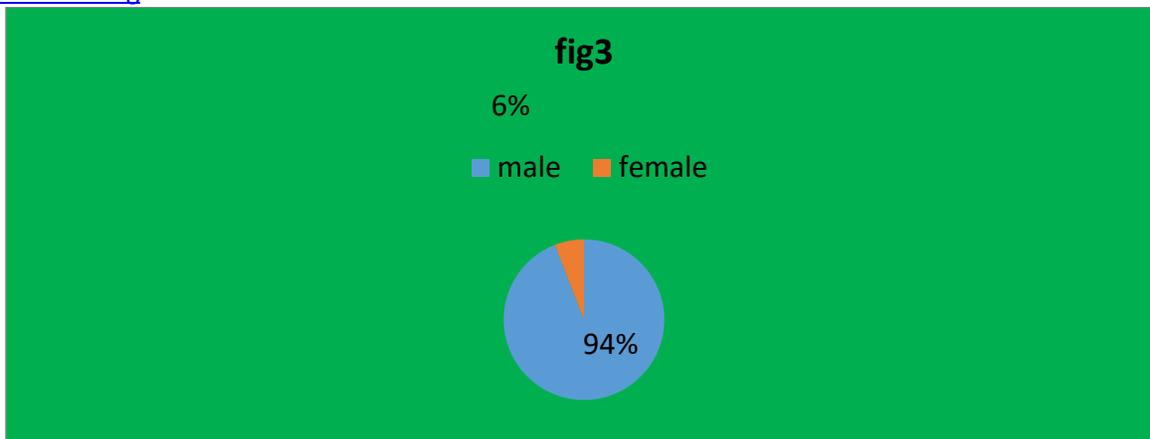
fig3

6%

■ male ■ female

94%

Fig 3. A pie chart showing gender distribution amongst patients diagnosed with alcohol related mental disorders.

As seen from below, it is noted that 17(50%) of patients were married, 12(35.3%) were singe and5 (14.7%) were divorced. This implies that the number of married patients with alcohol related disorder is almost half the number of single patients admitted in the unit. However the number of divorced patients is half number of single.

Table 7: below showing marital status of patients diagnosed with alcohol related mental disorders.

Marital status	Number of patients	Percentages (%)
single	12	35.3
married	17	50
divorce	5	14.7

DISCUSSION

Alcohol induced disorders are at least diagnosed twice more than alcohol use disorders in 23(68%) of patients and 11(32%) were diagnosed with alcohol use disorder. Alcohol induced psychosis is the most frequent diagnosed alcohol induced disorders amongst patients in the psychiatry unit of KIUTH with the number of 14(60.9%) of all patients diagnosed followed by Alcohol withdrawal syndrome with 6 (26.1%).Alcohol abuse is diagnosed at least twice more than alcohol dependence with a number of 8(72.7%) and 3(27.3%).

Sackets and beer were the most types of alcohol used by the majority of patients diagnosed and admitted in psychiatry KIUTH with alcohol use disorder, whereby Sackets had 42% and with amount of 10 Sackets per day and beer had 32%.with amount of 30 bottles per day. This implies that Sackets is the most type of alcohol which causes most of alcohol related mental disorders.

Alcohol related mental disorder affects majorly youth in their most productive stage of life with the majority of patients diagnosed with alcohol related mental disorders between the age range of 20-49years with 15(44.1%) patients.

Married patients with alcohol related disorder were 17(50%) 2 times higher than single patients in percentage with 12(35.3%) admitted in the unit and the number of divorced patients is half lower than single patients with 5(14.7%).

Stress is the leading cause of alcohol use overall with 24(70.6%). Most patients diagnosed and admitted in the unit were new admissions taking up to 24(70.6%) of all patients. 82.4% of 28 patients had good treatment outcome.

CONCLUSION

Alcohol related mental disorder is the most prevalent mental illness in psychiatry unit of KIUTH. 2/3rd of all cases of alcohol related mental disorders are new admissions. Alcohol induced psychosis is the most diagnosed mental illness. Alcohol abuse is more prevalent than alcohol dependence.

Alcohol related mental disorder is the number one cause of disability among youth in their most productive stage of life. Married men are the most affected by alcohol related mental disorders and being single curries a greater risk of alcohol use than being divorced.

Stress influence is the number one cause of alcohol use. With treatment alcohol related mental disorders has a good prognosis.

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