



A STUDY OF COMORBID PSYCHIATRIC DISORDERS IN PATIENTS WITH ALCOHOL DEPENDENCE SYNDROME

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ABSTRACT

Introduction- An estimated sixty million or more people use alcohol in India, and this number has increased recently. It is estimated that 2.7%, or 2.9 crore persons, in the general population (10-75 years old) suffer from dependent alcohol use. Multiple disorders present in one individual at the same time, either concurrently or sequentially, are known as psychiatric comorbidity. Though the degree of the association varies with each condition, alcohol users are more likely to develop mood, anxiety, drug, and mental health illnesses than the general population. **Objectives- 1-** To assess the different types of psychiatric problems in patients with alcohol dependence syndrome. **2-** To find out the prevalence of psychiatric problems in patients with alcohol dependence syndrome. **Methodology-** This cross-sectional comparative study was conducted at OPD & IPD of Psychiatry Department of Index Medical College & Hospital, Indore for the period of 6 months. The total sample size of this study was 120 subjects divided into two groups i.e. 60 Cases & 60 Controls. The following tools were used for the data collection: 1. a semi-structured socio-demographic proforma, 2. Mini International Neuropsychiatric Interview 7.0.2. (M.I.N.I.). **Result & Discussion-** A total of 53.33% and 15% of patients with and without alcohol dependence disorder were present with one or more psychiatric comorbidities. Among them, the most common psychiatric comorbidity present was major depressive disorder (40.63%) followed by bipolar affective disorder (28.13%), dysthymia and social anxiety disorder (9.38% each), panic disorder (6.25%) and anti-social personality disorder and psychotic disorder (3.13% each) in the patients with alcohol dependence disorder. We found a significant association of presence of psychiatric comorbidities in the patients with alcohol dependence disorder. **Conclusion-** Planning a thorough care strategy for comorbid psychiatric disorders in alcohol-dependent people would therefore benefit from accurate assessment and evaluation of these problems.

KEYWORDS : Alcohol Dependence, Substance Use Disorder, Comorbid Psychiatric Disorders**INTRODUCTION-**

Consuming alcohol is a significant social problem that is impacted by market dynamics, availability, culture, financial status, historical trends, and laws governing the consumption of alcohol. Drinking alcohol causes death and impairment at a relatively young age and accounts for about 14% of mortality in young adults. An estimated sixty million or more people use alcohol in India, and this number has increased recently. For every woman who drinks alcohol, there are seventeen guys. Up to 19% of alcohol consumers nationwide suffer from dependence. It is estimated that 2.7%, or 2.9 crore persons, in the general population (10-75 years old) suffer from dependent alcohol use.

The most prevalent psychiatric illness in the general population is Alcohol Use Disorder or AUD which poses a major public health risk in India. Those with AUDs are more likely to have co-morbid psychiatric issues. Since alcohol is a chronic substance that alters nearly every neurochemical system in the body both acutely and chronically, limitless drinking can cause transient psychological illnesses like anxiety, depression, and psychosis. The likelihood of developing alcohol use problems is increased by several pre-existing psychiatric conditions, like schizophrenia, bipolar disorder, and antisocial personality disorder.

Multiple disorders present in one individual at the same time, either concurrently or sequentially, are known as psychiatric comorbidity. Though the degree of the association varies with each condition, alcohol users are more likely to develop mood, anxiety, drug, and mental health illnesses than the general population. The association of alcohol use disorders and other psychiatric problems can occur through various mechanisms and may be due to a direct or indirect causal relationship of alcohol with other psychiatric problems, or vice versa.

To plan comprehensive management of psychiatric disorders in alcohol-dependent individuals, accurate assessment and evaluation of these conditions is necessary. Therefore, this study was conducted to observe the different types of psychiatric problems developed in patients with alcohol dependence syndrome and the incidence of those psychiatric problems in the central zone of India, where less data was available on the subject.

