A STUDY ON THE PREVALENCE OF ALCOHOL ABUSE AMONG PSYCHIATRIC PATIENTS AND THEIR FAMILY MEMBERS

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A R T I C L E   I N F O

A B S T R A C T

Background: high rates of alcohol abuse have been found among individual with mental illness such as anti social personality disorder, schizophrenia, depression and bipolar affective disorders. Clinical and social outcomes have been reported worse in this group. These 'dual diagnosis' patients have also been mainly investigated in the USA, and there has been very little research in Europe, where patterns of substance abuse may be different. **Method**: Hundred patients with psychiatric illnesses who had any contact with mental health department, RMMCH, Chidambaram as outpatient or in patient with history of alcohol abuse between Oct. 2015-Sep 2017(2 years). One hundred psychiatric patients were interviewed with a semi structured proforma and MAST (Michigan Alcohol Screening Test) **Results:** out of the hundred patients interviewed in my study it is found that the alcohol abusing psychiatric patients were mostly from rural and semi urban area, majority qualified with degrees, 75% are salaried and 85% married. Most of the abusing patients have co-morbid tobacco abuse.90% of the alcohol abusers had family history of alcohol abuse Majority of alcohol abusers were problematic drinkers as per MAST score (>5).In our study group 19% of anxiety disorder patients, abused alcohol. Fourteen percent each of depressive patients and schizophrenics showed alcohol abuse.

INTRODUCTION

Alcohol Use Disorders (AUD) namely Alcohol abuse and Alcohol dependence have a major impact on public health. With a documented global prevalence rate of 1.7% in 2003, alcohol use disorders remain one of the leading causes of disease burden worldwide. Alcohol abuse would be defined as the use of alcohol by an individual who is experiencing psychological distress and/or pain due to a mental disorder which would likely benefit from a pharmaceutical intervention. However, in the absence of that medication, the individual takes into his/her own hands the task of chemically coping with his/her psychological distress by abusing alcohol. The psychiatric patient may not realize that he/she is self-medicating through his/her use of alcohol.

According to the World Health Organisation (WHO), Alcohol use disorders accounts for 1.4% of the global disease Burden. Globally alcohol consumption causes 3.2% of deaths and 4.0% loss of disability adjusted life year.

International Substance Use Situation

Galletly and Watson[1] in Australia looked on the substance abuse in patients with acute mental illness by using semi-structured interviews, clinical history and collateral information gathering. They suggested that alcohol abuse could precipitate, exacerbate and prolong psychiatric disorders, which are often accompanied by a range of social problems.

Results from the comparative study by Barnett *et al*[2] in Cameo service centre Cambridge, in UK showed that alcohol abuse among people with first episode psychosis was twice that of the general population and was more common in men than women. Current and lifetime substance abuse was recorded for 123 consecutive referrals. Alcohol abuse was reported 43% and 38% reported poly substance abuse. According to Cassidy F *et*

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al^3 in UK, the rate of lifetime substance abuse was higher for alcohol 48.5%. Nearly 60% of the cohort had a history of some lifetime alcohol abuse. Whilst, Volkow[4] in USA reported on patients with Schizophrenia to have higher rate of lifetime history of alcohol use disorders (AUD) compared with general population. The substance used rated were as follows; for the patients with schizophrenia Nicotine use was 28.5% and general population 12.8%, Alcohol 43.1%-65% and 5.1%, respectively.

Aims and Objectives

- To study the prevalence of alcohol abuse in adult psychiatric patients reporting to Psychiatry OPD and their family members.
- To identify the severity of alcohol abuse in co-morbid psychiatric illness.

MATERIALS AND METHODS

Setting

Study was conducted in Rajah Muthiah Medical College and Hospital, Annamalai Nagar, Chidambaram. Psychiatry OPD.

Sample

Hundred consecutive psychiatric patients reporting to psychiatry OPD in the age group of 15-65 yrs.

Study Duration

October 2015 - September - 2017,(2 Years).

