https://www.eejournals.org/ Open Access
EURASIAN EXPERIMENT JOURNAL OF PUBLIC HEALTH (EEJPH) ISSN: 2992-4081
©EEJPH Publications Volume 4 Issue 2 2023

Abuse of Substances and Psychosis among Patients Admitted in Psychiatric Unit Kampala International University Teaching Hospital

Katumba Marvin

Department of Medicine and Surgery, Kampala International University, Uganda.

ABSTRACT

Globally, about 50% of individuals with psychosis have been linked with substance induced psychosis. Psychosis is known to be a serious mental condition that involves the person's losing contact with reality, to a greater or lesser extent, and is most often associated with certain mental illnesses like schizophrenia hence it is a common substance induced mental illnesses that occur as a result of use of drugs with patients presenting with positive and negative symptoms that reveal psychosis after prolonged use of the drugs. The main purpose of this study was to determine the prevalence of substance induced psychosis and commonly abuse drugs among admitted patients in psychiatric unit of Kampala international university teaching hospital. The study design was a retrospective study were all patient's files admitted in psychiatric hospital of Kampala International University record was observed using a predefined structure questionnaire. A total of 45 files were collected by Simple random sampling method. Data collected were identified by the use of a code number. Analysis of data was done with Microsoft excel 2010 and analyzed using statistical packaging for social scientists (SPSS) version 17. Data was presented in charts and tables. Out of 40 patients' files, 87.5% were males, 12.5% were females, and 57.5% live in rural area, 42.5% live in town, 42.5% were none educated, 37.5 ended in primary, 15% ended in secondary and 5% were tertiary graduates. In this study, the commonly abused substances were alcohol, cigarettes, multiple drugs and marijuana. The ratio of patients admitted with psychosis ishigher in men than in females as revealed by this study. The socio-economic factors influencing patients admitted due to substance abuse in this study include; low level of educationand high rates of unemployment. In this study the common abused substances, alcohol being highly abuse followed by cigarettes then those multiple and finally marijuana. The ratio of patients admitted with psychosis is higher in men as revealed by this study. The socio-economic factors influencing patients admitted due to substance abuse in this study include; low level of education, high rates of unemployment.

Keywords: Substance abuse, psychosis and psychiatrics

INTRODUCTION

Substance abuse also known as drug abuse is the use of any drug usually by self-administrationin a manner that deviates from approved social or medical pattern [10-15]. The most commonly used drugs have been part of human existence for thousands of years for example; opium, has been used for medicinal purposes for at least 3500years, references to cannabis (marijuana) as a medicine can be found in ancient Chinese herbals, wine is mentioned frequently in the bible and the natives of the western hemisphere smocked tobacco and chewed coca leaves. Substances abuse form designated classes of pharmacological agents include; alcohol, amphetamines, caffeine, cannabis, cocaine, hallucinogens, inhalants, nicotine, opioids, phencyclidine and the sedatives [6-9]. Globally research indicates that 50% of individuals with psychosis have a lifetime prevalence ofsubstance use [10]. The prevalence of substance induced psychosis is unknown [11]. Psychosis is a

© Katumba, 2023
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

serious mental condition that involves the person's losing contact with reality, to a greater or lesser extent, and is most often associated with certain mental illnesses like schizophrenia hence it is a common substance induced mental illnesses that occur as result of useof such drugs with patients presenting with positive and negative symptoms that reveal psychosis after prolonged use of the drugs [12-15]. Psychosis and substance abuse co-occur more frequently than can be explained by chance alone, this may be because substance abusers are at a higher risk of developing psychosis and also because psychotic patients are at a high risk of developing the tendency for substance abuse [16]. Individuals with psychosis have a higher prevalence of substance use than the general population [17-18]. The concept of how different substances act on the specific neurotransmitter systems to either stimulate or depress to produce psychosis could provide important clues about the pathophysiology of psychotic disorders. The ability of specific psychogenic properties of specificsubstances causing psychosis is useful to evaluate the risk of developing psychosis among drug users [15]. Psychotic disorders such as schizophrenia, schizoaffective disorders are disorders that may be characterized by symptoms of bizarre delusions, auditory hallucinations, and delusions of persecution [12]. Although a lot of researches have been done on substances like alcohol, amphetamines, cannabis and khat with their relationship to psychosis, several substances are abused in combination and possess different psychotogenic properties towards eliciting psychosis, this study will reveal the effect of substances abused to the increased cases of psychotic patients admitted since the past one year and it's from this context that a study should be done, drug and alcohol addiction is a leading cause of raising health care cost and has adverse effect on people's health, social and occupational functioning [19].

