Original Research Article

Psychiatric comorbidity in substance abusing population in Garhwal hills of Uttarakhand

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ABSTRACT

Background: Psychiatric morbidity occurs more frequently in patients with substance abuse than in the general population. Routine evaluation and treatment of psychiatric morbidity can be helpful in improving care of substance abusing population but such data are relatively meager from developing countries.

Methods: This study was conducted in the Out-patient facility of the Department of Psychiatry, Veer Chandra Singh Garhwali Government Institute of Medical Science & Research, Srinagar (Uttarakhand), starting from 23 September 2015. One hundred consecutive treatment seeking subjects fulfilling international classification of diseases and related health problems, 10th Revision (ICD-10), criteria for mental and behavioral disorders due to psychoactive substance use were included in the study. All the participants were required to sign an informed consent approved by the institutional ethical committee before being enrolled in the study. All the subjects included in the study were administered a semi-structured Proforma to elicit the clinical and socio-demographic variables.

Results: One hundred patients consisting of 95 men (95%) and 05 women (05%) were included. The average age of the sample was 39.68 years (SD=11.97). As for the socio-demographic variables other than age, 87% of the patients were married, 62% patients were living in nuclear families and 66% belonged to the rural areas. 79% patients were educated up to high school and above and only 06% were illiterate. 36 % of the subjects screened positive for psychiatric morbidity. Psychiatric morbidity was significant higher in unmarried people with less education (primary or less) and those living in nuclear families.

Conclusions: Psychiatric comorbidity was found in 36% of the study subjects.

Keywords: Substance abuse, Psychiatric morbidity, Garhwal hills, Clinical profile, Socio-demographic profile

INTRODUCTION

The substance abuse is slowly becoming one of the major public health issues of modern-day India. According to national mental health survey of India, 2015-16, substance use disorders (SUDs), including alcohol use disorder, moderate to severe use of tobacco and use of other drugs (illicit and prescription drugs) was prevalent in 22.4% of the population above 18 years in all the 12 surveyed states.

The prevalence of tobacco use disorder (moderate and high dependence) and alcohol use disorder (dependence and harmful use) was 20.9% and 4.6%, respectively.1

National institute of drug abuse (NIDA) in United States research report series refers to ‘comorbidity’ as two disorders or illnesses which occur in the same person simultaneously or sequentially. If the two conditions involved are a substance use disorder and another mental disorder then other term are used like ‘dual diagnosis’, ‘medically ill chemical abuser’ or ‘co-occurrence’. The
reason for such a separate designation is manifold: they are associated with poorer outcomes in various clinical domains, including increased risk of relapse, rehospitalization, life events, suicide and violence, medical comorbidity, homelessness, family discord, economic burden and public healthcare delivery system burden.²

The knowledge of psychiatric comorbidity in substance abusers is necessary in order to plan effective pharmacological and psychotherapeutic treatments for the comorbid psychiatric conditions. The present study aimed at determining the patterns of psychiatric comorbidity in substance abusing patients attending the out-patient’s department in a teaching hospital in Garhwal hills of Uttarakhand.

METHODS

This cross-sectional monocentric study was conducted at the out-patient facility of the Department of Psychiatry, Veer Chandra Singh Garhwal University Institute of Medical Science & Research, a teaching hospital in Srinagar, Uttarakhand, starting from September 2015 to August 2016. One hundred consecutive patients seeking treatment at our centre and fulfilling international classification of diseases and related health problems, 10th Revision (ICD-10), criteria for mental and behavioral disorders due to psychoactive substance use were included in the study. The diagnoses of psychiatric disorders were made as per ICD 10 criteria. The study was approved by institutional ethical committee. All the participants were required to sign an informed consent approved by the institutional ethical committee before enrollment in the study. All the subjects included in the study were administered a semi-structured proforma to elicit socio-demographic variables, details regarding the nature of substance abuse, questions regarding the reasons for initiation of abuse and reasons for relapse. The variables of data representing clinical and socio-demographic details, pattern of substance abuse, reasons for initiation and relapse and psychiatric morbidity were presented as numbers and percentages. Data was analyzed using suitable statistical methods and represented in the form of bar diagrams and pie charts as appropriate.

