



## Original Research Article

### Prevalence of Psychiatric Comorbidity in Suicide Attempters

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#### ABSTRACT

##### Keywords

Psychiatry,  
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specialty  
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Suicide is a complex, multidimensional phenomenon that has been studied from philosophical, sociological, and clinical perspective. The study is conducted in a tertiary care multi-specialty teaching hospital, which is of Cross sectional in nature and 100 consecutive patients of suicide attempt being admitted. Suicidal attempt was commonly seen in unmarried male. Housewives and student formed majority in the study. Poisoning (73%) was the most common method used for suicidal attempt, followed by drug overdose (21%). Benzodiazepine was most commonly used drug for overdose. Most of the patients attributed interpersonal problems (74%) as the reason for their suicidal attempt. Patients of alcohol dependence syndrome used more lethal modes of suicidal attempt even though scoring low on hopelessness and suicidal intent scale attributed to intoxicated state during the attempt.

#### Introduction

Suicide is a complex, multidimensional phenomenon that has been studied from philosophical, sociological, and clinical perspective; A student kills himself to escape the ignominy of exam failure. A woman burns herself to escape daily harassment by in-laws over inadequate dowry. Finance Dealer ends his life to fend off the horde of creditors.

The scion of an industrial empire kills himself after an uneasy marital relationship. More than 4, 00,000 people commit suicide all around the world every year. It is amongst the top ten causes of death for all ages in most countries of the world. In some, it is amongst the top three causes of death in the younger age group (15-34 years). Moreover, it is the second

most important cause of death in the age-group 15-19 yrs., second only to vehicular accidents (Latha *et al.*, 1996; Jain *et al.*, 1999).

Moreover, this is the figure of successful suicides. Attempted suicides are around ten times the figure i.e. 80,00,000 people attempt suicide, out of which 8,00,000 succeed in ending their lives. Attempted suicides involve a great effort on the part of medical and paramedical professionals and health care delivery systems, the immediate caregivers, the NGOs, and society at large to manage this colossal burden of morbidity and mortality. Moreover, research studies have found that 1-2% of attempted suicides become successful suicides every year. This means 10-20% attempted suicides will end their lives in a decade. Consider the Indian scenario, as elsewhere; suicide is amongst the top ten causes of death here, and amongst the top three between the ages 16-35 years.

While in 1984 around 50,000 people committed suicide (50,571, i.e. 6.8 per lakh), in 1994 this figure rose to 90,000 (89,195 i.e. 9.9 per lakh) (Beautrais, 2000; Jain *et al.*, 1999). At present we have nearly a lakh Indians dying of suicide every year, which is 20% of the world suicide population: another dubious distinction for this country, beside the population explosion. In last two decades, the suicide rate has increased from 7.9 to 10.3 per 1,00,000. There is wide variation within the country. Southern states of Kerala, Karnataka, Andhra Pradesh, Tamil Nadu have a suicide rate of >15, while in Northern states of Punjab, Bihar, Uttar Pradesh and Jammu and Kashmir, its <3. This variable pattern has been stable for last twenty years (Michel *et al.*, 1994; Noiernberg *et al.*, 2001). Higher literacy, better reporting system, lower external

aggression, higher socio-economic status and higher expectation are possible explanation for the higher suicide rates in Southern states.

## **Materials and Methods**

The study is conducted in a tertiary care multi-specialty teaching hospital, which is of Cross sectional in nature and 100 consecutive patients of suicide attempt being .The study was conducted in multi specialty hospital during the period of one year.

### **Inclusion criteria**

All patients of 16yrs of age and above. Patients admitted for treatment of attempted suicide whose physical condition was stable & could undergo detailed assessment.

### **Exclusion criteria**

Patients who refused to give consent. Patients who were critically ill and / or medically unstable that an interview was not possible.

## **Results and Discussion**

Mean age of the sample was 28.35 years ( $\pm 8.29$ ). The youngest patients were sixteen years of age. The oldest patient was fifty-seven years of age. Majority of patients, 70% belonged to 15 – 30 years of age group.

