

Assessment of Suicidal Intent

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ABSTRACT

Background: Suicide and suicidal attempt are an important cause of mortality and denotes severe morbidity among the population. Successful suicide attempt is associated with previous suicide attempts. Identifying factors in suicide attempters will help in formulating a comprehensive response to these issues. **Objective:** To identify the sub group who are more vulnerable and the factors associated with this group. **Setting and Design:** A cross sectional observational study of this sub group was carried out. **Material and Methods:** study was conducted on patients who were referred to the Psychiatry department for attempted suicide. They were assessed to identify those with high suicidal intent and study the factors associated with high suicidal intent. **Statistics:** Epiinfo by CDC was used to analyze the results. **Results:** High intent was associated with history of psychiatric illness, history of previous attempts and family history of suicidal attempts. **Conclusions:** A sub group was identified which had a high intent and possibly higher chance of repeating an attempt.

Key words: *Attempted suicide, intervention, suicidal intent*

INTRODUCTION

Suicide and deliberate self-harm are major issues in healthcare all over the world. It is a significant problem in India. 135,445 persons lost their lives during the year 2012 by suicide in India; 16,927 in Tamil Nadu had committed suicide the same year. Tamil Nadu recorded 12.5% of suicide rate, the highest among all states.^[1] Epidemiological studies evaluating suicide rates in Tamil Nadu, using the verbal autopsy method, have shown that the actual suicide rate is 6-9 times the officially reported rates.^[2,3] Suicide attempt rates are found to be even higher than the rates for completed suicides.^[4,5] Suicide risk among self-harm patients is

100 times higher than in the general population. It is often estimated that about 10-15% of attempters eventually die by suicide. Attempted suicide is stated to be associated with several psychosocial and medical conditions such as young age, female sex and psychiatric disorder.^[6] Suicide is usually associated with prior suicidal behavior, as 50% of people who commit suicide have previously attempted to do so. Patients who attempt suicide and survive are at a high risk of committing suicide later. Suicidal intent score has been found to be a good predictor of subsequent

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completed suicide,^[7] and it may be possible to intervene and prevent this.

In those who attempt and survive, some do intend to die and adopt more lethal methods, which would end in death but for the timely rescue response. They are called failed suicide by some authors; others who do not intend to die, but to manipulate the environment adopt less lethal methods and have milder intent. Sarkar *et al.*^[8] has identified a few factors, which differentiate these groups. Sidhartha and Jena^[9] in their review of the studies carried out in India on suicidal attempts have opined that identification of the subgroup by educating those who deal with suicide attempts can bring about a better referral process so that these patients can be managed to prevent further attempts which may turn out to be fatal. Vijayakumar *et al.*^[10] have concluded in their review of 54 articles from the Indian Journal of Psychiatry that poisoning, hanging, and self-immolation, particularly, in women were the most common methods of successful attempters; physical and mental illnesses, difficult interpersonal relationships, and economic difficulties were the main reasons; and women, students, and farmers were the most vulnerable of the population. With this view, the present study was carried out to find the sociodemographic profile and the suicidal intent score of the cases of attempted suicide as well as to determine the association of suicidal intent score with various factors.

Aim

1. To study the sociodemographic and other background details of those who were referred for attempted suicide.
2. To identify factors which are associated with high suicidal intent.
3. To identify patients who have these factors, which make them more vulnerable to future attempts.

MATERIALS AND METHODS

This is a hospital-based cross-sectional study. The study was conducted in the SRM Medical College Hospital and Research Centre, which in the SRM University Campus. Approval for the study was obtained from the Institutional Ethics Committee, SRM Medical College Hospital and Research Centre. The patients who attempted suicide were referred to Psychiatry Outpatient Department (OPD) for psychiatric assessment and necessary intervention from the medical facility after their physical condition improved. All the attempted suicide patients who attended Psychiatry OPD from October 2013 to December 2013 were evaluated in detail with a reliable informant. Written informed consent was obtained for the study from both the patients and their primary caregivers.

The psycho-sociodemographic variables were documented in a specially designed proforma which include their age, sex, marital status, address, education, occupation, income, mode of attempt, family history, comorbid physical/psychiatric diagnosis, history of attempts, and precipitating factors.

