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Psychiatric Co-Morbidities in Individuals with Alcohol Dependence: A Prospective Observational Study

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Abstract

Introduction: *Alcohol consumption has been on rise in developing as well as developed world. It is not only associated with pathologies like Peripheral Vascular disease, avascular necrosis of bones, cirrhosis of liver and hepatocellular carcinoma but also it has got a strong relationship with psychiatric co-morbidities including but not limited to depression, anxiety, bipolar disorders, adjustment disorders, delusional disorders, schizophrenia, anti-social personality disorder and suicidal tendencies. In Indian context the problem of alcohol dependence is increasing due to the factors like stress and change in life style. We conducted this prospective study to find out presence of psychiatric co-morbidities in individuals with alcohol dependence.*

Aims and Objectives: *To find out the prevalence of co-morbid psychiatric illnesses in individuals with alcohol dependence.*

Materials and Methods: *We conducted this prospective observational study after obtaining approval from institutional ethical committee. The study was conducted in department of psychiatry of a tertiary care medical institute situated in an urban area. A total of 80 patients aged between 20 to 60 years attending psychiatric outpatient department and having alcohol dependence were studied for presence of coexistent psychiatric co-morbidities. The patients were included on the basis of predefined inclusion and exclusion criteria. Psychiatric co-morbidities were diagnosed by International Classification of Diseases Diagnostic criteria for research- Tenth Revision. (ICD-10 DCR). The data was analyzed using Minitab version 17.*

Results: *Out of 80 studied cases majority were males (97.5%) with a F:M ratio of 1: 39. The most common age group with alcohol dependence was found to be in between 31-40 years (35%). The most common co-morbid psychiatric disorders in studied cases were found to be generalized anxiety disorder (12/80) followed by depression (10/80), antisocial personality disorder (9/80), bipolar disorder (7/80), delusional disorders (5/80) and phobias (3/80).*

Conclusion: *Psychiatric co-morbidities are frequently seen in individuals with alcohol dependence. Their early recognition and relevant intervention is crucial to the successful management of these patients.*

Keywords: *Alcohol Dependence, Psychiatric co-morbidities, Depression, Early Intervention.*

Introduction

Alcohol misuse, alcohol use disorders (AUDs) and alcoholisms are spectrum of the same disorder characterized by an excessive and maladaptive pattern of alcohol consumption[1]. a syndrome manifested by a behavioral pattern in which the

use of a given psychoactive drug or class of drugs, is given a much higher priority than other behaviors that once had higher value. Alcohol dependence is defined as "A syndrome manifested by a behavioral pattern in which the use of a given psychoactive drug or class of drugs, is given a much higher priority than other behaviors that once had higher value"[2]. Use of alcohol had been common in developed countries and various studies have reported that at least 50% of the American population consumes alcohol on regular basis[3]. Various studies have reported the age of first drinking to be between 12-15 years in western world. With changing demographics, the problem of alcohol use disorder is becoming common even in developing world[4]. In India Alcohol, tobacco and other substance abuse affects a considerably large section of society. According to some estimates approximately 60 million individuals use alcohol in some or the other form. These individuals in many of the instances are adolescent boys and girls and prone for developing addictions to other substances including illicit psychotropic substances[5]. Early age at the onset of drinking and consumption of alcohol over the years may predispose the individuals for development of conditions such as hepatic fibrosis, cirrhosis, esophageal carcinoma, pancreatitis and hepatocellular carcinoma[6]. In addition to that individuals with alcohol use disorders are more prone for conditions such as traumatic brain injury, deliberate self harm, suicides, unsafe sex (responsible for high prevalence of HIV infection amongst alcohol dependent individuals)[7]. Alcoholism and alcohol dependence not only predisposes an individual for developing addiction of other psychotropic substances but also it makes an individual prone for development of psychiatric co-morbidities[8]. These individuals are susceptible to development of various conditions like anxiety, mood disorders, anti-social personality disorder and even delusional disorders[9].

