# Evaluation of suicidal symptoms in adult depressive in-patients at Tribhuvan University Teaching Hospital

| NR Koirala*  |
|--------------|
| MK Nepal**   |
| VD Sharma*** |

## **Abstract**

The data on the frequency of the suicidal symptoms in depressed patients varies widely. The reported rates generally show that about 40% - 70% of patients with affective disorders show suicidal symptoms, about 15% of depressed patients end up their lives by suicide and more than 50% of patients who attempt suicide are also more likely to have a severe and major type of depression. The information was collected about the severity of depressive illness and the reporting of suicidal symptoms in the 80 ICD-10 diagnosed depressive in-patients. Rating was done as per Hamilton Rating Scale for Depression and details of suicidal symptoms were collected for suicidal wishes, ideation, gesture and attempts. Correlation of suicidal symptoms with other variable was calculated with Spearman correlation coefficient. Thirty-two point five percent of the male patients and 67.5% of the female patients reported suicidal symptoms. Female patients showed more suicidal ideation, wishes and attempts as compared to the male group. Positive and significant correlation was observed between suicidal symptoms, total HDRS Score and duration of the illness. Age showed negative correlation with suicidal symptoms.

Keywords: Suicide; Hamilton Depression Rating Scale; TUTH.

#### Introduction

Suicide is a major cause of death in all countries of the world (World Bank, 1993; World Health Organization, 1994; Hepple and Quinton, 1997). Studies of suicides have shown that the majority of individuals who kill themselves have a psychiatric disorder at the time of death (Black and Winokur, 1990), with depression being the most common specific disorder (Apter et al, 1993; Isometsa et al, 1994; Cheng, 1995), followed by alcohol dependence and schizophrenia (Robins et al, 1959; Barraclough et al, 1974; Klerman, 1987; Diekstra, 1993; Conwell et al, 1996). More than one disorder is present in some cases (Runesson, 1989; Coronelius et al, 1996), the combination of depression and alcohol abuse being especially frequent (Rich et al, 1974; Mattunen et al, 1991; Andrews and Lewinshown, 1992; Henriksson et al, 1993; Rudd et al, 1993).

Despite the prevalent methodological differences between studies, the reported rates generally show that about 40% - 70% of patients with affective disorders show suicidal symptoms, and about 15% of depressed patients end up their lives by suicide (Guze and Robins, 1970; Miles, 1977; Jones et al, 1994; Ferreira et al, 1998), thirty times the general population risk (Beautrais et al, 1996). Recent studies

from neighbouring countries, like India,

have also shown similar, even somewhat higher rate of suicidal attempt among patients with depressive illness (Sethi et al, 1978; Gupta and Singh, 1981; Sharma, 1998). More than 50% of patients who attempt suicide are also more likely to have a severe and major type of depression (Weissman, 1974; Roy, 1983; Liderberg, et al; 1985).

Although the phenomenon of depression, suicidal behaviour and completed suicide are related to one another, all depressive patients do not complain of suicidal ideation nor report such gestures or attempts (Guze and Robins, 1970; Hendin, 1986). Many explanations can be set forth to explain such observations. The issues of beliefs and concerns about suicide, psychosocial background and difference in ascertaining reporting and measuring suicidal symptoms may for example be implicated in this regard (Ashford and Lawrence; 1976). The religious affiliations have also been found to effect the suicidal rates as low rates of suicide are reported even in severely depressed patients from countries where religious practices influence the daily livings to a large extent (Mahgoub et al, 1988; Suleiman et al, 1988).

Since most suicidal individuals make some concomitant contact with the health care system (Achte, 1986; Hintikka et al, 1998), health professionals are thus in a key position with regard to identification of suicidal behaviour and early intervention at the population level. Prompt detection and effective treatment of depression could prevent some proportion of these suicides. Assessing suicidal risk is therefore a top priority for mental health professionals.

The associations between numerous psychological characteristics that may be amplified and associated with suicide risk are very complex. Hopelessness (Beck, 1985), dichotomous thinking, rigid thinking, poor problem solving skills (Wieshaar and Beck, 1990) attitudes toward suicide and suicidal ideation (Stein et al, 1998) are the most important and maybe more important than depression itself. Research on these issues in our country has, however, been limited and the characteristics that distinguish depressive suicidal from non-suicidal have received little attention. This paper describes the findings of a study, which was

designed to find out the extent pattern and severity of suicidal symptoms in a group of depressed Nepalese patients. The main objectives of the study was to evaluate the suicidal psychopathology among these patients in terms of socio-cultural set up and prevailing religious practices.

