

STUDY OF COMMON PSYCHIATRIC COMORBIDITIES IN PATIENTS OF ALCOHOL DEPENDENCE

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Abstract

Background: Alcohol as a psychoactive substance has been known to be consumed by mankind all over the world since times immemorial for its definite pleasurable effect. At the same time a prolonged and excessive abuse of it has been blamed to be associated with various health consequences. Study common psychiatric co-morbidities in patients of alcohol dependence. This is a Cross sectional observational study & Consecutive selection. **Materials and Methods:** 50 participants, aged between 18- 60 years attending the outpatient and inpatients facility of tertiary care hospital in Meerut, U.P., fulfilling ICD 10 criteria for alcohol dependence. After taking written consent, were included in the study, using scale SAD Q (Severity of alcohol dependence scale), HAM A (Hamilton rating scale anxiety) and HAM D (Hamilton rating scale depression). **Result:** SAD Q results shows that 50% of patients were having moderate alcohol dependence followed by 26% severe AD and 24% mild AD. HAM D score for depression showed that 26% of them were falling in severe depression and 8% mild to moderate. HAM A score showed that 72% of them were falling in mild anxiety, followed by 14% mild to moderate, 12% moderate to severe, and 2% severe anxiety. Conclusion: this study conclude that alcohol use temporarily suppressed the feeling of isolation, sadness, anxiety and negative thoughts.

INTRODUCTION

Alcohol as a psychoactive substance has been known to be consumed by mankind all over the world since times immemorial for its definite pleasurable effect. At the same time a prolonged and excessive abuse of it has been blamed to be associated with various health consequences. Currently, alcohol use disorder are among the most prevalent mental disorder worldwide.^[1,2] Alcohol consumption and problem related to alcohol varies around the world, it causes both burden of death and disease but death remain significant in most countries. Alcohol consumption is the 3rd largest risk factor for physical and mental illness. Globally it attributes to 62% of deaths in males and 1.1% deaths in females.^[3]

Life time alcohol consumption co relate with severity of alcohol dependence and it is associated with liver cirrhosis, digestion problem, road traffic accident, interpersonal difficulties with family, friends, coworker and psychiatric illnesses.^[4] Severe alcohol use have some co relation with socio

demographic factors which are independent variables like education, employment, total income and smoking.^[5]

In 2010, close to 95 percent of adults in France had drunk alcohol in the preceding year, highest across western Europe and Australia and lower in North Africa and Middle East. Typically 5-10 percent of adult across these regions drunk within the preceding year.^[6] Alcohol use is very common in India both in rural and urban area, prevalence of around 82.5%, In Uttar Pradesh alcohol dependence prevalence of alcohol use found to be 21.4% followed by cannabis 3.0%.^[7] Epidemiological studies in India have shown a prevalence rate of 16-50 % for alcohol dependence.^[8]

It has become apparent that psychiatric comorbidity, or co morbid mental and substance use disorder, may occur concurrently (two disorder are present at the same time) or successively (two disorder occur at different time in a person's life); in both case, the disorder may or may not be casually related.^[9] Many studies shows high prevalence of psychiatric co morbidities in alcohol dependent patients and

emphasis on clinical presentation in terms of over all symptoms, course, prognosis and treatment implication.^[10] Presence of severe alcohol use disorder and depression together with almost twice the association between the two, it is difficult to establish whether misuse of alcohol can cause depression or depression cause alcohol abuse.^[11] People with anxiety disorder are prone to develop psychological dependence on alcohol because they use it as self-medication to boost up self-confidence, to overcome stress and anxiety.^[12]

MATERIALS AND METHODS

In this study a total 50 patients were recruited male between age group 18-60 years after applying the inclusion and exclusion criteria, in Tertiary Care Hospital, in Meerut. Consent was obtained from the participants in the language they understand (Hindi/English). After obtaining consent each patient was interviewed along the proforma prepared specially for this study in department of psychiatry, Subharti Medical College. ICD 10 criteria were used to make the diagnosis of Mental and behavioural disorders due to use of alcohol dependence syndrome. Then Severity of Alcohol Dependence Scale (SAD Q) was used to assess severity of alcohol dependence. And after assessing the severity of alcohol dependence, Hamilton Rating Scale Depression (HAM D) and Hamilton Rating Scale Anxiety (HAM A) was used to assess the severity of depression and anxiety respectively. Sample size was 50 male participants between the

age of 18-60 years. It was a cross section observational study using consecutive sampling. Inclusion criteria include male patient from 18-60 years of age, diagnosed with alcohol dependence according to icd. 10 criteria and those who gave consent. Exclusion criteria includes patients with serious medical illness, consuming any other substances or patients in complicated alcohol withdrawal like delirium tremens.