Why some individuals having alcohol use disorder develop psychiatric co-morbidities and others do not still remain an enigma for psychiatrists but factors like Genetic susceptibility (having a close family member with psychiatric illness), early emotional traumas severity of alcohol dependence and the influence of gender have all been thought to play a crucial role[10].

Co-existence of psychiatric illnesses along with alcoholism makes the treatment of these individuals more complex from the perspective of treating psychiatrists[11]. It is important to elicit history of alcohol consumption in patients presenting with psychiatric condition so that appropriate de-addiction measures can be taken[12]. It Is equally important to diagnose psychiatric co-morbidities in individuals coming or being brought for de-addiction so as to be able to give appropriate treatment. Psychiatrists treating individuals with alcohol dependence have a difficult task of assessing patients' psychiatric complaints because in these instance it is difficult to make out whether alcohol abuse is the cause or effect of psychiatric symptoms[13].

We conducted this prospective study to find out the prevalence of co-morbid psychiatric illnesses in individuals with alcohol dependence.

Materials and Methods

This was a prospective cohort study carried out in the department of psychiatry of a medical college situated in an urban area. A total of 80 patients aged between 20 to 60 years attending psychiatric outpatient department and having alcohol dependence were studied for presence of co-existent psychiatric comorbidies. The patients were included on the basis of predefined inclusion criteria. Any patient having any exclusion criteria was excluded from the study. Demographic details, Age, Gender, history of alcohol consumption and dependence in patients as well as any of the family members were noted. A detailed history with regards to age at onset of alcohol consumption, pattern and quantity of alcohol use and maintaining factors were noted. Alcohol Dependence was determined on the basis of Severity of Alcohol Dependence Data (SADD)

which is a 15-item questionnaire used to determine the severity of alcohol dependence. Each item or question has four possible responses, scored as 0, 1, 2, and 3. The maximum score on the scale is 45. Alcohol dependence was determined to be low (0–9), moderate (10–19) or high (>19) dependence depending upon the obtained responses. History of any psychiatric illness in patients or their family members was also noted. A detailed clinical examination and psychiatric evaluation was done. Psychiatric co-morbidities were diagnosed by International Classification of Diseases Diagnostic criteria for research- Tenth Revision. (ICD-10 DCR). The data was analyzed using Minitab version 17.

Inclusion Criteria

1. Patients attending psychiatry OPD and having Alcohol dependence as determined by Severity of Alcohol Dependence Data.
2. Patients who had given Informed consent to be part of the study.

Exclusion Criteria

1. Patients with acute withdrawals symptoms.
2. Patients with Organic Brain Diseases.
3. Patients who refused consent.

Results

Total 80 cases attending psychiatric OPD with history of alcohol dependence were studied. Out of these 80 patients there were 78 males (97.5%) and 2 females (2.5%) with a F:M ratio of 1: 39.

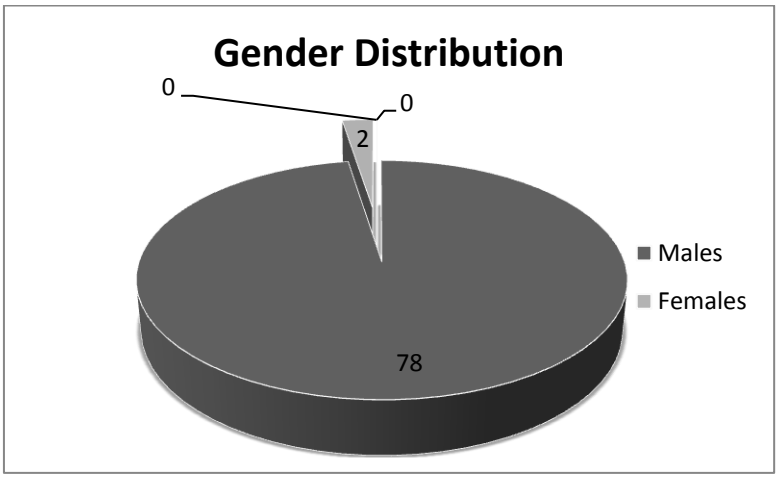

Figure 1: Gender Distribution of the studied cases

The analysis of the age group of the affected cases showed that the most common affected age group was 31-40 years (35%) followed by 41-50 years (27.50%) and 21-30 years (22.50%).

