ORIGINAL RESEARCH

To determine the incidence of depression and mental comorbidities among individuals with alcohol dependence

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ABSTRACT
Aim: To determine the incidence of depression and mental comorbidities among individuals with alcohol dependence.
Materials and Methods: This research was done in the Department of Psychiatry in a hospital setting. Only patients who were 18 years of age or older and had recently been diagnosed with alcohol dependency syndrome were included. A total of 100 male patients with alcohol dependent syndrome, who attended the Psychiatry Out Patient Department (OPD), were recruited in the research using purposive selection approach. Depression in patients was evaluated by means of a clinical interview, using the ICD-10 criteria. The degree of depression was determined using the HAM-D rating scale, which categorizes scores as follows: 0-7 indicates normal, 8-16 indicates mild depression, 17-23 indicates moderate depression, and 24 or more indicates severe depression. **Results:** The whole patient population consisted of males (100%). The majority of the subjects were married (59%) and had completed education up to the upper secondary level (46%). Additionally, 49% of the subjects identified as Muslim, 54% came from rural backgrounds, and 58% were skilled workers. The incidence of depression among patients was determined to be 93%. Moderate depression was the most prevalent, accounting for 58% of cases, followed by severe depression at 27%, and mild depression at 12%. The most often seen condition is Anxiety condition, accounting for 19% of cases. This is followed by depressive disorder at 13%, bipolar disorder at 11%, and personality disorder at 9%. **Conclusion:** Alcohol Use Disorders (AUDs), depression, and the simultaneous presence of these conditions place a significant and overwhelming weight on people, families, and communities. The majority of people diagnosed with alcohol dependency syndrome also experience depression. Alcohol dependency is linked to higher degrees of impairment, regardless of whether depression is present or not.
Keywords: ADS, Co-morbidity, Depression, HAM-D, ICD

INTRODUCTION

Alcohol use disorders (AUDs) are a significant worldwide health issue. Alcohol use ranks as the third most significant risk factor for illness and disability worldwide. Alcohol is responsible for the occurrence of 60 different illnesses and injuries, and it is considered a contributing factor in around 200 cases.[1] Alcohol use disorders (AUDs) have a substantial influence on a person's general well-being, including the development of medical diseases and mental comorbidities. Alcohol Use Disorders (AUDs) have been very widespread in industrialized nations, and there has also been a significant increase in alcohol use in emerging countries. According to the most recent data from the Global Burden of Diseases study, alcohol was identified as the seventh most significant risk factor for both death and disability-adjusted life years in 2016. Alcohol is responsible for 3.8% of fatalities in females and 12.2% of deaths in males

worldwide, among individuals aged 15-49.[2] The research aimed to investigate the hypothesis that individuals with early-onset (EO) alcohol dependence exhibit more mental comorbidity and more severe clinical characteristics compared to those with late-onset (LO) alcohol dependence.
In India, the per capita intake of alcohol, including both registered and unrecorded amounts, has risen from 3.6 liters of pure alcohol (2003-2005) to 4.3 liters (2008-2010).1 In 2015-2016, the largest study on psychiatric disorders in India was conducted. The report from this National Mental Health Survey reveals that 4.65% of the population has AUDs, making it the third most prevalent mental disorder, following tobacco use disorder and depressive disorder.[3]
Excessive use of alcohol causes 5.9% of all deaths globally. In addition, it is responsible for 5.1% of the disability adjusted life years.[3] It remains a major

public health problem in South Asian region including India.[4] Co-morbid depression is also associated with higher relapse following Alcohol Use Disorder treatment among adolescents6 and adults.[5] Heavy drinking, especially binge drinking, has been found to produce depressive symptoms. Remission of problem drinking has also been found to significantly increase the chances of remission in depression.[6] This research is expected to provide insight into a significant health issue. The results of this research will contribute to the existing knowledge by addressing the gaps in the literature about the incidence of depression and mental co-morbidities among alcohol dependent patients in the Indian context. Additionally, it will assist decision makers in enhancing their ability to effectively plan, allocate resources, and provide pertinent health services.

