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Research article

ALCOHOL DEPENDENCE SYNDROME AND OTHER PSYCHIATRIC ILLNESSESS

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Abstract

Alcohol is the commonest addictive psychoactive substance used in modern times as it was noted to be used as done in medieval times. However with use of alcohol their exists the relationship of co morbidity between substance use and psychiatric disorders. There was a strong association between mood and anxiety disorders as well as conduct and antisocial personality disorder with substance disorders at all levels. Association of psychosis whether as a co morbidity or etiology was a matter subject to further evaluation. The results also suggested that there was a definite continuum in the magnitude of co morbidity as a function of the spectrum of substance use category (use, problems, dependence), as well as a direct relationship between the number of co morbid disorders and increasing levels of severity of substance use disorders. Whereas there was no specific temporal pattern of onset for mood disorders in relation to substance disorders, the onset of anxiety disorders was more likely to precede that of substance disorders. These results illustrate the contribution of importance in understanding the patterns and risk factors for psychopathology and substance use disorders and understanding the various comorbid psychiatric disorders associated with psychoactive substance use.

Keywords: Co morbidity, Mental disorders, Substance dependence

Introduction

Co morbidity is a term that means having more than one disorder at various times. Concurrent disorders are those that actually occur at the same time. It is difficult to treat a person with schizophrenia whose psychotic symptoms are sometimes due to the psychosis and sometimes due to drug dependence. Likewise the combination of personality disorder and somatization disorder, or depression and anxiety, or any combination of the major groups of mental disorders produces more disability, makes the prognosis worse, the clinician's task more difficult, and the family's burden greater. It is commonly seen that substance use disorders are associated with minor or major mental illness.

The overall treatment profile of such patients having more than two concurrent psychiatric illnesses is very challenging and comprehensive care to tackle each issue is of extreme importance.

Literature of Review

It is a well known fact that comorbidity of various Psychiatric illnesses may occur in same individuals. The longitudinal profile study usually reveals whether the psychoactive substance abuse/dependence is the cause or effect of the resultant illness. Rates of substance use disorders were examined among those with psychosis (1,2) and rates of depression among those with panic disorder (3). If groups of disorders are taken into account, the focus is usually on the co-occurrence of mental disorders with substance use disorders — and the prevalence of one group among cases of the other is not insubstantial, often around 45–55% (2,4,5,6).The Epidemiologic Catchment Area (ECA) study, which was the first large-scale community survey of the prevalence of mental disorders, determined that 18% of the total population or 60% of those with at least one DSM-III disorder, also had at least one other psychiatric disorder in their lifetime (7).The National Comorbidity Survey (NCS), which studied a probability sample of the US population aged 18-54, reported strikingly similar rates of comorbidity. Fifty six per cent of respondents with a lifetime history of at least one DSM-III-R disorder also had at least one other lifetime disorder (8). Stated another way, nine out of ten severe 12 month disorders occurred in the 14% of the sample with a lifetime history of three or more disorders (9).

Among alcohol-abusing and alcohol-dependent patients, prevalence rates for psychiatric co morbidity of between 57% and 84% have been reported (10). Mood disorders occurring co morbidly with alcohol dependence are reported frequently. Many individuals with substance-use disorders also meet the criteria for major depression. Research on co morbid substance dependence and major depression was facilitated with the DSM-IV definitions of primary or independent disorders and substance-induced disorders. Major depression that occurs before the onset of a substance-related disorder might relate differently to suicidal behavior than major depression that occurs during the period of sustained abstinence. The latter is more likely to occur while patients are in treatment (11). Studies of substance- misuse service populations have shown prevalence estimates for personality disorders ranging between 40% and 100% (12). Personality disorders, especially antisocial personality disorders, are consistently associated with a worse long-term drinking outcome (13).