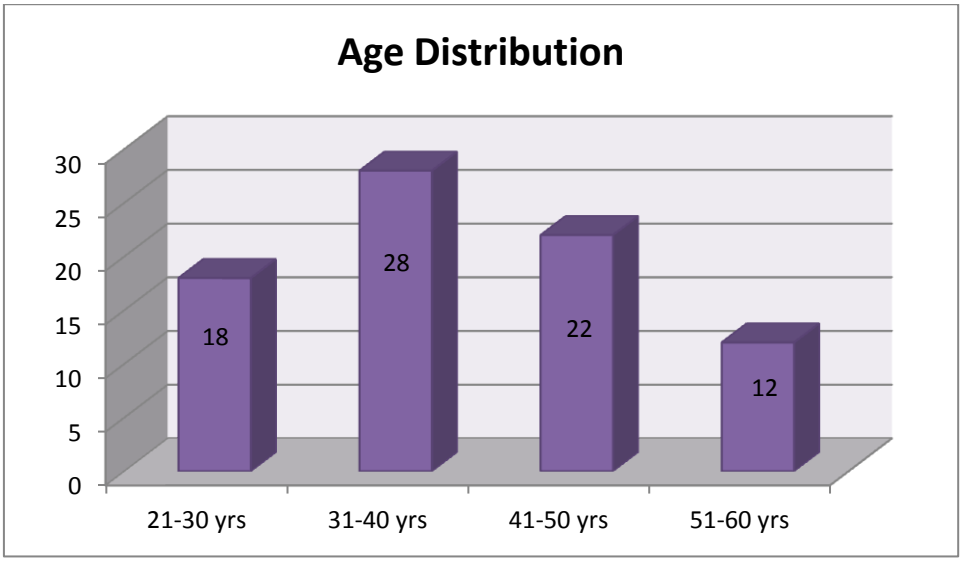

Figure 2: Age Distribution of the studied cases.

The analysis of marital status of the patients showed that out of 80 cases 17 patients wereunmarried. Out of 63 married patients 19 patients were either widowed or were separated from their spouses.