The Beck's suicide intent scale was used to assess the level of the intent.^[11] Beck suicide intent scale contains 20 items each scoring from 1 to 3 points. Total score of 15-19 was recorded as low intent, score 20-28 was recorded as medium intent, and score 29 and above was recorded as high intent.

Statistical analysis

Data entry was done in the MS-Excel and analysis was carried out by appropriate statistical software. Descriptive statistics was used.

RESULTS AND DISCUSSION

Fifty-five patients attended the psychiatric OPD's suicide prevention clinic. They were referred to the clinic from various departments where patients are admitted after a suicidal attempt. They were assessed according to a standardized proforma. 26 (47.3%) were men and 29 (52.7%) were women. Ponnudurai *et al.*^[12] had assessed a similar group of patients over a period of 1 year and their sample had more males in contrast to our study. 4 (7.3%) were illiterate, 1 (1.8%) had primary school education, while 10 (18.2%) had studied up to middle school. 16 (29.1%) had finished high school, 4 (7.3%) were diplomats or ITI qualified, 15 (27.3%) were graduates, and 5 (9.1%) were professionals.

28 (50.9%) were married and 27 (49.1%) were unmarried. Ponnudurai *et al.*^[12] had noted that unmarried persons of both genders were represented more in suicidal attempters.

9 (16.4%) were below 18 years of age, 17 (30.9%) were between 19 and 25 years, 20 (36.4%) were between 26 and 35 years, 5 (9.1%) were between 36 and 45 years, and 4 (7.3%) were above 46 years of age. The mean age of the group was 27.51 with a minimum age of 13 and a maximum age of 65. Mean age of people with mild intent was 26.76 (standard deviation [SD] 9.062), mean age of moderate intent was 31.44 (SD 12.12), and the mean age of severe intent was 26.64 (SD 14.25). It was surprising that the age of sample with severe intent was less than other groups, but the minimum age of person who attempted in this group was 13 and the maximum was 65 and this has skewed the result.

Unemployed were 11 (20%) in this group, unskilled workers were 17 (30.9), skilled workers were 15

(27.3%), clerical and petty business or occupation such as farmers were 3 (5.5%), professionals were 6 (10.9%), and students made up 3 (5.5%) of the sample.

11 (20%) had a prior attempt, while 44 (80%) did not have a previous attempt. Twenty percent of people who had attempted suicide in our sample had a history of prior attempts, which is in tune with other studies. 9 (16.4%) had a family history of attempted suicide and 46 (83.6%) did not have a family history. 18 (32.7%) had a psychiatric diagnosis and 37 (67.3%) did not have a psychiatric diagnosis. 33 (60%) had low lethality of attempt, while 22 (40%) had high lethality of attempt. 35 (63.6%) had low intent, 9 (16.4%) were assessed to have medium intent, and 11 (20%) had high-level intent. Bharati *et al.*^[13] in their study of suicidal intent had noted that high suicidal intent predicts subsequent successful attempts. Fifty-four of the 55 patients of the sample were of Hindu religion and one was a Christian. Muslims were not represented in the sample. Lack of representation of Muslims could be due to religious beliefs. 11 (20%) had attempted by ingestion of acid or chemicals, 17 (30.9%) had ingested tablets, 15 (27.3%) had ingested insecticides, 3 (5.5%) had attempted to hang themselves, 6 (10.9%) had consumed oleander seeds, and 3 (5.5%) had made cuts with intent to possibly kill them. Merzyk quoted by Logaraj *et al.*^[14] had stated that accessibility of poison determines the substance ingested. In this study, organophosphorus compounds were the commonly ingested substance, but in our study tablets were the most common ingested substance. This could be possibly due to accessibility. Our hospital caters to a suburban area. Though mode of attempt and lethality of intent depends upon the awareness of lethal potential of substances consumed, this association could not be made out.

This cohort was analyzed with various factors to identify an association between these factors.