MATERIALS AND METHODS

Data was collected during the period January 2008 to March 2011 from inpatients of Tertiary care centre in Rajasthan. Socio Demographic characteristics of the subjects are given in laid down tables. The patient sample comprised of patients with dual diagnosis one of which was substance abuse/dependence. The matched control sample was drawn from the community by purposive sampling technique. Inclusion criteria required alcohol or substance use within 30 days of hospitalization (inpatients). Severely psychotic, medically ill or homeless patients or patients having dementia were excluded. 100 randomly selected patients participated and were assessed by experienced interviewers.

Table 1: Age distribution of 200 male substance dependence patients

Age in years	Psychiatric patients *n* = 100 (%)	Normal controls *n* = 100 (%)
21-25	16	18
25-35	26	38
35-45	32	33
45-55	26	21

Methodology

The following tools were administered:

a) Socio-demographic Performa

It is a questionnaire which contained questions on socio- demographic details, personal and clinical information, past and family history and habits of the subjects.

b) BPRS (Brief Psychiatric Rating Scale)

The BPRS is a clinical rating scale widely used in psychiatric clinical practice. It is an 18-item scale measuring positive symptoms, general psychopathology and affective symptoms. Some items (e.g., mannerisms and posturing) can be rated simply on observation of the patient; other items (e.g., anxiety) involve an element of self-reporting by the patient. The BPRS is a clinician-rated instrument. Ratings are done after a brief (15-20 minutes) unstructured interview with the patient. Each item is rated on a 7-point scale (1 = 'not present' to 7 = 'extremely severe'). Patient's condition is judged at the time of interview, except for items numbered 2, 10, 11, 12, 15 and 16 for 3 days.

c) MAST (Michigan alcoholism screening test)

The MAST is a 24-item screening instrument designed to identify and assess alcohol abuse and dependence. The MAST was originally developed as a structured instrument that was able to detect alcoholism in individuals and which could be administered by a range of clinicians by Selzer, 1971.

DAST (Drug Abuse Screening Test)

The drug abuse screening test (Skinner, 1982) is a standard test that is used to determine if an individual is an addict. A score of 6 or more points indicates a drug problem. The DAST is the only method of identifying a potential drug problem. The DAST has been shown to have a high degree of internal consistency (coefficient *alpha* =.92), and factor analyses of inter-correlations among the DAST items have been interpreted as providing evidence that it measures a single dominant dimension of problems associated with drug abuse. Scores on the DAST are highly correlated with the frequency of use of a range of drugs, including cannabis, barbiturates, amphetamines and opiates other than heroin. The DAST attained 85% overall accuracy in identifying subjects who met DSM-III diagnosis and maximum sensitivity (96%) with a score of 6.

Procedure

All patients were interviewed in detail and after assessment tools were applied. Interviews were also conducted on normal subjects from among the general population. Initially the socio-demographic and clinical details of the sample were taken from the patients and recorded in the socio-demographic data sheet. The rating scales were applied to the patients after the withdrawal symptoms had abated, usually after 2 weeks. Like the patients, the normal control subjects were also assessed by the assessment scales.

Statistical analysis

The psychiatric patients were compared to normal controls by using the Chi-square test using SPSS.

RESULTS

In 81% of patients having either substance abuse or dependence, at least 1 diagnosis of co morbid mental disorder could be made. The most common disorders were depressive disorders, major depression, Anxiety disorders, Psychosis, bipolar disorders, Personality disorders as shown in table 2. Almost one third of the patients were diagnosed having major depression. One third of the major depressive disorders included psychotic features.

Schizophrenia was diagnosed in 11% and bipolar disorder in 16% of the patients. Anxiety disorders were found in 6% of the cases; and personality and adjustment disorders in 9% and 13%, respectively. Suicidal ideation and suicide are very common phenomena in relationship with depression and substance dependence. Suicidal attempts were found in 10% of the patients; and suicidal thoughts and ideation, in 84% (Table 3). There were some patients who did not reply on these issues. Regarding the methods used for attempting suicide, it was found that 3% attempted it by hanging; 2%, by taking overdose of drugs; 3% by jumping from high places; and 2%, by self-cutting (Table 4)

