

Original Article

## Prevalence of Psychiatric Disorder in Male Patients of Alcohol-Dependence

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### ABSTRACT

**Background:** Currently, Alcohol use disorders (AUDs) are among the most prevalent mental disorders worldwide. Alcohol use disorders are highly disabling and associated with many physical and psychiatric co-morbidities; they also contribute substantially to global morbidity and mortality. **Objectives:** To assess the magnitude of co morbid psychiatric disorder in alcohol dependence syndrome.

**Material and Methods:** The study was a hospital based cross-sectional observational study. The study was conducted at the Department of Psychiatry in Rohilkhand Medical College & Hospital (RMCH), Bareilly (Uttar Pradesh).

**Results:** Different psychiatric co morbidity for example mood disorder, Anxiety disorder, Adjustment disorder, Psychotic disorder, and Somatoform disorder associated with alcohol dependence.

**Conclusion:** The frequency of co-occurrence of different types of psychiatric disorders was as follows: Mood disorder 24%, Anxiety disorder 14%, Adjustment disorder 3%, Psychotic disorder 6%, and Somatoform disorder 2%.

**Keywords:** Psychoactive substance, Adjustment disorder, Somatoform disorder.

### INTRODUCTION

Alcohol dependence is more common in males, and has an onset in late second or early third decade. The course is usually insidious. It has been estimated that about 62.5 million in India consume alcohol and that there has been a significant increase in the per capita consumption of alcohol in recent times<sup>[1]</sup> The lifetime risk of developing alcohol dependence in men is around 10%, and this constitutes a significant public health problem.<sup>[2]</sup> In India, epidemiological studies have shown a prevalence rate of 16-50 % for alcohol dependence<sup>[3]</sup> According to National Household Survey 2000-2001, prevalence rate of alcoholism in males was found to be 21%.<sup>[4]</sup> Another study in southern rural India reported that 14.2% of the population sample had showed hazardous alcohol use. The prevalence of other psychiatric

disorders in alcohol dependants is of concern to both clinicians and researchers. The issue of co-morbidity has now assumed centre-stage in psychiatric research, which has led investigators to comment that it may be one of the most important advancements in psychiatric nosology in the twentieth century. It has now become apparent that Psychiatric co-morbidity, or co-morbid mental and substance use disorders, may occur concurrently (two disorders are present at the same time) or successively (two disorders occur at different times in a person's life); in both cases, the two disorders may or may not be causally related. But this co-occurrence of two psychiatric conditions does have many clinical implication in term of overall symptom presentation, course as well as prognosis of each of the condition.

Various studies have also reported that alcohol dependence with various co morbid psychiatric disorders can mean poor prognosis in patients. Patients suffering from untreated psychiatric disorders may also start taking alcohol due to disorder induced behaviour changes or as a self-medicating substance. Even after alcohol de addiction, psychiatric morbidity, if left untreated increases risk of relapse in alcohol dependent subjects. The existence of these disorders seems to influence the pattern and severity of drinking thereby adversely affecting the prognosis and treatment outcome.

Hence this study was conducted to assess the magnitude of co morbid psychiatric disorder in alcohol dependence syndrome.

## **MATERIAL & METHODS**

This hospital based cross-sectional observational study was conducted at the department of Psychiatry in Rohilkhand Medical College & Hospital (RMCH), Bareilly (Uttar Pradesh). A total of 100 male patients of Alcohol Dependence Syndrome, who fulfilled the inclusion and exclusion criteria, were recruited in this study. The subjects were recruited for the study by purposive sampling technique. In this study we were followed inclusion criteria as, age 18-45 years considered, only male patients diagnosed with alcohol dependence syndrome & currently abstinent (As per ICD-10 DSR)

### **Tools for Assessment**

- Socio-demographic and Clinical data sheet [Self Prepared]
- Mini International Neuropsychiatric Interview-Plus version (M.I.N.I.-Plus)
- International Personality Disorder Questionnaire (IPDE)
- Severity of Alcohol Dependence Questionnaire (SADQ)

### **Procedure for Data Collection**

Patients from outpatient department of Psychiatry at Rohilkhand Medical College and Hospital, Bareilly were included in the study. Such patients came on their own with family members or were referred from other departments for further psychiatric evaluation. After screening, as per inclusion and exclusion criteria, diagnosis was made as per ICD -10 Diagnostic criteria for research.<sup>[131]</sup> Socio-demographic data were gathered after taking informed consent. SADQ was applied to patients to assess the severity of alcohol dependence. They were assessed in details for presence or absence of other co-morbid psychiatric disorders with the help of M.I.N.I.-Plus. Presence of personality disorders were ascertained with the help of IPDE.