RESULTS

The study sample consisted of 100 subjects including 95(95%) males and 05 (5%) females. The average age of the sample was 39.68 years. Majority of the patients were found in the age group of 21-50 yrs. As for the socio-demographic variables other than age, 87 (87%) of the patients were married, 62% patients were living in nuclear families and 66 (66%) belonged to the rural areas. 79 (79%) patients were educated up to high school and above and only 06 (06%) were illiterate (Table 1).

Alcohol was the most frequently abused substance seen in 78 (78.00%) patients followed by tobacco smoking in 58 (58.00%) of the study subjects. Opioids were the least reported substance of abuse (03%) (Figure 1).

Table 1: Socio-demographic data.

| Variables          | Number | %   |
|--------------------|--------|-----|
| **Age (in years)** |        |     |
| Mean±SD            | 39.68 ± 11.97 |     |
| **Sex**            |        |     |
| Male               | 95     | 95  |
| Female             | 5      | 5   |
| **Education**      |        |     |
| Illiterate         | 6      | 6   |
| Primary            | 6      | 6   |
| Junior high school | 9      | 9   |
| High school        | 23     | 23  |
| Inter              | 32     | 32  |
| Graduate           | 7      | 7   |
| Postgraduate       | 17     | 17  |
| **Marital status** |        |     |
| Unmarried          | 12     | 12  |
| Married            | 87     | 87  |
| Widow              | 1      | 1   |
| **Family type**    |        |     |
| Joint              | 38     | 38  |
| Nuclear            | 62     | 62  |
| **Residence**      |        |     |
| Rural              | 66     | 66  |
| Urban              | 34     | 34  |

The most common reason for which the patients presented to the hospital was decreased sleep in 31 subjects (31%) followed by episode of anxiety in 21 patients (21%). Other reasons, in decreasing order of their frequency, were desire to quit the substance (18%), delirium tremens (16%), pain abdomen (6%) and psychosis (5%) of the cases.

Figure 1: Type of substance abuse and their frequency.
Table 2: Psychiatric comorbidity.

| Psychiatric comorbidity | Number | Percentage(%) |
|--------------------------|--------|---------------|
| No                       | 64     | 64            |
| GAD                      | 8      | 8             |
| Panic                    | 7      | 7             |
| Depression               | 7      | 7             |
| Schizophrenia            | 5      | 5             |
| Acute Psychosis          | 4      | 4             |
| Bipolar                  | 2      | 2             |
| ED                       | 2      | 2             |
| PTSD                     | 1      | 1             |
| Total                    | 100    | 100           |

Table 3: Association of socio-demographic variables with Psychiatric comorbidity.

| Variables                  | Number | %     | P value |
|----------------------------|--------|-------|---------|
| Age (in years)             |        |       |         |
| 11-20                      | 2      | 5.6   | <0.001* |
| 21-30                      | 9      | 25.0  |         |
| 31-40                      | 14     | 38.9  |         |
| 41-50                      | 8      | 22.2  |         |
| 51-60                      | 2      | 5.6   |         |
| 61-70                      | 1      | 2.8   |         |
| Sex                       |        |       | 0.559   |
| Male                      | 34     | 35.8  |         |
| Female                    | 2      | 20.0  |         |
| Education                 |        |       |         |
| Illiterate                 | 3      | 50.0  |         |
| Primary                   | 3      | 50.0  | <0.001* |
| Junior high school        | 2      | 22.2  |         |
| High school               | 8      | 34.8  |         |
| Inter                     | 10     | 31.3  |         |
| Graduate                  | 2      | 28.6  |         |
| Post graduate             | 8      | 47.1  |         |
| Marital status            |        |       |         |
| Unmarried                 | 6      | 50    | 0.031*  |
| Married                   | 30     | 35    |         |
| Family type               |        |       | <0.001* |
| Joint                     | 12     | 31.6  |         |
| Nuclear                   | 24     | 63.2  |         |
| Residence                 |        |       | 0.454   |
| Rural                     | 25     | 37.9  |         |
| Urban                     | 11     | 32.4  |         |

For as many as 82 (82.00%) patients, the present attempt was the first attempt to quit the drugs by taking treatment in a medical facility. The subjects included in the study were asked to provide one most important reason for the initiation of substance abuse. Peer pressure was cited as the most common reason by 75 (75.00%) patients while another 12 (12%) cited relief of frustration and stress as the reason. Other reasons, in decreasing order of their frequency, were drugs prescribed by doctors (9%), curiosity about the substance (3 %) and only 1% have sleep disturbance as the main cause of starting the substance abuse.