Table 2: Substance dependence and co morbid conditions

Disorders	Psychiatric patients *n*= 100 (%	Normal controls *n* = 100 (%)
Schizophrenia	11 (11)	0 (0)
Bipolar disorder	16 (16)	0 (0)
Anxiety disorder	6 (6)	9 (9)
Personality disorder	9 (9)	10 (10)
Depression	45 (45)	4 (4)
Adjustment disorder	13 (13)	10 (10)

Table 3: Suicidal attempts and ideation by substance dependence patients

Methods Psychiatric patients *n* = 100 (%)	Normal controls *n* = 100 (%)
Attempted suicide 10 (10)	2 (2)
Suicidal ideation 84 (84)	7 (7)
Not replied 6 (6)	51 (51

Table 4: Suicide methods used

Method	Psychiatric patients *n* (%)	Normal controls *n* (%)
Hanging	3 (3)	1 (1)
Drugs	2 (2)	0 (0)
Cutting	2 (2)	0 (0)
Burning	0 (0)	0 (0)
Jumping from high places	3 (3)	1 (1)

DISCUSSION

In the present study, the MAST and DAST questionnaires showed high specificity and high positive predictive value, but their sensitivity in patients is high because of high prevalence of substance dependence (cannabis, opioids and other forms of substance) in patients while in the general population, the diagnosis of alcohol dependence was rather high. The comorbid condition of schizophrenia was found in 11% of the substance dependence patients; bipolar disorder, in 16%; anxiety disorders, in 6%; personality disorders, in 9%; and adjustment disorder, in 13%. These findings support those of a few earlier studies. An analysis of the clinical profiles of 422 in patients diagnosed with no affective psychosis (292, 295, 297 and 298 according to ICD-9) showed that a high percentage (42%) of these inpatients had psychotic pathologies and a history of substance abuse. These were predominantly young males. The percentage of schizophrenic patients with a history of substance abuse reached a level of 40% — a particularly relevant finding in view of the fact that substance abuse leads to worse prognostics (14). The study reported that half of the heavy alcohol users presented with an additional psychiatric diagnosis.

In a study, (15), it was reported that the most frequent co morbid disorders identified were phobic syndromes (27%), posttraumatic stress (18%) and major depression (16%). Lifetime disorders (73% of the sample) included antisocial personality (40% lifetime), phobia (34%), posttraumatic stress (27%) and major depression (23%). Major depression was most likely to be associated with the use of opioids, stimulants and prescription drugs and with early onset of alcohol and marijuana use. Relapse at 1 year following treatment was equivalent for clients with or without diagnosis of major depression. Relapse was significantly associated with lower rates of lifetime depression for male cocaine users. In another study, (16) estimated that the affective disorders accounted for 38% of the years lived with a disability due to a substance use disorder, the anxiety disorders 26%, personality disorders 6% and psychosis 6%.
In the present study, among patients with substance abuse/dependence and co morbid psychiatric disorders, 10% of patients had attempted suicide while suicidal thought and ideation were reported by 84%. This is in agreement with a recent review which reported that nearly one third of patients with major depressive disorder also had substance use disorders, and the co morbidity yielded higher risk of suicide, greater social and personal impairment and other psychiatric conditions. Although the treatment of co morbid major depressive disorder and substance use disorders with medication is likely to be effective, the differential treatment effects based on substance use disorder co morbidity have not been systematically studied. 2008).

CONCLUSION

We conclude from the study that substance abuse/dependence increases the risk of associated psychiatric disorders. The most common disorders are depression, bipolar disorder, schizophrenia and personality disorders. Depression is usually secondary to alcohol dependence. It is often associated with an increased risk of suicidal behavior. Interest in, and research on, co morbidity has been increasing over past decades. It has emerged as one of the complex issues facing theorists, clinicians and policymakers who are responsible for providing funding for mental health problems. This chapter has discussed the concept of co morbidity and discussed the importance of community samples in documenting the extent of co morbidity in the community. As will be documented in later chapters, these surveys have established that co morbidity occurs. This has implications for theory, prevention and treatment of mental health problems. There are a number of potential explanations for co morbidity.

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