Inclusion Criteria

1. Patients who are all willing to undergo this study.2)Patients age group of 15- 65 yrs with psychiatric history who with history of alcohol abuse.3)Patients who are all not severely physically ill.

Exclusion Criteria

1) Patients below 15 yrs and above 65 yrs.2)Patients who are not willing for this study. 3)Patients who are all with severe physical illness.

Tools Used

***Semi Structured Proforma* (**Here patients age, habitat, education, occupation, income earned, religion, marital status, psychiatric diagnosis according to ICD 10, history about alcohol abuse, Co-morbid substance abuse and family history of alcohol abuse and family history of mental illness are taken into consideration)

MAST (The Michigan Alcoholism Screening test[1].)

RESULTS

Table 1 Residence

Habitat	Frequency	Percentage
Rural	52	52.0
Semi urban	43	43.0
Urban	5	5.0
Total	100	100.0

Majority of the alcohol abusers belong to rural and semi urban area.

Table 2 Marital Status

Marital status	Frequency	percentage
Divorced	1	1.0
Married	85	85.0
Single	14	14.0
Total	100	100.0

Most of the alcohol abusing psychiatric patients are married persons.

Table 3 Alcoholism Duration

Duration of Drinking	Frequency	percentage
<5 years	7	7.0
5-10 years	57	57.0
11-15 years	26	26.0
>15 years	10	10.0
Total	100	100.0

Majority of alcohol abusers drink more than five years.

Table 4 Family History

Relation	No of Cases	Percentage
Father	89	89
Mother	1	1
Siblings	83	83

Most of the alcohol abusers have family history of alcohol abuse in both father (89%) and siblings (83 %)

Table 5 MAST Score

Mast Score Level	Frequency	Percentage
0-3 no Apparent problem	2	2.0
4 Early or Middle Problems Drinker	10	10.0
5 or more problems drinker	88	88.0
Total	100	100.0

In this study around 90% of alcohol abusers are problematic drinkers.

Table 6 Frequency of Psychiatric Disorders

Diagnosis	Frequency	Percentage
ASPD	18	18.0
Depression	14	14.0
AIP	7	7.0
BPAD	11	11.0
GAD	10	10.0
Delusional	3	3.0
SCH	14	14.0
Phobia	6	6.0
Panic disorder	3	3.0
Miscellaneous	14	14.0
Total	100	100.0

About 20% of alcohol abusers are seen with co-morbid anti social personality disorder and 14% each of alcohol abusers are depressed and schizophrenics respectively. 19% were anxiety disorder patients. About 10% of alcohol abusers had bipolar disorder.

Table 7 Chi-square tests for Association of Duration and Quantity of Alcohol Intake

Age Level	Quantity in ml							Total
	90	180	270	360	540	720	900	
15-25 yrs	0	1	0	1	0	1	0	3
26-35 yrs	2	5	7	13	3	1	1	32
36-45 yrs	0	11	5	18	13	1	0	48
46-55 yrs	0	5	1	6	3	0	0	15
56-65 yrs	1	1	0	0	0	0	0	2
Total	3	23	13	38	19	3	1	100

The correlation between age of alcohol abusers and quantity of alcohol consumed was significant (p value - 0.020).

Chi-Square Tests

	Value	df	P value
Pearson Chi-Square	40.353	24	0.020

Table 8 Chi-square Tests for Association of Duration of Alcoholism and Patients Income

Duration of Drinking	Income				Total
	Nil	2-5k	5-10k	10-20 k	
2	0	1	0	0	1
3	0	2	2	0	4
4	0	0	1	1	2
5	0	1	1	0	2
8	0	1	7	3	11
10	0	8	10	26	44
12	0	1	1	2	4
14	0	0	1	0	1
15	0	2	9	10	21
18	1	0	1	0	2
20	0	1	2	3	6
25	0	0	1	0	1
30	0	0	0	1	1
Total	1	17	36	46	100

Chi-Square Tests

	Value	df	P value
Pearson Chi-Square	76.041	36	<0.001

The correlation between duration of alcohol abuse and income of alcohol abusers was highly significant (p value <0.001).