Psychiatric co-morbidity was found in 36% of the study subjects. The most common psychiatric co-morbidity seen was generalized anxiety disorder. Maximum 8% of the patients had a diagnosis of generalized anxiety disorder followed by 7 % for both panic disorder and depression. Schizophrenia was seen in 5% and 4% had acute psychosis followed by bipolar disorder and erectile dysfunction each seen in 2 % patients. Only 1% of patients had PTSD (Table 2 and Figure 2).

The female subjects had higher psychiatric morbidity as compared to males, though the difference was not statistically significant. Psychiatric morbidity was statistically significant in 31 to 40 years age group persons who were unmarried with less education (primary or less) and those living in nuclear families (p<0.05) as compared to married, well-educated and those living in joint families (Table 3).

Figure 2: Psychiatric comorbidity.

DISCUSSION

The most frequently abused substance in our study was alcohol (78% of study subjects) followed by tobacco smoking (58% of study population). Opioids were the most frequently abused substances in a study from Punjab by Gul et al reported by 59.67% of the patients; this was followed by alcohol abuse which was reported by 29% of the subjects.3 While in other studies the percentage of opioids abuse varied from 50 to 65%.5,8

Polysubstance abuse i.e. people abusing more than two substances simultaneously, was noted in 24% of our patients. This is much less in comparison to earlier studies where poly-substance abuse has been found in 50 to 60% of the patients.4,6

Peer pressure (75%) followed by relief of frustration and stress (12%) were the two most important reasons for initiation of substance abuse. This has been cited as the main reason for initiation of substance abuse in earlier studies as well.4,7 The frequency of peer pressure in our
study (75%) is in agreement with the earlier studies where it ranged from 50 to 96%.4-7

Psychiatric co-morbidity was observed in 36% of the study population. One study from Haryana, reported psychiatric co-morbidity in 32% of the study subjects. Unlike our study, their study population consisted of only alcohol abusers.9 Another study from South India found 33% of their alcohol abusing population sample to have psychiatric co-morbidity. However, this study was conducted on hospitalized alcoholics in a tertiary centre.10

Generalized anxiety disorder was the most common psychiatric disorder. This was seen in 8% of the subjects followed by panic disorder and depression, each seen in 7% of the people. Schizophrenia was seen in 5% while 4% had acute psychosis. Bipolar disorder and erectile dysfunction each, seen in 2% subjects and only 1% of patients had post-traumatic stress disorder. Generalized anxiety disorder was also the most commonly psychiatric disorder in a study from Haryana.9 In one study from South India, among the psychiatric disorders, the most common was major depressive disorder followed by generalized anxiety disorder.10 The epidemiological catchment area study has also reported anxiety disorder as the commonest disorder. Though this was a community-based study and that these disorders do always not present at a hospital.31

Psychiatric morbidity was associated with age, marital status, educational level and family structure of the study subjects. Psychiatric morbidity was significantly high in 31 to 40 years age group persons who were unmarried with less education (primary or less) and those living in nuclear families (p<0.05). A study by Ravikanth et al a comparison of patients with and without psychiatric comorbidity in relation to alcohol dependence; showed significantly greater occurrence of psychiatric comorbidity (p=0.03) in those with longer duration of drinking and with a higher severity of alcohol dependence (p=0.001).10

CONCLUSION

Psychiatric comorbidity was present in 36% of the study subjects. Anxiety disorders, GAD and panic disorder, were the most common co morbidities followed by depression. In this study the sample was recruited from a large tertiary hospital hence findings cannot be generalized to the community. There was no control group, so comparison between groups was not possible.

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