Of 34 patients diagnosed with depressive disorder, 29 patients used poisoning and 5 patients used drug overdose as mode of suicidal attempt. Among 28 patients of adjustment disorder, 20 patients used poisoning, 5 patients used drug over dose, 3 used other methods (self immolation, kerosene consumption) as mode of

suicidal attempt. Of 21 patients who had no diagnosis on axis-I, 11 patients used poisoning and 10 patients used drug overdose as method opted for suicidal attempt. 11 patients who were diagnosed as alcohol dependence syndrome, 10 used poisoning and 1 used hanging as mode of suicidal attempt. schizophrenia was diagnosed in 4 patients, 2 of them used OP compound and 2 used hanging as mode of suicidal attempt.

Striking finding was that patient of depressive disorder and patients who had no diagnosis on axis-I are using common methods (poisoning, drug overdose) to attempt suicide.

All over world the attempted suicide rate among adolescents and young adults is alarmingly increasing. This is in accordance with other Indian studies (Latha *et al.*, 1996).

The particular vulnerability in adolescents and young adults may due to emotional turmoil, interpersonal problems, increase in alcohol and substance abuse, breakdown in extended family, job difficulties and academic setbacks. Thus as large number of this high-risk group enters the phase of life associated with greatest risk.

This is similar to most of Indian studies (Jain *et al.*, 1999; Narang *et al.*, 2000) but in contrast with other studies (Beautrais, 2000) where female predominance is noted.

This can be explained by the fact that, the study site being a tertiary referral center, only cases of high medical/surgical seriousness are seen. As it's known that, men are less likely to seek help, admit the severity of symptoms, or accept treatment, increasing their likelihood of using lethal

means of suicidal attempt. Whereas, women tend to have more social support, more willing to seek help and lower rates of alcohol.

In the present study 28 (28%) patients were diagnosed with Adjustment disorder its closer to the figures of 34.6%. It is significantly higher than the rates quoted by Narang *et al.*, (2000) Out of these 28 patients of adjustment disorder, 14 were housewives forming the majority of this population and having difficulty to cope with Interpersonal problem with significant others. Rest of them were unemployed (6), shop owners (4) and students (3).

Of 11 patients diagnosed with alcohol dependence syndrome, all of them were male and attempted suicide in intoxicated state.

4 (4%) patients were diagnosed with schizophrenia. All of them were having features of post psychotic depression. All patients had chronic illness and multiple hospitalisations. These findings are in accordance with other studies (Narang *et al.*, 2000, Jain *et al.*, 1999)

1 (1%) patient was diagnosed as panic disorder and 1 (1%) with somatoform disorder. They thought their illness is debilitating and incurable making their life miserable causing socio-occupational impairment. Hence they thought they would get relief from their disease only when their life ends.

Among 21 (21%) patients of no diagnosis group, 9 were having V- code on axis –I and 11 patients had no diagnosis on V-code. Among patient who had V-code, 6 patients had academic problem, 3 had occupational problem, 2 had parent child relationship problem.

All patients having personality disorder had comorbid axis I diagnosis on scid I. Depressive disorder (6) and alcohol dependence syndrome (3) were the comorbidity diagnosed in the present study.

Borderline personality disorder was the most common personality disorder identified in several studies (Suominen *et al.*, 1996; Gupta *et al.*, 1981). In the present study, 4 patients were diagnosed with borderline personality disorder all 4 patients had co-morbid axis I diagnosis, 3 were diagnosed with depressive disorder and 1 with alcohol dependence disorder.

3 patients who were diagnosed with obsessive compulsive personality disorder had comorbid diagnosis of depressive disorder on axis I. 2 patient with the diagnosis of antisocial personality disorder had comorbidity of depressive disorder (1) and alcohol dependence syndrome (1).

Probable reasons were predisposition of personality disorder patients to major psychiatric disorders like depressive disorders or alcohol dependence syndrome, difficulties in relationships and social adjustments, impairment in abilities to cope with stress, interpersonal conflicts with family members and others.

