Research Report

PSYCHIATRIC COMORBIDITY IN ALCOHOL DEPENDENCE: A CROSS-SECTIONAL STUDY IN A TERTIARY CARE SETTING

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ABSTRACT

Background: Alcohol dependence is a very important public health issue in Kerala. Though alcohol dependence is demonstrated to be associated with psychiatric comorbidities, no attempts have been made to analyze the magnitude and pattern of comorbid psychiatric disorders in the state.
Methods: We assessed 88 inpatients with ICD 10 diagnosis of alcohol dependence syndrome for the presence of comorbid psychiatric disorders, using ICD10 Diagnostic Criteria for Research, after two weeks of inpatient care. Patients with delirium tremens, alcohol-induced psychosis or organic illnesses were excluded.
Results: 66.59% of our subjects had a comorbid psychiatric disorder. Bipolar affective disorder was the most common one (20.4%). Prevalences of other disorders were: unipolar depression (17%), phobia (9%), antisocial personality disorder (6.8%), generalized anxiety disorder (6.8%), schizophrenia (3.4%), obsessive compulsive disorder (1.1%) and delusional disorder (1.1%).
Conclusion: Comorbid psychiatric disorders are highly prevalent in alcohol dependence. There is a need for further large-sample studies on the comorbidities and on integrated strategies for the identification and management of both alcohol dependence and comorbid psychiatric disorders.

Keywords: Alcohol dependence, comorbidity, psychiatric disorder

INTRODUCTION

"Comorbidity" denotes the presence of a distinct clinical entity that has existed or may occur during the clinical course of a patient having the index disease.[1] Psychiatric comorbidities have a high prevalence among patients of alcohol dependence,[2,3,4] and often pose challenges in their diagnosis and treatment. Comorbid psychiatric illnesses have been found to be a major contributor to relapses.[5] Comorbidities commonly reported in this population include unipolar depression, bipolar disorder, panic disorder, generalized anxiety disorder (GAD), antisocial personality disorder (ASPD), obsessive compulsive disorder (OCD)

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and schizophrenia.[2,6,7,8] Unfortunately, often only the symptoms of dependence get sufficient clinical attention.

Comorbid psychiatric disorders in patients of alcohol dependence is a crucial area of research due to various reasons: First is the already reported very high prevalence of such comorbidity. In National Comorbidity Survey (NCS), the largest household psychiatric disorder survey, about one-third of respondents with alcohol dependence had a comorbid mood disorder.[9] Prevalence of comorbid major depressive disorder (27.9%) and anxiety disorder (36.9%) were very high in the NCS. Studies have shown that comorbidity in alcohol dependence would lead to more chronic alcohol use, treatment resistance of the comorbid disorder, and high suicide rates and disability.[10] Moreover, presence of psychiatric comorbidities is associated with poor treatment seeking for alcohol dependence.[11] Comorbid disorders also raise a challenging question of how to provide the best integrated treatment to address both the alcohol dependence and the comorbidities.

Among the Indian states, Kerala has the highest per capita consumption of alcohol —nearly three times the national rate.[11] A WHO-funded study conducted by Indian Council of Medical Research found that, in Kerala, 11% of the respondents had consumed alcohol over the past 30 days, and, of the total number of drinkers, the average consumption was three drinks per day.[12] Such a severe alcohol dependence will be associated with high prevalence of psychiatric disorders too. But, to the best of our knowledge, no studies have looked into the pattern of psychiatric comorbidity in alcohol dependence in the state.

Our study aimed to find the prevalence of psychiatric comorbidities among alcohol dependence patients attending a de-addiction facility.

METHODOLOGY

The study followed a cross-sectional design. It was conducted in the De-addiction unit of the Dept. of Psychiatry at Pushpagiri Institute of Medical Sciences and Research Centre, Thiruvalla, which is a tertiary care hospital. Study population included patients admitted for de-addiction who fulfilled the ICD-10 criteria for alcohol dependence syndrome. The assessment for psychiatric comorbidities was done by a qualified psychiatrist, according to ICD-10 Diagnostic Criteria for Research, through clinical assessment, after two weeks of inpatient treatment. Assessment of sociodemographic profile and other characteristics of patients in terms of age of initiation of alcohol use and duration of dependence was also done.

Patients who remained in delirium even after two weeks, those with alcohol-induced psychosis, and those with organic illnesses were excluded. Duration of the study was six months — from July 2013 to December 2013.

The study was approved by the Institutional Ethics Committee. Informed consent was obtained from the patients.

Continuous variables, such as age, were summarized in the form of means and standard deviations; while categorical variables like marital status were summarized in percentages.

