A STUDY OF PSYCHIATRIC COMORBIDITY IN ALCOHOL DEPENDENCE

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ABSTRACT

The diagnosis of comorbid psychiatric conditions have important clinical ramifications— as the outcome is poorer with multiple disorders. Various studies have shown that alcohol abuse has severe adverse effects on the course of mental illness and vice versa. Only a little data on the subject are available from our country. We interviewed 30 patients suffering from alcohol dependence using SCID - I & SCID - II. Seventy-six percent of the sample had axis I comorbid diagnosis and 40% had an axis II diagnoses. Depressive disorder and cluster B personality disorders were the most common comorbid diagnosis.

Key words: Alcohol Dependence, Comorbidity, substance using mentally ill, dual diagnosis.

INTRODUCTION

Comorbidity denotes the presence of a distinct clinical entity that has existed or may occur during the clinical course of a patient having the index disease (Fenstein, 1970). The term has also been used for diseases or disorders occurring together (Wittech, 1996). While dealing with drug dependence or abuse as one of the conditions in the domain of comorbidity, many other terms like dual diagnosis, chemical abusing mentally ill (CAMI), substance abusing mentally ill (SAMi) are used synonymously (Reis, 1993). The co-occurrence of substance abuse and mental illness has been known for a very long time. Winokur (1972) was possibly the first to report that alcoholics are three times more likely to have another psychiatric diagnosis. The findings have also been replicated in my other studies (Rounsaville et al, 1987). The self medication hypothesis for drug dependence proposed by Khantzian (1975) also signifies etiological relationship between the substance abuse and mental disorders. The concept of comorbidity has been gaining importance in the recent years as it is increasingly being recognized that proportion of substance using patients with another psychiatric disorder and those who are primarily substance abusers and later on develop other psychiatric illness is more than what is expected from the community based epidemiologic studies. A large number of studies have been reported from the western world. The importance of this area can be recognized from the fact that nearly one hundred articles on this topic are being published in the indexed journals every year (Basu & Gupta, 2000). Comorbid conditions affect the outcome of both disorders. It is reported that out come of drug dependence is better when comorbidity is taken into account. (Rounsaville et al, 1987). Recently Mattoo and Ramana (2000) have reviewed the epidemiologic studies on comorbidity in alcohol dependence. Though alcohol is one of the commonest drugs of abuse in India, yet Indian literature is conspicuous by its paucity. Besides that the cultural and ethnic variations might influence, the clinical presentation of both comorbid disorders. Therefore, the findings of the western studies may not be applicable in our culture. Hence we preferred to carry out this study to examine prevalence of psychiatric comorbidity in alcohol dependent patients.

MATERIAL & METHOD

The study was conducted in a tertiary care centre. The study sample included 30 consecutive patients meeting the DSM-IV (APA, 1994) criteria for alcohol dependence who had presented in the outdoor services for the first time. These patients were interviewed on structured clinical interview for DSM-IV (Research Version) [SCID] for arriving at the DSM Axis-I and Axis - II diagnoses.

Prior to participation in the study a full informed written consent was taken from the participants. Complete confidentiality was ensured to them.

Data generated was subjected to chi-square test and student's 't' test as applicable.

RESULTS

Out of 30, 23 (76.6%) patients were found to have comorbid psychiatric disorder. The axis I comorbidity was found in 76.6% patients. Axis II comorbidity was seen in 40% of the sample (Table-1).

| Diagnosis       | N (%) |
|-----------------|-------|
| Axis I only     | 11 (36.6) |
| Axis II only    | 0 (0.00)  |
| Both            | 12 (40.0) |
| Nil             | 7 (23.3)  |
| Total           | 30 (100%) |

The comorbid subgroup had significantly lower age at presentation (t = 2.28, p < 0.05, Table 2). A significantly higher proportion of them belonged to nuclear family ($\chi^2 = 5.96, p < 0.05$, Table 2).

Axis II comorbidity was detected only along with an axis I disorder (Table 3). Major depressive disorder was diagnosed in 52.1% of patients fulfilling the criteria of any axis-I disorder. Cluster B personality disorders accounted for the maximum (58.3%) axis-II comorbidity (Table 4).

DISCUSSION

The need to distinguish the alcohol dependence patients with and without psychiatric morbidity was recognized a long
In various studies it has been reported that alcohol dependence along with comorbid psychiatric illness account for poor prognosis of such patients (Schuckit, 1985; Cloninger, 1987; Babor et al 1992). Thus, the distinction between patients with and without comorbidity is of clinical significance. However, for the reasons unknown, only few studies from India have explored this area.

A large proportion of our patients (76.6%) had psychiatric morbidity. A great variation in the comorbidity with alcohol dependence (3-98%) is reported (Keeler et al, 1979). However, our results are in congruence with the findings of most of the methodologically robust investigations. In a study at Veterans Administration Hospital comorbidity rate among alcohol dependents was found to be 63% (Powell et al, 1982). Other studies also reported the psychiatric comorbidity rates from 50-70% (Mullaney & Tripp, 1979; Mahajan, 1993; Midha et al, 2001).