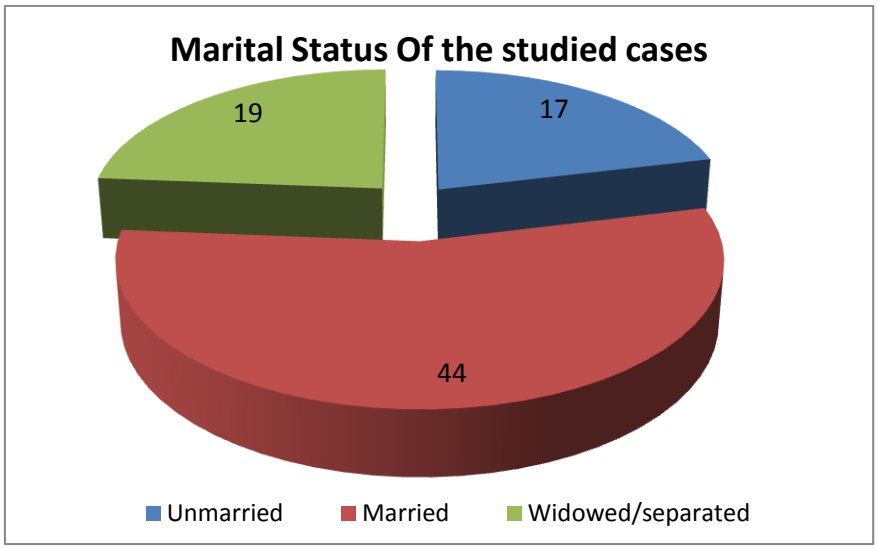

Figure 3: Marital Status of the Studied Cases

Out of the studied cases most of the patients were educated up to the level of matriculation (37.50%) followed by up to higher secondary school (15%), graduation (12.5%) and post graduation (7.5%). 22 patients were illiterate (27.50%).Employment status of the patients showed that out of 80 patients only 12 (15%) were in salaried permanent jobs while 25 (31.25%) patients had their own small shops or businesses. 26 (32.5%) patients were laborers or daily wage workers and 16 (20%) patients were unemployed and were totally dependent upon other family members for their expenses. Finally, out of 80 patients 42 (52.5%) patients belonged to urban area and 38 (47.5%) belonged to rural areas. The analysis of patients for alcohol dependence was done on the basis of Severity of Alcohol Dependence Data (SADD). It was found that out of 80 patients 12 (15%) had low, 38 (47.5%) patients had moderate and 30 (37.5%) patients had high alcohol dependence.

Table 1: Demographic Profile of the Studied Cases

	Characteristic	No of Patients	Percentage
Gender Distribution	Males	78	97.5%
	Females	2	2.5%
	Total	80	100%
Age Distribution	20-30 yrs	18	22.5%
	31-40 yrs	28	35%
	41-50 yrs	22	27.5%
	51-60 yrs	12	15%
	Total	80	100%
Marital Status	Unmarried	17	21.25%
	Married	44	55%
	Widowed/separated	19	23.75%
	Total	80	100%
Educational Qualification	Illiterate	22	27.5%
	Up toMatriculation	30	37.5%
	Up to HSC	12	15%
	Graduate	10	12.5%
	Postgraduate	6	7.5%
	Total	80	100%
Residing Area	Rural	38	47.5%
	Urban	42	52.5%
	Total	80	100%
Severity of Alcohol Dependence	Low	12	15%
	Moderate	38	47.5%
	High	30	37.5%
	Total	100	100%

Finally, the prevalence of various psychiatric co-morbidities was found out in these patients. Out of 80 patients who have been diagnosed with alcohol dependence some or the other kind of psychiatric co-morbidity was found in 46 patients (57.49%). The most common psychiatric affection was

found to be generalized anxiety disorder (12/80) followed by depression (10/80), antisocial personality disorder (9/80), bipolar disorder (7/80), delusional disorders (5/80) and phobias (3/80).