Sex versus intent level

In our study [Table 1], there were 26 males and 29 females, but the difference was not statistically significant between these groups. Lal and Sethi^[15] have noted that females predominate in the incidence, but this difference disappears when this group is subdivided on socioeconomic status and education. Narang *et al.*^[16] have noted that single males and married females attempt suicide more. Assessment and analysis were carried out for these factors.

Family history versus intent level

Table 2 shows that there is a very significant correlation between a family history of attempted or completed suicide and high intent levels in our sample. This is in tune with most of the studies in India. Venkoba Rao^[17] in his hospital-based study of attempted suicide also has noted these findings where he states that about 20% of

suicide attempters in his study had a family history of suicidal attempt. Badrinarayana^[18] also has noted that a positive family history of suicide was correlated with successful suicide.

Psychiatric diagnosis versus intent level

Presence of psychiatric illness [Table 3] has been noted to be associated with suicidal attempts and completed suicide in many studies. Jain *et al.* had noted that depression was associated with suicidal attempts, and in these persons suicidal intent was high.

Previous attempt versus intent level

Table 4 of our results show that persons with history of suicidal attempts have a high suicidal intent and this association is statistically significant. This is in tune with many studies. Lal and Sethi^[15] had noted that about 7% of the suicidal attempters had attempted previously and they had high intent.

Lethality versus intent level

In our study [Table 5], lethality of attempt shows a trend toward a positive co-relationship with high intent, but it is not statistically significant. The table shows that more persons in this sample who had low suicidal intent had attempted with less lethal means whereas

Table 1: Comparing sex versus intent level

Intent level	Male	Female
Low	15	20
Moderate	5	4
High	6	5

$\chi^2 = .164$; $df = 1$; P value = .686

Table 2: Comparing family history versus intent level

Intent level	Yes	No
Low	8	27
Moderate	0	9
High	1	10

$\chi^2 = 24.891$; $df = 2$; P value = .000

Table 3: Comparing psychiatric diagnosis versus intent level

Intent level	Yes	No
Low	9	26
Moderate	4	5
High	5	6

$\chi^2 = 6.56$; $df = 1$; P value = .010

Table 4: Comparing previous attempt versus intent level

Intent level	Yes	No
Low	8	27
Moderate	0	9
High	3	8

$\chi^2 = 19.80$; $df = 1$; P value = .001

Table 5: Comparing lethality versus intent level

Intent level	Low	High
Low	29	6
Moderate	3	6
High	1	10

$\chi^2 = 2.200$; $df = 1$; P value = .138

persons with a high suicidal intent had attempted with high lethal nature.

Comments

SRM Medical College and Hospital is situated on the highway connecting Chennai with almost all the towns and rural areas of Tamil Nadu. It caters to patients from Chennai, surrounding suburban areas, and nearby districts. Medical emergencies by their nature are from nearby areas only. This population consists of a mixture of urban, suburban, and rural areas. Though there are nearby hospitals, due its reputation and site, it is catering to a larger area and population nearby.

Suicide and suicidal attempts are medical emergencies, which are attended in the medical wards and casualty. When patients are stabilized, they are referred to our department for evaluation and further follow-up. Due to the nature of these acts, they are fraught with repercussions to the patients and their relatives. As noted by many authors' patients who have made suicidal attempts, some of them try to repeat their attempts, and this attempt may be fatal. Hence, it becomes imperative to identify the subgroup who may make further attempts. High suicidal intent is associated with further attempts and a constellation of factors is associated with high intent, which indirectly points toward risk in the future. Our study reveals that in these groups of patients, high intent is associated with family history of suicide, psychiatric illnesses, history of suicidal attempts, and high lethality of present attempt. We propose to continue this assessment of our cohort and intensify our follow-up of those who are identified by these factors.

CONCLUSIONS

This study was carried out to assess the association of suicidal intent scores with other sociodemographic and clinical variables. Hindus were predominantly represented in our sample though the local population has Muslims and Christians. Age, gender, and marital status were not associated with high suicidal intent. High suicidal intent is associated significantly with the presence of psychiatric diagnosis and associated with history of previous attempts and family history of suicidal attempts very significantly. Identification of

this subgroup will help in focusing on this group and formulating suitable responses.

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Conflicts of interest

There are no conflicts of interest.

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