Patients with language impairment, intellectual deficits or pervasive developmental disorder. The data so obtained was appropriately compiled, tabulated and there after statistically analysed using chi-square and its significance was checked with P-value at 0.05 and conclusion drawn using in's spss software. No potential physical, psychological, social or legal harm were seen in the subjects participants in the study. this study to bring awareness to how, socio economic status, religious, residential area and other factor affects both the severity of alcohol use as well as the psychiatric co morbidities found amongst this alcohol dependent patient.

RESULTS

This [Table 1] depicts age group of a patient diagnosed with AD according to ICD 10 shows that AD was more common in patients between the age group of 38-47 years i.e. 46% followed by 28-37years i.e. 32%, 48-57 years 14% and 18-27 years 8%. Statistics showing the Mean age of AD patients is 38.34 years, Median 39.0 and Mode 32.

Table 1: Distribution of AD patients according to age group

Age	Frequency	Percent
18-27 years	4	8%
28-37 years	16	32%
38-47 years	23	46%
48-57 years	7	14%
>57 years	-	-
Total	50	100%

Table 2: Distribution of AD patients according to socio economic class.

Sub-Category	Frequency	Percent
Lower	-	-
Upper- Lower	8	16.0%
Lower-Middle	38	76.0%
Upper-Middle	4	8.0%
Upper	-	-
Total	50	100.0%

Table 3: Distribution of AD patients with the severity of alcohol dependence.

SAD Q Score	Frequency	Percent
Mild	12	24.0%
Moderate	25	50.0%
Severe	13	26.0%
Total	50	100.0%

Table 4: Distribution of AD patients with the severity of depression.

HAM D	Frequency	Percent
No	33	66.0%
Mild - Moderate	4	8.0%
Severe	13	26.0%
Total	50	100.0%

Table 5: Distribution of AD patients with the severity of anxiety.

HAM A	Frequency	Percent
Mild	36	72.0%
Mild to Moderate	7	14.0%
Moderate to Severe	6	12.0%
Severe	1	2.0%
Total	50	100.0%

Table 6: Assessing severity of anxiety with severity of AD.

HAM A Result										
SAD Q score	Frequency				Total	Frequency				Total
	Mild	Mild to Moderate	Moderate to Severe	Severe		Mild	Mild to Moderate	Moderate to Severe	Severe	
Mild	11	1	-	-	12	22.0%	2.0%	-	-	24.0%
Moderate	18	4	2	1	25	36.0%	8.0%	4.0%	2.0%	50.0%
Severe	7	2	4	-	13	14.0%	4.0%	8.0%	-	26.0%
Total	36	7	6	1	50	72.0%	14.0%	12.0%	2.0%	100%
Pearson's Chi-Square			8.194							
Sig			0.049							
Result			Significant							

Table 7: Assessing Severity of Depression with severity of AD.

HAM D Results									
SAD Q score	Frequency			Total	%			Total	
	No	Mild - Moderate	Severe		No	Mild - Moderate	Severe		
Mild	12	-	-	12	24.0%	-	-	24.0%	
Moderate	17	1	7	25	34.0%	2.0%	14.0%	50.0%	
Severe	4	3	6	13	8.0%	6.0%	12.0%	26.0%	
Total	33	4	13	50	66.0%	8.0%	26.0%	100.0%	
Pearson's Chi-Square			14.905						
Sig			0.005						
Result			Significant						

[Table 2] depicts socioeconomic class according to modified kuppaswamy classification 2019 in AD patients which shows that 38 participants out of 50 belongs to Lower-Middle class 76%, followed by 8 participants in Upper-lower class 16%, and 4 participants in Upper-Middle class 8%.

[Table 3] In this table SAD-Q scale is used for the severity of alcohol dependence, it is appreciated that 50% of AD patients were having moderate alcohol dependence followed by 26% severe AD and 24% mild AD.

[Table 4] It is evident from the table that after applying HAM-D for the range of severity of depression, depicts that 26% of participants having severe depression and 8% of participants having mild to moderate depression.

[Table 5] It is evident from the table that after applying HAM-A scale on AD patient for the severity of anxiety, there was mild anxiety in 72% of male AD patient followed by mild to moderate anxiety in 14% of the participants, moderate to severe in 12% and severe in 2%.

[Table 6] represents that the severity of anxiety according to HAM A and alcohol dependence according to SAD Q score i.e. Degree of association between anxiety and severity of alcohol dependence is present after applying Chi square test. This table depicts that 72% of participants had mild anxiety, 14% participants had mild to moderate anxiety and rest 12% of participants had severe anxiety. In severity of AD, 50% of AD patients having moderate AD followed by 26% severe and 24%

mild. Pearson's Chi Square test has been used which comes out to be 8.194. The significant value of the data is close to 0.049, lesser than tolerance limit of 0.05; hence it is concluded that the given relationship is just significant.