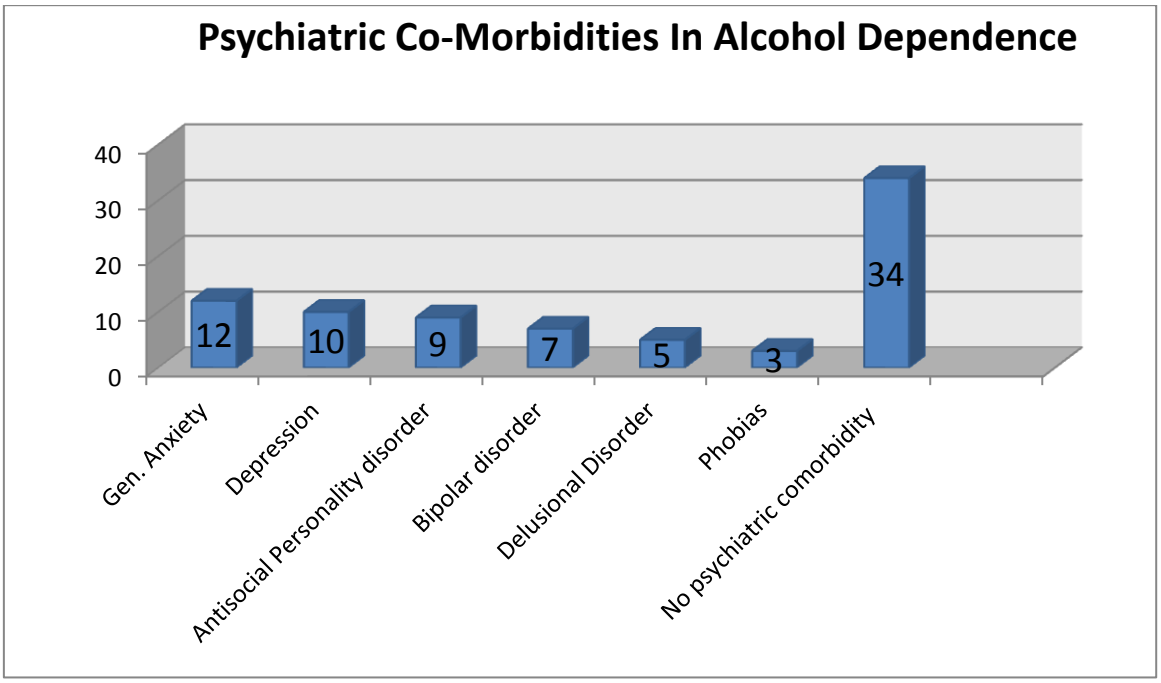

Figure 4: Psychiatric Co-Morbidities in studied cases

Discussion

We conducted this prospective study of 80 alcohol dependent patients to find out the prevalence of various co-morbid psychiatric condition. The patients were predominantly males with a F:M ratio of 1:39. This may have to do with the fact that in developing countries specially India alcoholism is associated with social stigma and females are usually not addicted to alcohol. Similar trends of male predominance were reported by N Heramani Singh et al who in their study of 100 alcohol dependent subjects for presence of comorbidity found that all consecutive patients were males. They attributed this not only to men being more likely to consume alcohol but also to fact that alcohol consumption by women is socially unacceptable in our country hence they are less likely to seek psychiatric advice [14].

In our study we found most common age group affected by alcohol dependence to be 31-40 years (35%). Very similar age incidence was found by Sidharth Arya et al who conducted a prospective study of 100 patients tofind out relation between psychiatric co-morbidity with quality of life. They found mean age of patients with alcohol dependence to be 38.93 ± 8.57 years[15].

In our study majority of the individuals with alcohol dependence were either found to be married or divorced or separated. M. Pramod Reddyet al conducted a prospective study of 68 male patients to find the demographic factors associated with alcohol dependence syndrome [16]. The authors found that Majority (62%) of patients were married at time of presentation. Similarly Schneider U et al in a large study of 2713 alcohol dependent individuals reported higher rate of alcohol dependence amongst married patients[17].

The other demographic factors associated with alcohol dependence in studied patients were found to be lower educational levels and urban population. Similar conclusions were drawn by the authors in interesting study conducted by Kumar S G, et al. et al. The authors conducted a community based, cross sectional study of 946 subjects to find out relationship of alcohol dependence and socio-demographic factors,

smoking, tobacco chewing and chronic diseases found that lower education levels were independently associated with alcohol use[18].

Finally, in our study common psychiatric disorders were found to be generalized anxiety disorders, followed by depression, antisocial personality disorders, bipolar disorders, delusional disorders and phobias. Similar findings were reported by authors likeHernan G Rincon-Hoyoset al and Kessler et al . Hernan G Rincon-Hoyos et al conducted a study of differences in demographic, socio-economic, behavioral and self-reported health status variables amongst patients of psychiatric illnesses and alcohol dependence. Te author found a statistically significant correlation between alcohol use disorders and psychiatric illnesses including Major Depressive Disorder, bipolar disorders, agarophobia, drug abuse, separation anxiety and conduct disorder[19]. Similarly, Kessler, et al reported that psychiatric disorders and substance use disorders (SUDs) are highly comorbid. They further found that amongst individuals with substance abuse including alcohol dependence approximately 27% of people have at least one psychiatric disorder, and 45% of people with psychiatric conditions actually have two or more disorders[20].

Conclusion

Co-existent psychiatric illnesses such as generalized anxiety disorders, depression, antisocial personality disorders, bipolar disorders, delusional disorders and phobiasare common in patients with alcohol dependence. Their early recognition and appropriate management is crucial for successful management of these patients.

Conflict of Interest: None.

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