**Table.1** Frequency distribution of data by age group (n=100)

| Age-Group    | Frequency  | Percentage |
|--------------|------------|------------|
| 15-20        | 10         | 10.0       |
| 21-25        | 28         | 28.0       |
| 26-30        | 32         | 32.0       |
| 31-35        | 16         | 16.0       |
| 36-40        | 4          | 4.0        |
| 41-45        | 3          | 3.0        |
| 46-50        | 4          | 4.0        |
| 51-55        | 2          | 2.0        |
| 56-60        | 1          | 1.0        |
| <b>TOTAL</b> | <b>100</b> | <b>100</b> |

**Table.2** Mode of suicidal attempt vs psychiatric diagnosis (n=100)

| Mode of suicidal attempt/psychiatric Diagnosis | n1       | Depressive disorder (n2=34) | Adjustment Disorder (n2 =28) | No diagnosis (n2=21) | Others (n2=17) |       |        |       |
|--|----------|-----------------------------|------------------------------|----------------------|----------------|-------|--------|-------|
|  |          |                             |                              |                      | Al-co          | Schiz | Pa-nic | Som a |
| O P Compounds                                  | 54       | 20                          | 13                           | 09                   | 09             | 02    |        | 01    |
| Other poisoning                                | 19       | 09                          | 07                           | 02                   | 01             | 00    |        |       |
| Drug over dose                                 | 21       | 05                          | 05                           | 10                   |                |       | 01     |       |
| Others   |          |                             | 03                           |                      | 01             | 02    |        |       |
|  | Hanging  | 03                          |                              |                      | 01             | 02    |        |       |
|  | Self imm | 02                          |                              | 02                   |                |       |        |       |
|  | Kerosene | 01                          |                              | 01                   |                |       |        |       |

Table. 3

| Table 3: Frequency distribution of data by psychiatric morbidity (n=100) |             |            |
|--|-------------|------------|
| Variables  | Frequencies | Percentage |
| UNIPOLAR MDD   | 27          | 27.0       |
| OTHER MOOD DIS   | 7           | 7.0        |
| ADJUSTMENT DISO  | 28          | 28.0       |
| ALCOHOL DEP  | 11          | 11.0       |
| SCHIZOPHRENIA  | 4           | 4.0        |
| NO DIAGNOSIS   | 21          | 21.0       |
| OTHERS   | 2           | 2.0        |
| TOTAL  | 100         | 100.0      |

In the present study, it was found that 39 (39%) patients had some personality traits accentuated in them. Cluster B traits were observed in 27 patients (borderline personality trait in 15, antisocial personality trait in 6, histrionic personality trait in 6 patient) and cluster C personality traits in 12 patients (obsessive compulsive personality trait in 6, dependent personality trait in 4, avoidant personality trait in 2 patients).

There were no patients with cluster A trait diagnosis. These were the individuals not fulfilling the criteria for personality disorder on DSM IV TR. Haw *et al.*, 2001, found traits accentuation based on personality assessment schedule in 33.3% of the individuals. These finding are in accordance with the present study (Haw *et al.*, 2001).

Probable reasons for these traits were: work or study related perfectionism, uncertainty about self image, low frustration tolerance, interpersonal problems marred by unstable internal preference for the relationship, frequent arguments and disagreements, emotional liability and feeling of emptiness, impulsivity. This shows that, these traits not only reflect the personality disorder

diagnosis but also are the same factors that are left out while formulating the diagnosis. Paykel *et al.*, (1975) had observed that patients who attempted suicide show as much as four times an incidence of an upsetting life event in the preceding month compared to general population (Paykel *et al.*, 1978). Chronic social problems – marital difficulties and separations, unemployment, overcrowded housing and debts are common among suicidal attempters. Many attempters have experienced acute interpersonal problems and financial stressors and they often form the background to the suicidal attempts. Most frequent stressful life events, the present study population had experienced in past 1 month and 1 year were marital conflicts, conflicts with in-laws, financial loss, family conflicts, etc. thus undesirable life events were the most common occurrences in their life, during this period.

In conclusion, poisoning (73%) was the most common method used for suicidal attempt, followed by drug overdose (21%). Benzodiazepine was most commonly used drug for overdose. 79% of patients were diagnosed to have psychiatric diagnosis on scid-I, most common diagnosis was

depressive disorder. 9 (9%) of patients were diagnosed having personality disorder on clinical assessment according to DSM IV TR, most common was borderline personality disorder. Most of the patients attributed interpersonal problems (74%) as the reason for their suicidal attempt.

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