AIMS & OBJECTIVES-

1. To assess the different types of psychiatric problems in patients with alcohol dependence syndrome.
2. To find out the prevalence of psychiatric problems in patients with alcohol dependence syndrome

METHODOLOGY-

This cross-sectional comparative study was conducted at Psychiatry Department of Index Medical College, Hospital & Research Centre, Indore for the period of 6 months i.e. December 2022 to May 2023 after obtaining ethical committee approval. The total sample size of this study was 120 subjects divided into two groups i.e. 60 Cases & 60 Controls.

The study participants were recruited from the Index Medical College, Hospital and Research Centre, Indore's Outpatient and Inpatient Department of Psychiatry. The study participants in the control group were selected using a simple random sample technique, while the patients in the cases were selected using a purposive sampling technique. There were no subjects from either of the two groups who dropped out during the data-gathering process.

Inclusion criteria includes patient between the ages of 21 to 65 years and diagnosed with alcohol dependence syndrome on basis of ICD-10 classification. Subjects who consume alcohol but do not meet the criteria for alcohol dependence syndrome as defined by ICD-10, serving as controls. Exclusion criteria Patients of less than 21 years and more than 65 years. Patients with any substance use disorder other than alcohol dependence syndrome. Patients uncooperative for interview.

The following tools were used for the data collection: 1. a semi-structured socio-demographic proforma, 2. Mini International Neuropsychiatric Interview 7.0.2. (M.I.N.I.).

Qualitative and Quantitative variables were presented as frequency and percentages and mean (Standard Deviation) respectively and the Chi-square test was applied through statistical software.

RESULTS-

In this study, a total of 60 individuals meeting the ICD 10 criteria for alcohol-dependent syndrome were evaluated throughout the study, along with 60 subjects from the general community who served as a matched control group.

The mean age of the patients with alcohol dependency is 40 years with an SD of 10 years and for the control group, the mean age is 39 years

with an SD of 9.6 years. Among all the patients with alcohol dependency included in the study, 41.7% of patients were from the age group of 31 to 40 years followed by 41 to 50 years (30%), 21 to 30 years (15%), 51 to 60 years (8.3%) and > 60 years (5%). In the control group of patients without alcohol dependence disorder, the majority of the patients were within the age group of 31 to 40 years followed by 41 to 50 years (33.33%), 21 to 30 years (16.67%), 51 to 60 years (10%) and > 60 years (5%). When both the groups were compared for any difference, we found no difference between the groups for the age-wise distribution of patients. (Chi-square test; $P = 0.9634$). When both the groups were compared for any difference, we found no significant difference between the groups for the gender-wise distribution of patients, type of family, income, age of onset and duration of alcohol consumption.

A total of 53.33% and 15% of patients with and without alcohol dependence disorder were present with one or more psychiatric comorbidities. Among them, the most common psychiatric comorbidity present was major depressive disorder (40.63%) followed by bipolar affective disorder (28.13%), dysthymia and social anxiety disorder (9.38% each), panic disorder (6.25%) and anti-social personality disorder and psychotic disorder (3.13% each) in the patients with alcohol dependence disorder. In the group without alcohol dependence disorder, the most common psychiatric comorbidity was major depressive disorder (44.44%) followed by social anxiety disorder (22.22%), panic disorder, psychotic disorder and generalised anxiety disorder (11.11% each). When both the groups were compared for any association of having psychotic comorbidities in the patients with and without alcohol dependence disorder, we found a significant association of presence of psychiatric comorbidities in the patients with alcohol dependence disorder. (Chi-square test = 17.93; $P < 0.0001$). (Table given below)

Psychiatric comorbidities	Cases		Controls	
	Frequency	Percentage	Frequency	Percentage
Major depressive disorder	13	40.63%	4	44.44%
Bipolar affective disorder	9	28.13%	0	0
Dysthymia	3	9.38%	0	0
Social anxiety disorder	3	9.38%	2	22.22%
Panic disorder	2	6.25%	1	11.11%
Anti-social personality disorder	1	3.13%	0	0
Psychotic disorder	1	3.13%	1	11.11%
Generalised anxiety disorder	0	0	1	11.11%
Total	32		9	

DISCUSSION-

The individuals diagnosed with alcohol dependence had an average age of 40 years, with a standard deviation of 10 years. The majority of patients (35%) were male, 85% were in the 30 to 40-year age range, 88% were married, 63% had completed secondary education, 85% lived in nuclear families, and 47% made between 10,000 and 20,000 rupees a month.