Table 1: *Distribution of study participants by demographic variables*

Variable	Number (n= 88)	Percent
AGE AT INITIATION (in years) Mean=28.9 SD= 1. 63		
<20	3	3
21-30	52	59
31-40	33	38
DURATION OF DEPENDENCE (in years) Mean= 5.8 SD= 1. 6		
1-5	48	54
6-10	30	34
11-15	8	9
16-20	2	3

Table 2: *Characteristics of alcohol use*

Variable	No: (n= 88)	Percent
AGE (IN YEARS) Mean= 40.39 years SD= 2.38 years		
21-30	5	6
31-40	42	47
41-50	34	39
>50	7	8
MARITAL STATUS		
Married	75	85
Unmarried	10	11
Separated	3	4
EDUCATION		
Primary	30	34
SSLC	33	38
PDC/+2	18	20
Degree	7	8
OCCUPATION		
Unemployed	8	9
Unskilled	40	45
Skilled	22	25
Professional	18	21
FAMILY INCOME PER MONTH (in rupees)		
5000 -10,000	34	39
10,000-20,000	46	52
>20,000	8	9
Total	88	100

RESULTS

A total of 88 patients were included. All the participants were male. Majority were in the age group of 31-40 years (n=42, 47%), married (n=75, 85%), had completed secondary school education (n=33, 38%), unskilled workers (n=40, 45%), and earning in the range of 10000-20000 INR per month (n=45, 52%) (Table 1). Age at initiation was between 21-30 years in 52 (59%) subjects, while the duration of alcohol dependence was in 1-5 year range in 48 (54%) of them (Table 2).

Overall prevalence of any psychiatric comorbidity was 66.59%. Rates of specific comorbidities are depicted in Figure 1.