### Patients and methods

The study was carried out at the Department of Psychiatry, Tribhuvan University Teaching Hospital, Kathmandu. Case records of all admitted patients between January-December 1994, who meet the ICD-10 (WHO, 1992) Diagnostic criteria for depression were scrutinized for relevant data. Patients, aged under 18 years, with diagnosis of substance abuse and dual psychiatric diagnoses were excluded and a stratified sample of 80 patients, 40 males and 40 females, matched for gender, religion, and marital and socioeconomic status were selected for the study. The information was collected about the severity of depressive illness and the reporting of suicidal symptoms. Rating was done as per Hamilton Rating Scale for Depression-HRSD (Hamilton, 1967) and details of suicidal symptoms were collected for suicidal wishes, ideation, gesture and attempts.

Differences between male and female depressive patients in terms of these symptoms were assessed using chi-square test. Correlation of suicidal symptoms with other variable was calculated with Spearman correlation coefficient.

### **Results**

Table I shows the demographic details of the sample. Thirteen (32.5%) of the male patients and 27 (67.5%) of the female patients reported suicidal symptoms, which constituted 50% of the total sample under study. Patients, from lower and middle socioeconomic classes, single and, who belonged to Hindu religious constituted a large proportion of suicidal in both male and female. Females had reported longer duration of illness (9.2±4.7 Vs. 7.1±2.3 months), but were younger than their counterpart (37.4±5.3 Vs. 31.2±4.8).

The details of suicidal symptomatology as measured by the Hamilton Rating Scale for Depression in the sample (Table II) shows that female patients showed more suicidal ideation (78% Vs. 62%) and wishes (70% Vs. 38%) as compared to the male group. However, suicidal attempts were more prevalent among male than female.

Table III shows the correlations between total HRSD score, suicidal symptoms, and age of the patients and the duration of the illness. Positive and significant correlations were observed between suicidal symptoms, total HDRS Score and duration of the illness. Age showed negative correlation with suicidal symptoms.

Table I: Demographic details

|                       | Male                    |  | Female                     |   |
|-----------------------|-------------------------|--|----------------------------|---|
|                       | Total                   | No. of patients showing<br>suicidal symptoms total and % | Total                      | No. of patients showing<br>suicidal symptoms total and<br>% |
| No. of Patients       | 40                      | 13 (32.5%)   | 40                         | 27 (67.5%)  |
| Age (Mean)            | 37.4 <u>+</u> 5.3       |  | 31.2 <u>+</u> 4.8          |   |
| Duration of illness   | 7.1 <u>+</u> 2.3 months |  | 9.2 <u>+</u> 4.7<br>months |   |
| Marital Status        |                         |  |                            |   |
| Single                | 21                      | 9 (42.8%)  | 21                         | 16 (76.2%)  |
| Married               | 19                      | 4 (21.0%)  | 19                         | 11 (57.8%)  |
| Socio-economic Status |                         |  |                            |   |
| Upper                 | 5                       | 1 (20.0%)  | 5                          | 1 (20.0%)   |
| Middle                | 27                      | 10 (37.0%)   | 8                          | 5 (38.4%)   |
| Lower                 | 8                       | 2 (25.0%)  | 27                         | 21 (77.7%)  |

| Religion                                     |                  |            |                   |            |
|--|------------------|------------|-------------------|------------|
| Hindu  | 36               | 12 (34.2%) | 36                | 23 (63.8%) |
| Buddhist                                     | 3                | 1 (33.3%)  | 3                 | 2 (66.6%)  |
| Christian                                    | 1                | 0          | 1                 | 1 (100%)   |
| Muslim                                       | 1                | 0          | 1                 | 1 (100%)   |
| HDRS Score (Mean)                            | 28 <u>+</u> 4.6  |            | 32.3 <u>+</u> 5.9 |            |
| Score on suicidal symptoms on<br>HDRS (Mean) | 2.4 <u>+</u> 0.9 |            | 3.6 <u>+</u> 1.3  |            |

