ORIGINAL ARTICLE

Psychiatric and personality disorders in survivors following their first suicide attempt

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ABSTRACT

The aim of the study was to determine the prevalence of psychiatric and personality disorders in survivors following their first suicide attempt. Three hundred and forty-one survivors who received treatment from the various medical wards of a general hospital participated in the study. ICD10 psychiatric disorders were diagnosed in 47.2% of the cases. The most common diagnosis was depressive episode (31%). Only 7 % qualified for a diagnosis of personality disorder. A significant proportion of patients (52..8%) did not suffer from any identifiable ICD- 10 psychiatric disorder.

Key words: Prevalence, psychiatric disorders, attempted suicide.

INTRODUCTION

In recent years attempted suicide has become the focus of research, as it has been found to be one of the predictors of suicide (Hawton et al, 1988 and Nordentoft & Rubin, 1993). Various psychiatric disorders have been identified in individuals who attempt suicide (Ennis et al, 1989; Suominen et al, 1996; Haw et al, 2001). They include mood disorders, alcoholism and anxiety disorders (Ennis et al, 1989; Suominen et al, 1996; Haw et al, 2001). The rates of psychiatric disorders are reported to be high in this population ranging between 85-98% (Ennis et al, 1989; Suominen et al, 1996; Ferreira de Castro et al, 1998). Nearly half of those diagnosed to have psychiatric disorders suffer from multiple psychiatric disorders (Suominen et al, 1996).

Similarly personality disorders have also been examined in this group and the proportion of patients with personality disorders range between 45-55% (Ennis et al, 1989, Suominen et al 1996, Ferreira de Castro et al 1998). Borderline personality disorder is one of the commonest personality disorders identified in several studies in patients who attempt suicide (Ennis et al 1989, Suominen et al 1996, Gupta &Trzepacz 1997). A few other studies have also identified anxious avoidant, anankastic, and paranoid personality disorder as common personality disorders (Dirks 1998 and Haw et al 2001). The presence of psychiatric disorders and personality disorders in patients who attempt suicide increases the risk of suicide six-fold compared with the risk in individuals with psychiatric disorders alone (Foster et al 1999).

The frequency of psychiatric disorders as reported in Indian studies range between 9.5 to 24.9% (Rao 1965, Ponnudurai et al 1986). Very few Indian studies have addressed the issue of personality disorders. A more recent study by Latha et al (1996) using DSM III R criteria reported a high prevalence of 93% of psychiatric disorders in the sample. 12% had received a diagnosis of Axis II disorders. There is an ongoing project at JIPMER Pondicherry where patients admitted for their first suicide attempt were recruited for a three-year follow up evaluation with a special focus on reattempts. This paper reports on the prevalence of psychiatric and personality disorders in a sample of patients who attended the emergency medical services following their first suicide attempt.

MATERIALS AND METHODS

Survivors following the first suicide attempt who were receiving treatment from the various medical wards of JIPMER hospital Pondicherry were recruited for the study. The period under the investigation was from August'2001 to July'2002. Attempted suicide, for the purpose of this study, was defined as "an act with non-fatal outcome in which an individual deliberately Initiates a non-habitual behaviour, that without intervention from others will cause self-harm, or deliberately ingest a substance in excess of the prescribed or generally recognized dosage, and which aimed at realizing changes that the person desires via the actual or expected physical consequences" (Platt et al 1992)

Subjects were aged 18 years and above. Informed consent was obtained from all the patients who participated in the study. All patients were assessed following a formal referral to the department of psychiatry. The patients were administered Mini Mental State Examination (MMSE) (Folstein et al 1975) and those with a score of 20 or above became eligible to participate in the study. The interviews were conducted in four to six sessions of 45 minutes duration to complete the evaluation.

INSTRUMENTS

Semi-structured proforma specially designed for the study was used to collect information on various demographic and psychosocial variables, information on suicide attempt and circumstances related to the attempts.

Mini International Neuro-psychiatric Interview (MINI) plus. (Sheehan et a 1998) This is a structured diagnostic interview developed jointly by European and American psychiatrists for DSM-IV and ICD-10 categories. It includes modules for 23 disorders .It features questions on rule outs, disorder sub typing and chronology. It also

features a number of algorithms to handle hierarchical rule outs in the event the patient had more than one disorder at a time.

ICD-10 international personality disorder examination (Loranger et al 1997).