METHODOLOGY

Study area

Kampala international university western campus teaching hospital (KIUTH) located in the southeastern part of Kampala, Uganda's largest and capital city.

Study population

The study was carried out among male and female patients admitted at KIU-TH mental health unit.

Study design

The retrospective descriptive study design was used in this research.

Study units and respondents

The study units were health care providers care givers responsible for the psychotic patientsadmitted at KIUTH mental health unit.

Sample size

The sample size (n) was calculated using the krejcie, Robert v, Morgan, Daryle W, fordetermining sample size for research activities. With approximation of 45 respondents, 40 was required for the study.

Sampling technique

Simple random sampling method was employed to recruit records of study participants.

Data collection and data analysis

A questionnaire (see appendix iii) was used against documented patent files and hospital recordsretrospectively as both primary and secondary data sources to assess drug induced psychosis and its prevalence. The data was then be further be entered into Microsoft excel 2010 to be analyzed and processed. The statistical relationships will be tested using statistical packaging for social scientists (SPSS) version 17.analysis will include cross tables and Pearson's coefficient.

Inclusion and Exclusion criteria

To be included in the study the following were considered.

I. Should be records of a patient with history or admission at the mental health unit of KIUTH in 2018-2019.
II. The patient records should meet the DSM V criteria for drug induced psychosis.

To be excluded, for patient records which qualified but had inadequate information required for data collection and all those not admitted within 2018-2019 were not be included in the study.

Ethical considerations of the study

Clearance was obtained from Kampala international university Research and Ethics committee, permission to carry out the research was obtained from KIUTH administration informed consent was sought and obtained from participants, all results were treated with utmost confidentiality byensuring that only authorized people have access to them. To ensure anonymity, no names was used instead codes only known to the researcher. The questionnaires were personally filled and adequate time will be accorded to each patient record to obtain appropriate answers to the questions.

© Katumba, 2023
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

RESULTS

40 patients were recruited in the study. 87.5% were males, 12.5% were females, and 57.5% stay in rural, 42.5% stay in town, 42.5% were none educated, 37.5 ended in primary, 15% ended in secondary and 5% were tertiary graduates.

Table 1 shows the socio-demographic characteristics of patients admitted at psychiatric unit

VARIABLE	FREQUENCY(N)	PERCENTAGE (%)
GENDAR		
MALE	35	87.5
FEMALE	05	12.5
RESIDENCE		
RURAL	23	57.5
TOWN	17	42.5
EDUCATION LEVEL		
NONE	17	42.5
PRIMARY	15	37.5
SECONDARY	06	15
TERTIARY	02	5