Table II: Details of symptoms among suicidal patients.

|                             | Male      | Female     |
|-----------------------------|-----------|------------|
| Feels life not worth living | 13 (100%) | 27 (100%)  |
| Wishes to be dead           | 7 (53.8%) | 21 (77.7%) |
| Suicidal Ideas              | 5 (38.4%) | 19 (70.3%) |
| Suicidal Attempts           | 4 (30.7%) | 6 (22.2%)  |

Table III: Correlation of suicidal symptoms.

|                      | HDRS<br>Score | Suicidal<br>Symptoms | Age   | Duration<br>of illness |
|----------------------|---------------|----------------------|-------|------------------------|
| Total HDRS<br>Score  | -             | 0.52**               | 0.32  | 0.50                   |
| Suicidal<br>symptoms | 0.52**        | -                    | 0.28* | 0.40*                  |
| Age                  | 0.32          | 0.28*                | -     | 0.20                   |
| Duration of illness  | 0.50**        | 0.40**               | 0.20  | -                      |

**\*\*** <0.01 **\*** <0.05

(Values are of Spearman Correlation coefficient)

#### Discussion

The results of this study showed that 50% of depressed patients (16.5% of male and 33.5% females) reported symptoms of suicide in this sample. Feelings that life is not worth living, death wishes and suicidal ideation were more common than the actual attempts among the suicidal patients. Female patients comparatively showed more symptomatology (67.5% Vs. 32.5%) than male patients, which is in consistent with the findings reported by many investigators (Weissman, 1974, Sharma, 1998).

Present findings are consistent with

the reports from the West (Guze and Robins, 1970; Barraclough and Pallis, 1975; Beck et al, 1985; Black and Winokur, 1990; Andrew, 1992; Diekstra,

1993; Cheng, 1995; Hipple and Quinton, 1997; Stein et al, 1998) that the risk of suicide is high

in depressive patients, but do not support the observations from countries where a

very low rate of suicide or deliberate self harm have been reported (Mahgoub et al, 1988; Suleiman et al, 1988). The differences in techniques and methodologies used, selection criterion and the aims and objectives of the study maybe the reasons of the prevalent discrepancies between the reported rates in different studies.

Significant positive correlations between suicidal symptoms, duration and severity

of the illness, as suggested by this study, have also been reported by Wetzel (1976), Beck (1979, 1985), Rush et al (1982) and Monk (1987). In our culture where the elderly people are considered to be well integrated and respected members of the family, where most of their children have settled and are ready to shoulder their responsibilities thus making the life of the elderly rather free from the stresses and strains (Shukla et al, 1990) and yet another factor such as low life expectancy compared to that of the western societies maybe responsible for the negative correlation between age and suicidal symptoms. However, as the

investigators did not find study which may explain the observed relationships in the context of our socio-cultural settings. They felt difficult to compare the results and would suggest a need of a separate study to explore these phenomenon.

The high rate of suicide amongst depressed in-patients in this study can be explained on various grounds. Although the prevailing Hindu teachings condemn and strictly proscribe intentional self-destruction, the lack of religious and family harmony, the destruction of traditional religious practices and increasing burden of day to day stresses, poor socio-economic status, cultural degradation poor social support, inability to compete for the basic demands, and impending fear of being ill among the depressed might be considered important factors which lead to high rate of suicide among the depressed in-patients. However, the rate may still be high. The legal penalties and the features of prosecution and imprisonment for suicidal patients may make it uncommon for the expression of suicidal wishes or thoughts. These are only the possible explanations, which deserves further investigations and needs more work to determine the nature and influences of religious and socio-cultural factors on the suicidal symptomatology.

The practical implications of the results of this study also require due attention. The recognition of suicidal behaviour is of vital importance as it not only provides information regarding further risk factors for depressive patients but also calls attention for specific intervention strategies which can be incorporated to deal with the mortality and morbidity of these patients. The loss of life not only creates major social and economic costs for society but also leads to immense anguish and pain for the family. Early identification and recognition of these symptoms have, therefore, far reaching consequences in the management of these patients and the clinicians dealing with cases of depression should always explore the extent of these symptoms in their patients.

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