IPDE is essentially a self-report instrument available in a separate module based on ICD-10. The 67 items are arranged topically under six headings: work, self, interpersonal relationship, affect, reality testing and impulse control. In addition to the diagnosis, the interview provides dimensional score for each disorder regardless of whether the subject has the disorder. The interview takes into account the age at onset and the duration of the behavior and it requires substantiation of responses with anecdotes and examples. The scoring also has provision for information from the informant. IPDE ICD-10 module has a screening questionnaire consisting of 59 true / false items. If 3 or more items from a disorder are circled the patient has failed the screen for that disorder and have to be subsequently interviewed.. The tranlation and back translation of the instrument was done with the help of professional bilingual experts. Modifications were done as suggested by other mental health professionals. Two of the investigators who were familiar with the instrument administered it to the patients in the presence of an informant. The diagnosis of personality disorders was arrived at by consensus.

RESULTS

341 patients formed the sample. There were 153 men (44.9%) and 188 women (55.1%). The mean age of the sample was 26.1(9.3) years. The mean age of the men and women were 27.4 (18.1) years and 25.1 (9.5) years. Majority belonged to the 18-25 age group. The mean number of years spent in school was 7.4 (5.1) years. 85 (29.9%) had no formal education; 22(6.5%) had primary education. 159 (46.6%) were educated up to high school level. 205(60.1) were employed at the time of recruitment. The occupational profile of the sample was; skilled workers-56.9%, unskilled workers 9.1%, students 7.3%, housewives 23.2% and professionals 3.5%. 184(54%) were married and 143(41.9%) were single. 3 were widowed (.9%) and 11 were separated (3.2%). Majority (85%) was from the rural area. 82.7% had a monthly income ranging between Rs 500-999. (Table 1)

Table 1 : Socio-Demographic Characteristics of the sample

Socio-Demographic Variables	Patients included in study	
	n	%
Male	153	44.9
Female	198	55.1
Age classification		
18 – 24	189	55.3
25 – 29	65	19.0
30 – 34	28	8.2
35 – 39	29	8.5
40 and above	30	8.8
Employment status		
Employed	206	60.1
Unemployed	136	39.9
Skilled	194	56.9
Unskilled	31	9.1
Professional	12	3.5
Student	25	7.3
Housewife	79	23.2
Educational status		
No education	85	24.9
Primary education	22	6.5
Middle School	64	18.8
High school	159	46.6
College level	11	3.2
Monthly income distribution		
Above Rs.1000/-	52	15.2
Rs.500/- – Rs.999/-	282	82.7
Below Rs.500/-	7	2.1
Marital status		
Married	184	54.0
Single	143	41.9
Separated	10	2.9
Widow	3	0.9
Divorced	1	0.3

47.2% of the suicide attempters suffered from a mental disorder. Depressive syndrome represented the largest diagnostic group (31%). Alcohol dependence was present exclusively among males (8.7%). Neurotic, stress related and somatoform disorders were found in 14.5% of the attempters. No significant gender difference in psychiatric disorders were observed except for alcohol dependence syndrome. (Table2)

7% of the patients had a diagnosable personality disorder. The most common personality disorders identified in the study were anankastic and histrionic personality disorders. (Table3)

TABLE 2 : Psychiatric Disorders: ICD-10 Classification

1. Affective Disorders	Male (153)	Female (188)	Total (341)
Bipolar disorder F31	2 (1.3%)	2 (1.03%)	4 (1.1%)
Depressive episode F32	56 (36.6%)	50 (25.2%)	106 (31%)
Dysthsymia F34	10 (6.5%)	14 (7%)	24 (7%)
2. Substance use Disorder			
Alcohol Dependence F10	30 (19.6%)	—	30 (8.7%)
3. Neurotic, stress related and somatoform disorders			
Anxiety disorder (F 40-41)	8 (5.2%)	10 (5%)	18 (5.2%)
Adjustment disorder (F34.2)	6 (3.9%)	8 (4%)	14 (14.1%)
Somatoform disorder (F 45)	7 (4.5%)	12 (6%)	18 (5.2%)
4. Schizophrenia non affective psychoses			
Paranoid Schizophrenia (F20.0)	1 (0.65%)	1 (0.5%)	2 (0.6%)

TABLE 3 : Personality Disorder ICD-10 Classification

Personality disorders

	n	%
Anxious (F60.6)	4	1.17
Anankastic(F60.5)	6	1.7
Paranoid (F60.0)	2	0.58
Histrionic (F60.4)	5	1.46
Dependent (F60.7)	0	0
Emotionally unstable(F60.3)	2	0.58
Schizoid (F60.1)	3	0.87
Dissocial (F60.2)	2	0.58

DISCUSSION

The study has comprehensively evaluated the mental disorders and the personality disorders among a sample of first attempters. The patients studied were the ones who were admitted to the emergency medical unit and later referred to psychiatric services. There was a generally high acceptance rate for the interview. 93% of the patients who were registered as cases of attempted suicide during the study period participated in the study. Poisoning was the most common form of suicide attempt (90.6%). Minority of patients (3%) admitted with an alleged history of self-immolation could not be interviewed either because of the clinical condition or refusal to give consent. The sample is significantly different from other studies in that the study has included the ones who attempted suicide for the first time. The study has adopted structured interview method for identifying psychiatric and personality disorders. It was ensured that the patients did not have a confusional state at the time of interview. The availability of an informant helped in getting an independent account of premorbid personality.