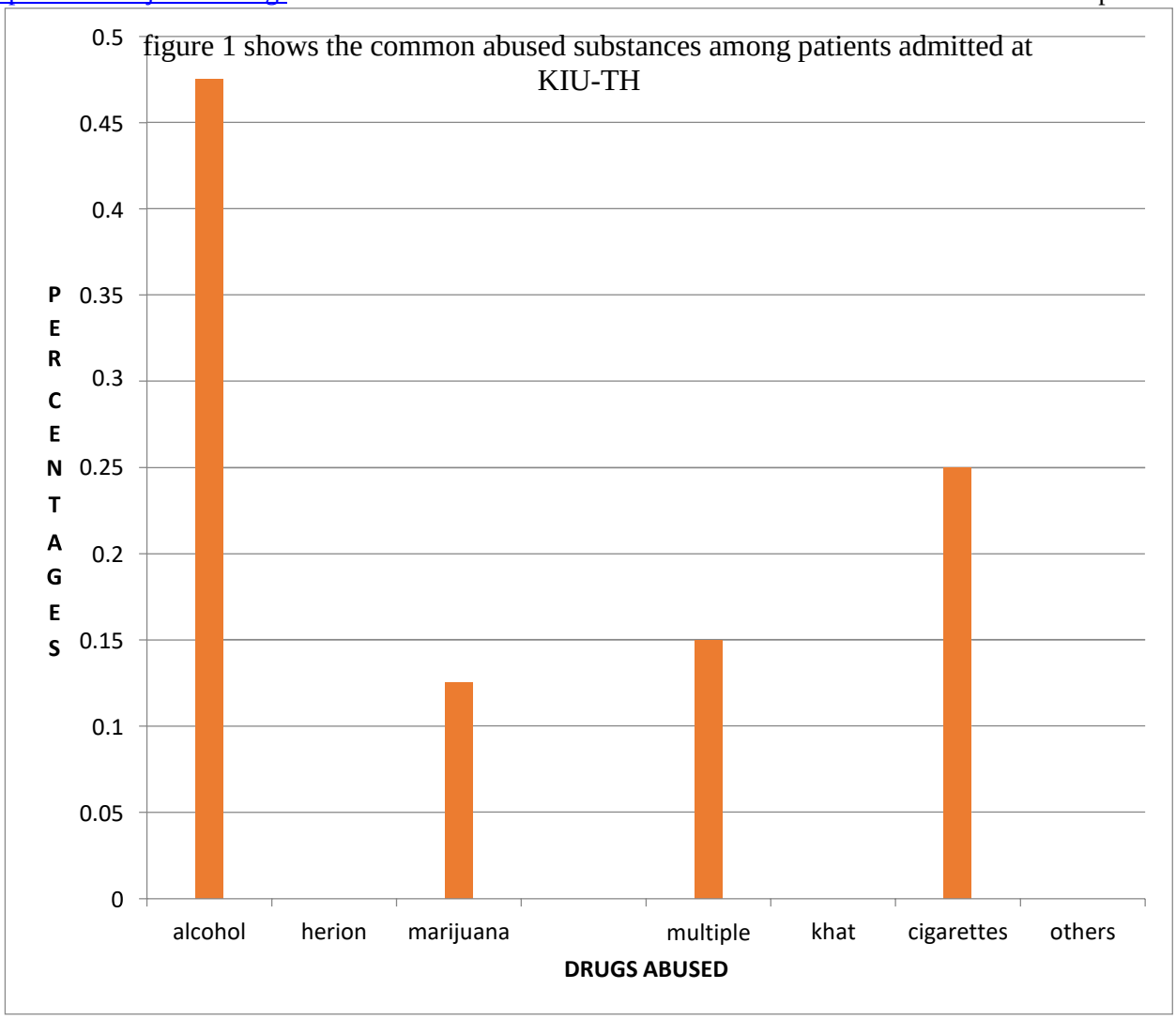
© Katumba, 2023
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Table 2 shows the common abused substances among admitted patients

The table above shows the common abused substances. Alcohol highly abused 47.5%, followedby cigarettes 25% then multiple 15% and finally marijuana 12.5%.

variable	Frequency (n)	Percentage (%)
drugs		
alcohol	**19**	**47.5**
herion	**0**	**0.0**
marijuana	**05**	**12.5**
multiple	**06**	**15**
khat	**00**	**0.0**
cigarettes	**10**	**25**
others	**00**	**0.0**

© Katumba, 2023
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



The figure above shows the common abused substances, alcohol being highly abuse followed bycigarettes then those multiple and finally marijuana

© Katumba, 2023
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Objective 2: to find the ratio of admitted patients with psychosis in psychiatric unit