### **Statistical Analysis**

All the data was tabulated in a Microsoft excel spread sheet. Descriptive statistical analysis was done using SPSS Software version 16. Appropriate statistical tests were used where ever required considering statistically significant level at  $p < 0.05$ .

## RESULTS

**Table 1: Socio-demographic Details of Male Patients of Alcohol Dependence Syndrome (ADS; N=100)**

Socio-demographic Variables		Male patient of ADS (N=100)
		Mean $\pm$ SD
Age in years (Minimum=23, Maximum=62)		39.46 $\pm$ 8.57
		<b>n (%)</b>
<b>Religion</b>	Hindu	77(77%)
	Muslim	17(17%)
	Sikh	6(6%)
<b>Marital Status</b>	Single	24(24%)
	Married	62(62%)
	Separated	5(5%)
	Divorced	9(9%)
<b>Education</b>	Illiterate	8(8%)
	1 <sup>st</sup> -10 <sup>th</sup> Std.	53(53%)
	Pre-University	18(18%)
	Graduate	15(15%)
	Postgraduate or above	6(6%)
<b>Occupation</b>	Unemployed	10(10%)
	Unskilled Employment	52(52%)
	Skilled Employment	38(38%)
<b>Residence</b>	Rural	27(27%)
	Semi Urban	29(29%)
	Urban	44(44%)
<b>State</b>	Uttar Pradesh	88(88%)
	Uttarakhand	12(12%)
<b>Socio-economic</b>	Low	20(20%)

<b>Status</b>	Middle	71(71%)
	High	9(9%)
<b>Family type</b>	Nuclear	64(64%)
	Joint	36(36%)

**Table 2: Socio-demographic Details of Male Patients of Alcohol Dependence Syndrome (ADS; N=100)**

<b>Socio-demographic Variables</b>		<b>Male patients of ADS with psychiatric co-morbidity (N=64)</b>	<b>Male patients of ADS without psychiatric co-morbidity (N = 36)</b>	<b>t/<math>\chi^2</math></b>	<b>df</b>	<b>p value</b>
<b>Age (in years)</b>		40.98±8.90	36.70±7.29	2.42	98	<b>.017*</b>
		n%	n%			
<b>Religion</b>	Hindu	47(73.4%)	30(83.3%)	1.459	2	.482
	Muslim	13(20.3%)	4(11.1%)			
	Christian	4(6.3%)	2(5.6%)			
<b>Marital status</b>	Single	15(23.4%)	9(25.0%)	5.088	3	.165
	Married	41(64.1%)	21(58.3%)			
	Separated	1(1.6%)	4(11.1%)			
	Divorced	7(10.9%)	2(5.6%)			
<b>Education</b>	Illiterate	7(10.9%)	1(2.8%)	3.701	4	.448
	1 <sup>st</sup> -10 <sup>th</sup> STD	31(48.4%)	22(61.1%)			
	Pre-University	11(17.2%)	7(19.4%)			
	Graduate	10(15.6%)	5(13.9%)			
	Post-graduate or above	5(7.8%)	1(2.8%)			
<b>Occupation</b>	Unemployed	4(6.3%)	6(16.7%)	2.866	2	.239
	Unskilled Employment	34(53.1%)	18(50%)			
	Skilled Employment	26(40.6%)	12(33.3%)			
<b>Residence</b>	Rural	19(29.7%)	8(22.2%)			

	Semi-urban	19(29.7%)	10(27.8%)	.965	2	.617
	Urban	26(40.6%)	18(50%)			
<b>State</b>	Uttar Pradesh	57(89.1%)	31(86.1%)	.190	1	.663
	Uttarakhand	7(10.9%)	5(13.9%)			
<b>Socio-economic status</b>	Low	13(20.3%)	7(19.4%)	2.792	2	.248
	Middle	43(67.2%)	28(77.8%)			
	High	8(12.5%)	1(2.8%)			
<b>Family type</b>	Nuclear	43(67.2%)	21(58.3%)	.784	1	.376
	Joint	21(32.8%)	15(41.7%)			

**Table 3: Distribution of Psychiatric Comorbidity in Male Patients of Alcohol Dependence Syndrome (ADS; N=100) on IPDE Only and Comparison of Socio-demographic details of Male Patients of Alcohol Dependence Syndrome (ADS) according to Presence or Absence of Psychiatric Comorbidity**