[Table 7] shows with the severity of depression according to HAM D and alcohol dependence according to SAD Q score i.e. Degree of association was found in between depression and severity of alcohol dependence after applying Chi square test. This table depicts that 26% of participants had severe depression, 8% participants had mild to moderate depression rest 66% of participants had no depression. In severity of AD, 50% of AD patients having moderate AD followed by 26% severe and 24% mild. Pearson's Chi Square test has been used which comes out to be 14.905. The significant value of the data is close to 0.005, lesser than tolerance limit of 0.05; hence it can conclude that the given relationship is highly significant.

DISCUSSION

In the present study we aimed at understanding common psychiatric co-morbidities in patients of alcohol dependence and to find out the relationship between alcohol dependence with sociodemographic profile, severity of alcohol dependence and common co-morbidities. In our current study we included 50 patients diagnosed with alcohol dependence according to ICD 10 in the age group of 18-60 years after fulfilling the criteria of inclusion and

exclusion. In this study majority of the patients belonged to the age group of 38-47 years (46%) followed by 28-37 years (32%), and 48-57 years (14%), and the mean age of patients was 38.34 years.

In this study we found that most of the participants belonged to lower middle class, i.e 76%, followed by upper lower class at 16% and upper middle class i.e 8%. They concluded that alcohol dependence is more common in middle class, which suggested that even consumption of alcohol required a minimum level of financial stability which does not exist in lower socioeconomic status, therefore maximum population of alcohol dependants belong to middle socioeconomic status.

In our study the SAD Q scale applied for severity of alcohol dependence showed that 50% of patients had moderate alcohol dependence, followed by 26% severe and 24% mild. After data analysis for HAM D scores we found that 66% of alcohol dependant patients were without depression, followed by 8% with mild to moderate depression and 26% of participants were falling in severe depression. A similar study done by Sharma et al,^[13] 2018 on psychiatric comorbidity in patients with alcohol dependence reported depression in 28% of the patients. Another study was done by McHugh and Weiss,^[14] 2019 which reported that some symptoms are common to both depression and depressant effects of alcohol withdrawal like decreased sleep, psychomotor agitation, increased irritability etc. Hence there are difficulties in diagnosing patients with depression and alcohol withdrawal. It is concluded that alcohol use temporarily suppressed the feelings of isolation, sadness, anxiety, negative thoughts and feeling much better and thereby masking of depressed state. In our study a positive correlation was found between severity of alcohol dependence and depression using Pearson's chi square test. The p value is 0.005 which is statistically significant. Hence it is concluded that severity of depression increases with the severity of alcohol dependence.

In our data analysis, using the HAM A score showed that 72% of alcohol dependence patients were falling in mild anxiety, followed by 14% as mild to moderate, 12% moderate to severe and 2% in severe anxiety. A similar study done by Nair et al,^[15] 2019 in which it was found that 60% of alcohol dependant patients had mild anxiety and 40% showed normal anxiety. Another study done by Sloan,^[16] 2003 showed that changes in anxiety level effect the drinking behaviour of alcohol because it is an independent factor associated with use of alcohol. It is concluded that in the beginning people take alcohol to relax themselves in a stressful situation, but gradually the frequency and amount of alcohol intake increases and becomes compulsive drinking. In our study the severity of alcohol dependence and anxiety showed just significant correlation and the p-value is=0.049. Hence we can concluded that the trend of increasing anxiety with

increasing alcohol dependence observed by us is true for the population under study.

CONCLUSION

During evaluation of comorbidities in patients, the data showed that around 26% of them were severely depressed and 8% mild to moderately depressed. The correlation between severity of alcohol dependence and depression showed highly significant correlation (p value 0.005). After apply anxiety scale, result showed that 72% of them were falling in mild anxiety, followed by 14% mild to moderate, 12% moderate to severe, and 2% severe anxiety. The correlation between severity of alcohol dependence and anxiety showed just significant correlation (p value 0.049). It is concluded that the depression and anxiety severity increases with the alcohol dependence.

It summarises that in the beginning people take alcohol to relax themselves in a stressful situation, but gradually the frequency and amount of alcohol intake increases and becomes compulsive drinking. The alcohol use temporarily suppressed the feelings of isolation, sadness, anxiety, negative thoughts and feeling much better and thereby masking of depressed state.

Overall, these results suggest that health care providers need to recognise the burning issues of different aspects of psychiatric comorbidities for management, better outcome and policy making in patients of alcohol use disorders which are on rise in our society.

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