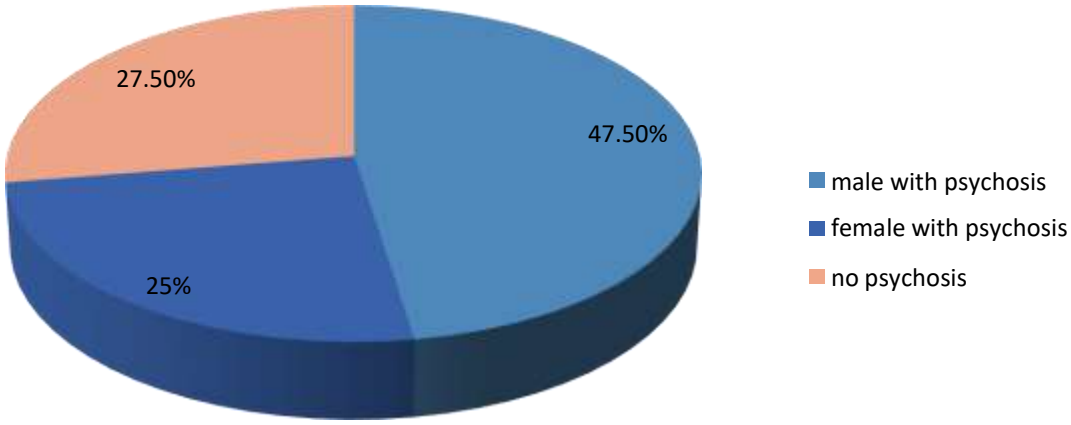


Figure 2 shows the ratio of admitted patients with psychosis admitted atKIU-TH

© Katumba, 2023
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Table 3 shows multivariate analysis of socio-economic factors influencing substance abuse

Variables	OR	95%CI	P-VALUE
Level Of Education			
None	0.231	1.023-2.451	0.002*
Primary	0.651	0.223-1.034	0.121
Secondary	0.302	0.543-1.724	0.101
Tertiary	1.000		
Residence			
Rural	1.000		
Town	0.423	0.524-1.820	0.011*
Employment Status			
Unemployment	0.135	0.263-2.033	0.001*
Employed	1.000		

***Statistically Significant P<0.05**

DISCUSSION

In this study the common abused substances, alcohol being highly abuse followed by cigarettes then those multiple and finally marijuana. This is supported by other different researches Alcoholism is one of the most common psychiatric disorders observed in the western world, alcohol related problems in the United States contribute to 2 million injuries each year including 22000 deaths [9]. A 2015 Dutch literature review on alcohol induced psychosis found that theirs 0.4% lifetime prevalence in the population and 4% prevalence of alcohol induced psychosis in patients with alcohol dependence, the incidence being highest in working age men, there is also a higher prevalence in of alcohol induced psychosis in patients who become dependent on alcohol at a young age as well as those with a low socioeconomic status, individuals who are unemployed or living on their pension and those who live alone [20]. The ratio of patients admitted with psychosis is higher in men as revealed by this study. This is supported by other studies [21] reported a study on 476 users in order to assess dependence and the presence of psychotic symptoms and found that the rate of psychotic symptoms increased with greater cocaine use, only 6.7% who did not meet the criteria for a diagnosis of cocaine abuse or dependence had psychotic symptoms, same authors found that a younger age was related to a greater risk of psychosis, additionally, more subjects who develop psychosis after cocaine use are likely to be men with have along and more severe history of abuse. Consequently, poverty can exclude individuals from access to the social opportunities andeconomic participation enjoyed by others, in addition to these socioeconomic and psychosocial consequences, stigma can also decrease the likelihood that people with a mental illness looking for mental health care [22-26]. Psychosis is associated with increased risks of poverty hence; psychosis can be viewed as an important factor in determining social and economic disadvantage. The relationship between social disadvantage and poor health status is clear. People who have a psychotic illness exhibit higher rates of obesity, poor physical health co-morbidity and higher rates of substance abuse than the general population [23-26].