MATERIALS AND METHODS

This research was done in the Department of Psychiatry in a hospital setting. The research protocol was evaluated by the Ethical Committee of the Hospital and was awarded ethical approval. Following the explanation of the study's objective and specifics, a signed informed consent was acquired. Only patients who were 18 years of age or older and had recently been diagnosed with alcohol dependency syndrome were included. Exclusion criteria for the research included patients with acute and severe physical disease, those with pre-existing documented mental conditions, uncooperative individuals, and those who did not provide permission to participate. A total of 100 male patients with alcohol dependent syndrome, who attended the Psychiatry Out Patient Department (OPD), were recruited in the research using purposive selection approach.

METHODOLOGY

Depression in patients was evaluated by means of a clinical interview, using the ICD-10 criteria. The degree of depression was determined using the HAM-D rating scale, which categorizes scores as follows: 0-7 indicates normal, 8-16 indicates mild depression, 17-23 indicates moderate depression, and 24 or more indicates severe depression.[7]

STATISTICAL ANALYSIS

The surveys were encoded and spreadsheets were generated for data input. The data was analyzed using the SPSS 18.0 software program for Windows, developed by SPSS Inc. in Chicago, IL, USA. Demographic information was summarized using descriptive statistics, and the survey data was evaluated. The confidence level was set at 95% and the threshold of significance was set at 5%.

RESULTS

Table 1: The whole patient population consisted of males (100%). The majority of the subjects were married (59%) and had completed education up to the upper secondary level (46%). Additionally, 49% of the subjects identified as Muslim, 54% came from rural backgrounds, and 58% were skilled workers. Table 2 reveals that the incidence of depression among patients was determined to be 93%. Moderate depression was the most prevalent, accounting for 58% of cases, followed by severe depression at 27%, and mild depression at 12%. Table 3 presents the prevalence of several mental illnesses. The most often seen condition is Anxiety condition, accounting for 19% of cases. This is followed by depressive disorder at 13%, bipolar disorder at 11%, and personality disorder at 9%.

Table 1: Demographic profile of the study population

Variables	N (%)
Age	
18-27 Years	16 (16%)
28-37 Years	50 (50%)
38-47 Years	24 (24%)
>47 Years	10 (10%)
Education	
Illiterate/ Read and write	7 (7%)
Primary	24 (24%)
Higher Secondary	46 (46%)
Graduate	23 (23%)
Occupation	
Un-employed	14 (14%)
Skilled	58 (58%)
Un-skilled	28 (28%)
Marital status	
Married	59 (59%)
Un-married	29 (29%)
Divorced	12 (12%)
Residence	
Rural	54 (54%)

Urban	28 (28%)
Peri-Urban	18 (18%)
Religion	
Hindu	34 (34%)
Muslim	49 (49%)
Sikh	9 (9%)
Christian	8 (8%)
Family Type	
Nuclear	61 (61%)
Joint	39 (39%)

Table 2: Assessment of severity of depression using HAM-D rating score

HAM-D rating score	N (%)
Normal	7 (7%)
Mild	12 (12%)
Moderate	58 (58%)
Severe	27 (27%)

Table 3: Distribution of psychiatric co-morbidities in the study population

Psychiatric Co-morbidities	N (%)
Annexity	19 (19%)
Depressive disorder	13 (13%)
Bipolar disorder	11 (11%)
Anti-social personality	9 (9%)