Psychiatric disorders

In this study the prevalence of psychiatric disorders among the attempted suicide patients was 47.2%. . This is low in comparison to other studies which have recorded a much higher prevalence (Ennis et al 1999, Beautrais et al 1996, Suominen et al 1996, Ferreria de Castro et al 1998 , Haw et al 2001, Latha et al) and the reason for this difference is not clear. Absence of previous episodes of attempted suicide in our sample could have altered the characteristics of the population. Majority of patients did not report any contact with the psychiatric services before the attempt. Gender had no influence on psychiatric morbidity except for alcohol dependence syndrome which was exclusively identified in men..

Depressive episode was the most common diagnosis. 31% of the patients qualified for this diagnosis according to ICD 10 criteria.Our findings replicate those of Ennis et al, 1989 and Gupta and Trzepacz 1997 who diagnosed depression in 31% and 37.2% respectively. But other studies have shown 60 to 70 % of their sample qualified for a diagnosis of depressive episode or major depression according to the criteria used. (Beautrais et al., 1996 Suominen et al., 1996, Haw et al 2001) Psychotic symptoms were rare in this study though Haw et al 2001 in their sample observed that nearly half the depressive episodes were severe or psychotic. This study found alcohol dependence syndrome to be the second most psychiatric diagnosis but the prevalence was low compared to other studies.(Suominen et al.1996, Haw et al 2001, Ennis et al, 1989) .Abuse of cannabis and other hard substances were not documented. Though dysthymia was uncommon in various studies (Suominen et al 1996, Haw et al 2001) we found a prevalence rate of 7% in this study. Another Indian study by Latha et al 1996 has quoted a much higher prevalence(42%).Adjustment disorder has been shown to have association with suicidality (Greenberg et al 1995) and relatively a high prevalence has been shown in attempted suicide patients(Magne-Ingvar et al 1992).Our low prevalence figure for adjustment disorder is in keeping with the findings of (Suominen et al 1996, Ennis et al 1989). Anxiety disorders were also less common in this study though other studies have quoted a higher frequency. (Suominen et al.1996, Haw et al 2001) Schizophrenia, bipolar affective disorder and schizoaffective disorder were rare in this study.

PERSONALITY DISORDERS

Personality disorder was identified only in 7% of the patients and all suffered from a co-morbid psychiatric disorder. A much higher prevalence ranging between 45to 57% was observed in other studies. (Ennis et al., 1999, ,Suominen et al.,1996 Ferreria de Costa et al., Haw et al 2001) Another Indian study (Latha etal1996) identified

personality disorders in 12 % of the cases. The population in this study is young and in addition to the patient, a reliable informant provided an independent account. In spite of this there is an under representation of personality disorders and the study has failed to find any significant association between personality and suicidal behaviour. The low rate of personality disorder could also have been influenced by the choice of instrument, as the threshold for detecting a disorder varies from instrument to instrument. Anankastic personality disorder was the most diagnosed one (1.7%) followed by histrionic personality disorder (1.46%). Borderline personality disorder has been reported as the most common personality disorder in several studies (Ennis et al 1989 Suominen et al 1996 Gupta & Trzepacz 1997) As our study included only first attempt patients, our study might have excluded potential borderline patients. Anxious, paranoid, and anankastic personality disorders are found to have significant representation in a few other studies (Dirks 1998, Haw et al 2001).

Comparison with other studies is difficult, as the subjects included in this study are the ones who attempted suicide for the first time. There is an inherent bias in the study that all of them were referred from the emergency services, which could mean there is an over representation of severe cases. Further the IPDE instrument was not subjected to inter-rater reliability. Majority of the patients denied having received any psychiatric consultation prior to the index attempt. It is an important observation that more than half the patients did not receive a psychiatric diagnosis. As attempted suicide is punishable under Indian law, the fear of future involvement with the law might have deterred the patients from giving more accurate information. There is a need to focus on socio -cultural factors to understand why these individuals resort to this extreme step as a reaction to even a minor provocation (e.g.: rebuke by a family member, altercations, arguments, etc). Follow up studies are required to identify whether these individuals have a risk of developing a psychiatric disorder in future.

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