Psychiatric Comorbidity on IPDE	Male Patients of ADS (N=100) (
Dissocial personality disorder	17%
Anxious-Avoidant personality disorder	12%
Borderline personality disorder	5%
Paranoid personality disorder	2%
Other personality disorders	7%

IPDE: International Personality Disorder Examination

**Table 4: Distribution of Psychiatric Comorbidity in Male Patients of Alcohol Dependence Syndrome (ADS; N=100) on M.I.N.I.-Plus Only**

Psychiatric Comorbidity on MINI-Plus	Male Patients of ADS (N=100)
	n (%)
Mood disorder	24%
1. Mood disorder (current)	16%
o Major depressive episode (current)	6%
o Major depressive episode with melancholia (current)	4%
o Suicidality (current)	4%

○ <b>Dysthymia (current)</b>	2%
<b>2. Mood disorder (life time)</b>	8%
○ <b>Recurrent Major depressive episode (life time)</b>	5%
○ <b>Dysthymia (life time)</b>	3%
<b>Anxiety disorder (current)</b>	14%
<b>3. Panic disorder (current)</b>	6%
<b>4. Social Anxiety disorder (current)</b>	3%
<b>5. Generalized Anxiety disorder (current)</b>	2%
<b>6. Obsessive compulsive disorder (current)</b>	1%
<b>7. Mixed Anxiety and Depressive disorder (current)</b>	2%
<b>Adjustment disorder (current)</b>	3%
<b>Psychotic disorder</b>	6%
<b>8. Psychotic disorder (current)</b>	2%
○ <b>Schizophrenia (current)</b>	1%
○ <b>Bipolar 1 disorder with psychotic symptoms (current)</b>	1%
<b>9. Psychotic disorder (life time)</b>	4%
○ <b>Schizophrenia</b>	1%
○ <b>Delusion disorder</b>	1%
○ <b>Psychosis NOS</b>	1%
○ <b>Bipolar 1 disorder with psychotic symptoms</b>	1%
<b>Somatoform somatization disorder (life time)</b>	2%

## DISCUSSION

In our study, the frequency of occurrence of different types of psychiatric conditions was as follows: Mood disorder – 24%, Anxiety disorder – 14%, Adjustment disorder – 3%, Psychotic disorder – 6%, and Somatoform disorder – 2%. In mood disorders, 16% of the diagnoses were current while 8% were lifetime. Overall, frequency of distinct diagnoses was as follows: Depression- 15% [Major depressive episode 6% (current), Major depressive disorder with melancholia 4% (current), Recurrent Major depressive episodes-5% (lifetime)]; Suicidality 4% (current); and Dysthymia 5% (current 2% & lifetime 3%). A higher prevalence of depression in patients of alcohol dependence has earlier been reported by many research workers like Singh et al.<sup>[5]</sup> (26%), Alec et al<sup>[6]</sup> (33%), Cadoret et al.<sup>[7]</sup> (39%), Shakya et al<sup>[8]</sup> 18.3%.

There was no lifetime diagnosis in anxiety disorders. All of them were of current level and frequency of distinct diagnoses was as follows: Panic disorder 6% (current), Social Anxiety disorder/Social phobia 3% (current), Generalized anxiety disorder 2% (current), Obsessive compulsive disorder- 1% (current), and Mixed anxiety and depressive disorder 2% (current). In psychotic disorders, 2% of the diagnoses were current while 4% were lifetime. Overall, frequency of distinct psychotic conditions was as follow: Schizophrenia 2% (current 1% & lifetime 1%), Bipolar 1 disorder with psychotic symptoms 2% (current 1% & lifetime 1%), Delusional disorder 1% (lifetime), and Psychosis NOS 1% (lifetime). Somatoform Disorders (lifetime) were present in 2% of all patients while Adjustment disorder (current) was present in 3% of all patients of alcohol dependence syndrome. There were no current somatoform diagnoses and no lifetime diagnosis of adjustment disorder.

## CONCLUSION

It was concluded found that a comorbidity of other psychiatric disorders including personality disorders was present in 64% of all male patients of alcohol dependence syndrome. Comorbidity of psychiatric disorders except personality disorders was present in 47% of the patients while 43% of all patients had comorbidity of personality disorders only. The frequency of co-occurrence of different types of psychiatric disorders was as follows: Mood disorder 24%, Anxiety disorder 14%, Adjustment disorder 3%, Psychotic disorder 6%, and Somatoform disorder 2%.

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