DISCUSSION

In this study alcohol abuse is most common in mid agers 25-45 comprising about 75% of population under study and least common in elderly age group 56- 65 years (2%). Similarly a study by Chidozle Donald Chukwujekwu *et al*[6] showed alcohol abuse among psychiatric patients, was highest among 38-47 age group and least among the 68-77 age group. Regarding income about 80% of study population fall under middle class group, (viz Rs.5000 – Rs. 20000). Similarly in a study by Chidozle Donald Chukwujekwu *et al* showed alcohol abuse among psychiatric patients, was more common among middle class group (Rs. 6000-Rs.20000). In this study alcohol abusers habitat are 52% rural and 43% semi urban and few (5%) urban, which is contrary to the study by Kate. B. Carey *et al*[7] where majority of the sample were from urban area. With regard to education 30% belong to PG and 30 % belong to UG and 20% are illiterate. Twenty percentage completed primary school or beyond. But contrary to this, in the study by Kate. B. Carey *et al*[7] majority (64%) completed only high school or beyond and 12% are illiterate. In this study most (75%) are salaried and going to job and remaining are self employed , very few (3%) fall below the poverty line. Similarly in the study by Kate. B. Carey *et al* (55%) of the sample were employed outside the home. Religious affiliation about 80% were Hindus and 20% were Muslims. These findings are similar to the study by Kate. B. Carey *et al*., Alcohol abusers among psychiatric patients are mostly (85 %) are married and remaining are single, which is contrary to the study by Kate. B. Carey *et al*, where only 50% were married and 38% were single. Most of the alcohol abuser have comorbid tobacco abuse, which is an usual feature among alcohol abusers, similarly in a study by P. Batel *et al*[8] smoking was prevalent among alcohol abusers (88%). Approximately 90% of alcohol abusers have family history of alcohol abuse. Similarly a study by Pradeep R. Johnson *et al*[9] most of the alcohol abusers have family history of alcohol abuse. Only 5% of alcohol abusers have family history of mental illness. Contrary to this, in a study by Bridget. F. Grant *et al*[10] family history of psychiatric illness was high. Mostly (90%) of alcohol abusers were problematic drinkers as per MAST score >5. Similarly in a study by Pradeep R. Johnson *et al* found high AUDIT scores (42.43 + 11.37) in majority of alcohol abusers among psychiatric patients. Of the 100 alcohol abusing psychiatric patients subsamples were diagnosed as follows antisocial personality disorder (18%); anxiety disorder (19%) including GAD (10%) phobia (6%) and panic disorder (3%); depression (14%); schizophrenia (14%);bipolar disorder (10%) and miscellaneous like delusional disorder, alcohol induced psychotic disorder, etc form the remaining. Similarly in a study by Kate. B. Carey *et al* Patients in the psychiatric (P) subsamples were diagnosed as follows:

1. Psychotic disorders (n=388) were 39% including schizophrenia (n=224), acute psychosis (n=26), delusional disorders (n=23) schizoaffective disorder (n=18) and unspecified psychosis (n=97).
2. Mood disorders (n=464; 47%) Including bipolar disorder (n=310) and depression (n=154).
3. Severe anxiety and somatization disorders (n=83; 8%),
4. Organic psychiatric syndromes (n=19; 2%), or
5. Another disorder (n=34; 3%)

CONCLUSION

It is mandatory to identify co-morbid alcohol abuse, which is more prevalent among psychiatric patients when compared to general population, in order to provide effective treatment and follow up.

Limitation of this study is that this study was conducted with 100 samples of randomly selected psychiatric patients and screened for alcohol abuse. Large sample size could have been better to screen for alcohol abuse in psychiatric patients. Lack of gold standard structured diagnostic interview is one of the limitations in this study. Further research should address the sensitivity and specificity of structured self report tools and screening with large samples.

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