CONCLUSION

In this study the common abused substances, alcohol being highly abuse followed by cigarettes then those multiple and finally marijuana. The ratio of patients admitted with psychosis is higher in men as revealed by this study. The socio-economic factors influencing patients admitted due to substance abuse in this study include; low level of education, high rates of unemployment

REFERENCES

1. Stellah N. (2011). *challenges of drug use among the youth uganda research, 2011;* 95–96.
2. Ibebuike JE, Nwokike IG, Iquiro AA, Ibebuike KE, Nwinyinya OP, Oti IP, Obeagu EI, Nwosu DC. Prevalence Of Substance Abuse Among Students of Eziach Senior Secondary School Orlu Local Government Area, Imo State. World Journal of Pharmacy and Pharmaceutical Sciences. 2017 Aug 21;6(10):1519-25.
3. Offie DC, Ekanem E, Femi O, Ekeh O, Ariyo AO, Dike PN, Obeagu EI, Oguh DN, Adeyinka OY, Akueshi C, Tomori M. Determinants of Psychoactive Substance Use Among Young People In Ado Ekiti, South West, Nigeria. World Journal of Pharmacy and Pharmaceutical Sciences. 2021 Feb 15;11(4):140-65.
4. Obeagu EI. A review of factor associated with alcohol abuse among youths K. A review of factor associated with alcohol abuse among youths. J Pub Health Nutri. 2023; 6 (2).;142.