Prevalence rates for both axis – I and axis – II disorders in our sample was quite high (76.6% & 40% respectively). Earlier studies like Epidemiological Catchment Area study (Wittchen et al, 1996) and National Comorbidity Study (Kessler et al, 1997) also reported similar findings. In the western literature there was higher comorbidity of depressive disorders with alcohol dependence (Ross et al, 1988). In our study group too, the depressive disorders were most prevalent Axis – I disorder (52%). Other studies have also reported high prevalence (66.6%) of depressive disorders in their alcoholic sample (Midha et al, 2001). Alcohol use increases the chances of onset of depressive illness by 2.6 times. Depressive disorders can coincide with alcohol related problems. (Dixit & Crum, 2000). In other Indian studies prevalence of depressive illness had been low (Mahajan 1993, Kishore et al, 1994). Few other studies also (Kessler et al, 1997) suggest a weak relationship between substance use disorders with mood and anxiety disorders. A complex interaction of etiological factor determines the outcome of any disorder. Patients at a tertiary centre are likely to have more severe presentation of disorder.

Personality disorders were prevalent in 40% of patients. Prevalence of personality disorders have been uniformly reported to be higher in substance abusers (Brooner et al 1997, Midha et al 2001). Axis – II comorbidity was found exclusively along with another Axis – I comorbid diagnosis also. Cluster B personality disorders which were found in 58.3% of patients. Midha et al (2001) also found dissocial personality disorder average 22.7% of their sample of

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**TABLE - 2 : Sociodemographic Comparison on Alcohol Dependence Patients With & Without Coorbidity.**

|                | With comorbidity | Without comorbidity | t/x² |
|----------------|------------------|----------------------|------|
| N              | 23               | 7                    |      |
| Age in years   |                  | 35.2 ± 7.3           | 43.8 ± 12.7 | 2.28b |
| Marital status | Married          | 20 (86.9)            | 7 (100.0) | 0.43 |
|                | Single           | 3 (13.1)             | -     |
| Family         | Nuclear          | 16 (69.6)            | 1 (14.3) | 5.96b |
|                | Joint            | 7 (30.4)             | 6 (85.7) |
| Domicile       | Rural            | 12 (52.2)            | 5 (71.4) | 0.81 |
|                | Urban            | 11 (47.8)            | 2 (28.6) |

* Figures in parentheses show percentages.  
b p < 0.05, Significant.

The comorbid subgroup manifested dependence at much younger age and had more frequent hospitalization (Table 3).

**TABLE - 3 : Clinical Profile of Alcohol Dependence Patients with & without Comorbidity**

|                | With comorbidity | Without comorbidity | t/x² |
|----------------|------------------|----------------------|------|
| N              | 2.3              | 7                    |      |
| Age at onset of dependence (mean ±s.d.) (in years) | 26.9 ± 7.4 | 33.8 ± 9.3 | 2.04b |
| Duration (In years) of dependence (mean ±s.d.) | 7.2 ± 6.2 | 9.8 ± 10.1 | 0.85 |
| No. of abstinent periods Nil | 8 (34.89) | 2 (28.6) | 0.09 |
|                | 3 (56.5)         | 5 (71.4)             |      |
| >1             | 2 (8.7)          | 0 (0.0)              |      |
| Previous admissions Nil | 10 (43.6) | 6 (85.7) | 3.85b |
|                | 10 (43.6)        | 1 (14.3)             |      |
| >1             | 3 (13.2)         | 0 (0.0)              |      |

* Figures in parentheses show percentages.  
b p < 0.05, Significant.
### TABLE 4: Comorbidity in Study Group

| Axis - I | Axis - II |
|---------|-----------|
| **Diagnosis** | **Diagnosis** |
| Brief Psych. Disorders | Cluster A |
| Dysthymia | Cluster B |
| Major depression | Cluster C |
| Alcohol Induced | Personality disorder NOS |
| Psychotic Disorder | 1 (8.3) |
| Total 23 (100) | Total 12 (100) |

It is likely that Axis - II comorbidity predisposes the person to other types of psychiatric disorders. The presence of drug or alcohol dependence may be a complication of personality disorder rather than an independent disorder. All 12 patients in our sample who had an Axis - II diagnosis, did have Axis - I (Major depressive disorder) diagnosis, other than alcohol dependence. It is quite likely that Axis - II disorder makes the personal vulnerable to develop more than one kind of psychiatric disorder. However small sample does not permit any generalization.

A significant proportion of patients in the comorbid subgroup lived in nuclear families (Table 2). Poor social support has been found etiologically linked to the psychiatric morbidity (Brown & Harris, 1972). However, psychiatric morbidity itself may reduce the level of available support. This study being cross sectional in nature cannot comment on cause and effect relationship. Age of onset of dependence is significantly lower in the group of patients with comorbidity. This finding similar as reported other studies (Cloninger et al., 1989; Babor et al, 1992). The few studies for India do not confirm this finding (Kishore et al., 1994). Earlier the age of onset for dependence, the more is likelihood of psychiatric comorbidity, suicide and increased severity of psychiatric symptoms therefore earlier help seeking by patients.

To conclude, the study does suggest that prevalence of psychiatric comorbidity is very high. The presence of comorbidity is likely to complicate the outcome of both illnesses as suggested by increased clustering of hospitalizations over a relatively small period in the patients. The findings of the study are difficult to generalize as it requires a large community based sample for such epidemiological studies.

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