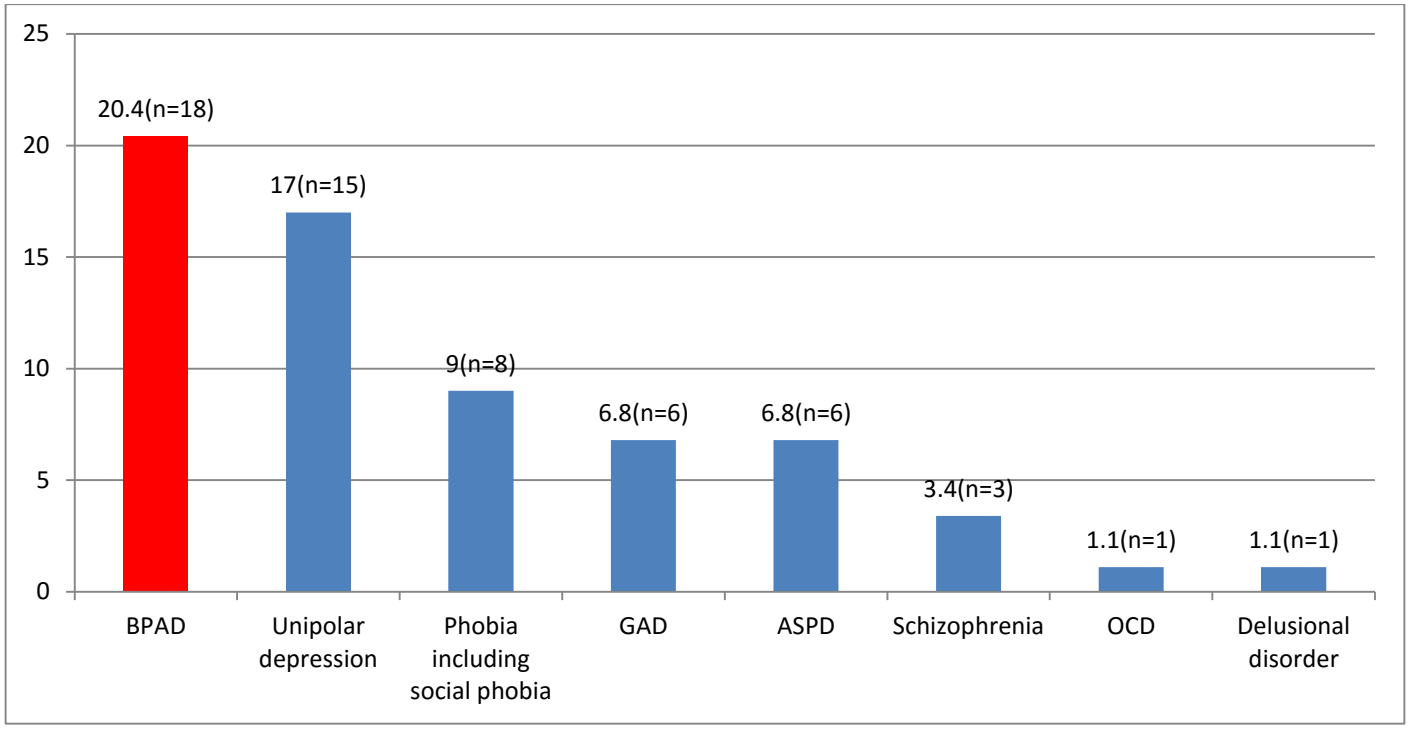
DISCUSSION

Our sample contained relatively elderly patients (mean age 40.39 years, SD 2.38) and age of onset of alcohol use too was relatively late (mean 28.9 years, SD 1.63), compared to another Indian study by Singh et al.[2] The mean duration of dependence was 5.8 (SD 1.6) years, which is shorter compared to the finding by Singh et al.[2] Similar to some other Indian studies on comorbidities in alcohol dependence, all our subjects were male.[14,15] The reasons could be that, as per the experience of psychiatrists working in the state, alcohol consumption by women is less socially accepted in Kerala, alcohol use is more prevalent in men than women in this region, and women are less likely to get admitted for treatment of alcohol dependence.

Psychiatric comorbidity was found in 66.59% of our subjects. This is comparable to the findings of other studies.[4,14] One Indian study had demonstrated a higher prevalence of 81% in inpatients with alcohol dependence.[15] However, we should remember that, as per existing literature, even in outpatients with alcohol dependence the reported prevalence range is from 76.6% to 92%[2,4] — such wide range may be due to factors like the context (whether the study is conducted in outpatients, inpatients or community sample), the tools used (whether a structured interview schedule was used to diagnose comorbidities or not) and stage of illness (whether the evaluation was done during active use or remission). NCS, which was a community study, had found a prevalence of 66.1% — a figure comparable to our own finding.

Many Indian studies had revealed a very low prevalence of bipolar disorder in alcohol dependence, from 0% to 16%.[2,4,9,15] But our study found bipolar disorder to be the commonest comorbidity (20.4%). This should be viewed in light of the fact that comorbidity of bipolar disorder and

Figure1: *Bar diagram showing the percentage of various psychiatric comorbidities*



BPAD: Bipolar affective disorder GAD: Generalized anxiety disorder ASPD: Antisocial personality disorder OCD: Obsessive compulsive disorder

alcohol dependence was the most common dual diagnosis detected in NCS.[9] Moreover, as the age onset of alcohol dependence in our sample was later than the usual age of onset for bipolar disorder, it is possible that our patients with alcohol dependence-bipolar comorbidity developed bipolar disorder first and then only developed alcohol dependence. But we did not look into the temporal association of the two disorders in our sample.

Unipolar depression was diagnosed in 17% of our sample. Such a relatively lower prevalence of unipolar depression has been detected by another Indian study too.[16] However, some other studies have also documented higher prevalence of 26% and 33%.[2,17] In our study, compared to other studies, duration of dependence was short and hence the less chronic nature of alcohol use might have resulted in lower prevalence of depression.[2]

In our sample, phobia was diagnosed in 9% of subjects. (Different types of phobias, such as social phobia, agoraphobia, specific phobia or other phobic disorders, were grouped together in this study.) GAD was diagnosed in 6.8%, and this prevalence is similar to the findings by Singh et al. (8%).[2] ASPD was diagnosed only in 6.6% of our cases, and this is far less compared with the findings of Singh et al. (21%).[2] This may be due to our use of unstructured interview and ICD-10 criteria to diagnose personality disorders.

Surprisingly, our study showed a very low prevalence of schizophrenia in alcohol dependence (3.4%). In Epidemiologic Catchment Area (ECA) study, the lifetime rate of comorbid schizophrenia in the alcohol dependence group was 24%.[18] We included only those patients who attended our de-addiction unit — many patients with schizophrenia-alcoholism comorbidity might have been attending our general psychiatry department for treatment of schizophrenia, and hence could have got excluded from this study. Another reason could be that many patients with alcohol dependence-schizophrenia

comorbidity would have got admitted to any of the rehabilitation centers prevalent in the state, for life-long stay, due to the higher severity or chronicity of their illnesses. Prevalence of comorbid OCD we found is comparable to the findings of Singh et al.[2]

Limitations of our study include small sample size, cross-sectional design, not using a structured interview schedule, and including only inpatients. We did not assess comorbid use of other substances (including nicotine), physical comorbidity, or treatment parameters. Personality evaluation scales or structured interview schedule for axis II disorders could have been used to detect personality disorders.

To conclude, our study highlights the fact that psychiatric comorbidities are highly prevalent in alcohol dependence. Studies with larger sample size, studies that include patients with remitted alcoholism, and studies on integrated interventions to treat both alcoholism and the comorbid psychiatric disorders are needed in the future.

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