5. Hasssan AO, Obeagu EI, Uyigue PO, Akinleye CA, Olamijuwon PB. Bacteriological and Mycological survey of domiciliary cockroach in Owo, Metropolitan. Int. J. Curr. Res. Med. Sci. 2022;8(1):14-28.
6. Okorie N, Adeniran OC, Adimabua OP, Obeagu EI, Anastasia E. Pathological Changes among Norvegicus Rattus Exposed on Novel Smoked Bambusa Vulgaris (Bamboo) Leaf: Cigarette Substitute during COVID-19 Lockdown in Nigeria. Journal of Advances in Medical and Pharmaceutical Sciences. 2022 Aug 16;24(7):30-9.
7. Okorie N, Obeagu EI, Ufot M, Azi SO, Ude UA, Ibiam GA, Ogbuanya CO, Jacob IC, Onyekachi EI. Evaluation of Histopathological Effects of Smoked Marijuana on Albino Rats and Its Oxidative Stress Indices. Journal of Advances in Medical and Pharmaceutical Sciences. 2022 May 30;24(4):1-4.
8. Okorie N, Obeagu EI, Nnamani AD, Ude UA, Agada UN, Obi IA, Ibiam GA. Histopathological Effect of Emzolyn Codein Cough Syrup on Lungs and Its Oxidative Stress Biomarkers. Journal of Pharmaceutical Research International. 2021 Nov 12;33(49B):228-40.
9. Benjamin.J.S, virginia.A S, pedro ruiz. (2015). *Synopsis of Psychiatry* (11th editi). editorial. (2018). Alcohol-Induced Psychotic Disorder: Hallucinations, Delusions, Persistent Thoughts. Retrieved June 19, 2019, from https://www.alcohol.org/comorbid/psychotic-disorder/
10. Smith MJ, Thirthalli J. Prevalence of psychotic symptoms in substance users: acomparison across substances.*ComprehensivePsychiatry*,2009;*50*(3),245–250. https://doi.org/10.1016/j.comppsych.2008.07.009
11. Perälä J, Kuoppasalmi K, Pirkola S, Härkänen T, Saarni S, Tuulio-Henriksson A, …Suvisaari, J. Alcohol-induced psychotic disorder and delirium in the general population. *British Journal of Psychiatry*, 2010; *197*(3), 200–206. https://doi.org/10.1192/bjp.bp.109.070797
12. Elizabeth H. Substance/Medication-Induced Psychotic Disorder. Retrieved June 26, 2019, from https://www.verywellmind.com/what-is-substance-medication-induced- psychotic-disorder-21938, 2019.
13. Vincent CC, Obeagu EI, Agu IS, Onyekachi-Chigbu AC. Prevalence and Pattern of Psychoactive Substance use among Senior Secondary School Students in Community Secondary School, Umuna, Orlu LGA. Journal of Pharmaceutical Research International. 2021 Dec 14;33(57A):59-67.
14. Asogwa EI, Obeagu EI, Abonyi OS, Elom CO, Udeoji DU, Egbumike CJ, Agunwah EU, Eze CN, Akamike IC, Esimai BN. Mitigating the Psychological Impacts of COVID-19 in Southern Nigeria; Public Awareness of Routine Exercises and Preventive Measures. Journal of Pharmaceutical Research International. 2021 May 31;33(30A):72-83.
15. Agah JJ, Ede MO, Asor LJ, Ekesionye EN, Ejionueme L. Managing examination induced stress among students using FEAR-model of cognitive behavioural intervention: Policy implications for educational evaluators. Current Psychology. 2021 Mar 27:1-3.
16. Thirthalli J, Benegal V. (2006). Psychosis among substance users. In *Current Opinion inPsychiatry*, *2006*; 19; http://nimhans.ac.in/cam/sites/default/files/Publications/19.PDF
17. Obeagu EI. Gender-based assessment of tumour necrosis factor–alpha and interleukin–6 of patients with Schizophrenia in Nigeria. Int. J. Adv. Res. Biol. Sci. 2022;9(9):29-35.
18. Obeagu EI, Esimai BN, Ugwu LN, Ramos GF, Adetoye SD, Edupute EC. Neutrophil to Lymphocyte Ratio and Some Cytokines in Pateints with Schizophrenia after Antipsychotic Therapy in Southeast, Nigeria. Asian Journal of Medical Principles and Clinical Practice. 2022 May 30;5(4):47-52.
19. Aldandashi S, Blackman M. P01-15 The prevalence of substance induced psychosis& substance induced mood disorders in adolescent population. *European Psychiatry*, 2009; *24*, S403. https://doi.org/10.1016/S0924-9338(09)70636-4
20. Jeffrey E, Kelsey D, Jeffrey CBN. PRINCIPLES OF PSCHOPHARMACOLOGY FOR MENTAL HEALTH PROFESSIONALS. 2006.
21. Rovera C. *Substance-Induced Psychoses: A Critical Review of the Literature*. 2011; https://doi.org/10.2174/1874473711104040228
22. Janicijevic E. Socioeconomic Factors Associated with Psychoactive Substance Abuse byAdolescents in Serbia. *Frontiers in Pharmacology*, 2017; *8*, 366. https://doi.org/10.3389/fphar.2017.00366
23. Air T, Zannettino L, Galletly C. Psychosis, Socioeconomic Disadvantage, andHealth Service Use in South Australia: Findings from the Second Australian National Survey of Psychosis. *Frontiers in Public Health*, 2015; *3*, 259. https://doi.org/10.3389/fpubh.2015.00259.
24. OPC Ugwu Ebugosi RS, IN Achara (2023). Evaluation of the effects of Maternal alcohol consumption on someselected biochemical parameters. IAA Journal of Biological Sciences.10 (1) 87-95.
25. Ugwu Okechukwu P.C. and Amasiorah V.I.(2020). Review on Health Implications, Benefits and Biochemistry of Alcohol Intoxication. INOSR Experimental Sciences. 6(1). 62-74.
26. Odom Ruth Obianuju and Okon Michael Ben. Ugwu Okechukwu Paul Chima (2022). The Effect of Ethanol Leaf Extract of Rauwolfia vomitoria on Hepatic Markers of Chloroform Intoxicated Albino Wistar Rats IAA Journal of Applied Sciences 8 (1) 87-97.

CITE AS:Katumba Marvin (2023). Abuse of Substances and Psychosis among Patients Admitted in Psychiatric Unit Kampala International University TeachingHospital. Eurasian Experiment Journal of Public Health, 4(2):1-9.