DISCUSSION

The patient profile in the present research included exclusively of male inpatients, and other demographic characteristics were comparable to those identified in prior studies conducted in India on patients with alcohol dependence.[8,9] Each of the individuals exhibited a level of dependency ranging from mild to severe, as assessed by the SADD scale. The current research identified Anxiety Disorder as the most prevalent mental condition, with a prevalence rate of 19%. This was followed by depressive disorder at 13%, bipolar disorder at 11%, and personality disorder at 9%. The prevalence of co-morbid psychiatric diagnoses in individuals with alcohol dependency varies among research, with some stating that mood disorders are the most often seen, while other studies identify anti-social personality or anxiety disorders as the most prevalent.[10,11] Clinicians and researchers are concerned about the frequency of co-occurring mental problems in individuals with alcohol dependence. The topic of co-morbidity has now become the primary focus of psychiatric study. Psychiatric co-morbidity, which refers to the presence of both mental and substance use disorders, can occur either concurrently (when both disorders are present at the same time) or successively (when the disorders occur at different times in a person's life). It is important to note that the two disorders may or may not be causally related.[12] However, the simultaneous presence of these two mental diseases has significant therapeutic consequences in terms of the overall presentation of symptoms, the progression of the conditions, and the prognosis for each individual ailment. Furthermore, it is essential to make a concerted effort to educate additional medical personnel who can provide optimal care for individuals with multiple medical conditions. To enhance the outlook for patients who have both substance use disorders and mental diseases, it will be necessary to do research on alcohol use disorders (AUDs) that occur alongside psychiatric disorders. This research should include both clinical and preclinical studies. Additionally, it is important to carry out these efforts within an integrated organizational framework and provide appropriate training structures. The limited sample size precludes the generalization of the findings to the broader population. The presence of Berksonian bias may also be seen in this research, given it was done on a population based in hospitals.

CONCLUSION

Alcohol Use Disorders (AUDs), depression, and the simultaneous presence of these conditions place a significant and overwhelming weight on people, families, and communities. The majority of people diagnosed with alcohol dependency syndrome also experience depression. Alcohol dependency is linked to higher degrees of impairment, regardless of whether depression is present or not.

REFERENCES

1. Das A, Kar SK, Gupta PK, Dalal PK. A Cross-sectional Study of Psychiatric Comorbidity and Severity of Addiction in Patients with Early- and Late-Onset Alcohol Dependence. Indian J Psychol Med. 2020;42(4):334-340.
2. Nair MG, Vidhukumar MG, and Prabhakaran H.. Age at onset of alcohol use and alcohol use disorder: time-

trend study in patients seeking de-addiction services in Kerala. Indian J Psychol Med; 2016; 38(4): 315.

3. Gururaj MG, Varghese MG, Benegal MG, et al. National Mental Health Survey of India, 2015-16: summary. Bengaluru: National Institute of Mental Health and Neurosciences, 2016.

4. Balhara Y, Mathur S. Alcohol: A major public health problem – South Asian perspective. Addict Disord Their Treat 2012;11:101-20

5. Cornelius J R, Maisto S A, Martin C S, Bukstein O G, Salloum I M, Daley D C. Major depression associated with earlier alcohol relapse in treated teens with AUD. Addict Behav 2004;29:1035–8.

6. Paljärvi T, Koskenvuo M, Poikolainen K, Kauhanen J, Sillanmäki L, & Mäkelä P. Binge drinking and depressive symptoms: A 5-year population-based cohort study. *Addict* 2009;104:1168–78.

7. Skogen MG, Knudsen MG, Hysing MG, et al. Trajectories of alcohol use and association with symptoms of depression from early to late adolescence: the Norwegian longitudinal health behaviour study. Drug Alcohol Rev; 2016; 35(3): 307–316.

8. Vohra AK, Yadav BS, Khurana H. A study of psychiatric co-morbidity in alcohol dependence. Indian J Psychiatry 2003;45:247-50.

9. Kaur R, Krishna PS, Ravinder E, Sahithi JK, Dattatrey M. Psychiatric disorders in adult males with alcohol dependence - A study in Telengana region of Andhra Pradesh. Int J Res Med 2013;2:80-6.

10. Sánchez-Peña JF, Álvarez-Cotoli P, Rodríguez-Solano JJ. Psychiatric disorders associated with alcoholism: 2 year followup of treatment. Actas Esp Psiquiatr 2012;40:129-35.

11. Kumar V, Dalal PK, Trivedi JK, Kumar P. A study of psychiatric co-morbidity in alcohol dependence. Delhi Psychiatry J 2010;13:291-3.

12. Singh A, Kumar S, Sharma CS, Dixit V, Srivastava RK, Yaduvanshi R. Other psychiatric co-morbidities in male patients of alcohol dependence syndrome: a cross sectional study. IJBAMR. 2016; 5(2):828-38.