In a study done by Kattukulathil et al. investigated the rate of psychiatric illness among alcohol-dependent patients attending a de-addiction centre in Kerala. The results indicated that most patients (47%) were between the ages of 30 and 40; all participants were male and 85% were married; 38 per cent of patients had completed secondary school; 45% of patients were unskilled workers; and 52% of patients had a monthly family income of between 10,000 to 20,000 rupees.

The results of our study revealed that the most of patients (45%) had started to drink alcohol between the ages of 21 to 30 years and that 40% had begun less than 20 years earlier. These findings were similar to those of a previous study by Chaudhary et al., which examined the type and prevalence of associated psychiatric disorders in alcohol-dependent people compared to the general population (58% and 38%, respectively). Similar patterns of the age of onset of alcohol

consumption (59% and 3%, respectively) were also seen in a study performed by Kattukulathil et al. to ascertain the incidence of mental comorbidities among alcohol-dependence patients attending a deaddiction centre in Kerala.

The results of study by Singh NG et al also observed that 35% of the patients had begun drinking alcohol at an age under 20, and 41% of the patients had begun drinking between the ages of 21 and 30.

The primary outcome of the current investigation showed that patients with alcohol dependency problems had an overall prevalence of 53.33% for at least one psychiatric comorbidity, compared to 15% for subjects without alcohol dependence disorder. Additionally, a significant difference was seen between those with and without alcohol-dependent illness in terms of psychiatric comorbidities ($P < 0.0001$; Chi-square test = 17.93). Our study's observations were similar to the previous research conducted in India.

According to our research, major depressive disorder (40.63%) was the most prevalent psychiatric comorbidity among patients with alcohol dependence, followed by bipolar affective disorder (28.13%), panic disorder (6.25%), dysthymia and social anxiety disorder (9.38% each), anti-social personality disorder, and psychotic disorder (3.13% each). Similarly, depression was the most common type of psychiatric comorbidity in patients with alcohol dependence disorder, followed by antisocial personality disorder (21%) and phobia (16%), according to a study by Singh NG et al.

Another study from India revealed similar results. Chaudhary et al.'s cohort study in a rural and metropolitan area examined the type and prevalence of comorbid psychiatric disorders in alcohol-dependent people and compared the results with those of the general population. It found that depression (10.23%) was the most common psychiatric comorbidity in patients with alcohol dependence disorder, followed by anxiety disorders (7.95%), panic disorders (4.55%), and bipolar disorder (3.41%).

In contrast to our results, Kattukulathil et al.'s cross-sectional study, which examined the prevalence of psychiatric comorbidities among patients with alcohol dependence disorder attending a de-addiction facility in Kerala, found that bipolar disorder was the most common comorbidity among these patients (20.4%), followed by unipolar depression (17%), phobia (9%), GAD and ASPD (6.8% each), and schizophrenia (3.4%).

CONCLUSION-

Based on our study, we found that individuals with proven alcohol-dependent diseases had a considerably greater overall incidence of psychiatric comorbidities than non-alcohol dependent subjects. Additionally, we discovered that among patients with confirmed alcohol-dependent disorders, major depressive disorder was the most prevalent kind of psychiatric comorbidity, followed by anti-social personality disorder, bipolar affective disorder, panic disorder, and social anxiety disorder.

Planning a thorough care strategy for co-morbid psychiatric disorders in alcohol-dependent people would therefore benefit from accurate assessment and evaluation of these problems.

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