

Socio-Demographic Profile of Suicide Attempters in a Tertiary Hospital of South India

Pavithra P. Rao¹, Preethi Rebello², Denzil Pinto³

¹Assistant Professor, ²DPM. Senior Resident, ³Consultant Psychiatrist,
Department of Psychiatry. Father Muller Medical College. Mangalore. Karnataka. India. 575002.

Corresponding Author: Preethi Rebello

ABSTRACT

Background: Suicide is a tragic and serious preventable public health problem all over the world. It is one of the three leading causes of death globally. Usually suicide has no single cause. It is the endpoint of an individual process, in which several cultural, social, situational, psychological, and biological factors interact

Aims: To identify the socio-demographic details of patients admitted with history of alleged suicide attempt.

Method/ Materials: 50 in-patients with alleged history of suicide attempt were evaluated. Their socio-demographic details were obtained and their socio economic status as assessed using Socio Economic Status Schedule. Results obtained were analyzed with IBM SPSS statistics 21.

Results: Majority of the patients belonged to 18-30 years age group, were Hindus with primary education, married, employed from semi-urban area and nuclear family. The average family income of most was more than Rs 3000 and belonged to category III of the Socio Economic Status Schedule with the score of 21-35.

Conclusion: Socio-demographic variables in those with attempted suicide may be considered as risk or protective factor. Proper assess

Key words: Suicide attempt, Deliberate self harm, socio-demographic

situational, psychological, and biological factors. Suicide is usually preceded by years of suicidal behavior or feelings, and plans and warnings. In about half of all suicides a previous attempt is found in the person's history. Various risk or protective factors underlie suicidal behavior, and the changing balance of these helps to explain the fluctuation of suicide risk over the course of time.

An appearance of suicidality means either an intensified effect of risk factors or a weakened effect of protective factors. A precipitating factor may well be decisive in explaining the precise timing of suicide in the long course of a person's suicide process. Often, however, it also allows a simple and rational explanation in the face of the complexity of suicide.

The investigator has come across only a few reported studies evaluating the relation of suicide attempters to socio-demographic variables in patients in South India. The aim of this study is To study the relation of suicide attempts to socio-demographic variables like age, sex, marital status, domicile, economic status, education, religion, occupation, and clinical variables like co-morbidities (diabetes mellitus, hypertension, carcinoma, physical disability, chronic painful conditions and other medical conditions.)

INTRODUCTION

Suicide is a mode of death usually consequent to a complex and multifaceted behavior pattern. It is typically seen as the fatal outcome of a long-term process shaped by a number of interacting cultural, social,

MATERIALS AND METHODS

The clinical study was conducted in Father Muller Medical College, Kankanady, Mangalore, which is a multi speciality hospital medical college and hospital, with

catchment area extending from South Canara to the northern districts of Kerala. All patients attending the inpatient facilities of the department of medicine and psychiatry with an alleged history of suicide attempt constituted the population for the study. The study was conducted from the 1st of September 2010 to the 31st of August 2012. The sample for the study consisted of fifty consecutive patients with an alleged history of suicide attempt, between the age group of 18 to 64 year. Patients who were unstable, unco-operative, unresponsive or on ventilator and the patients in whom the self-harm was found to be accidental were excluded from the study. This study was approved by Father Muller Institutional Ethics Committee. The design and nature of the clinical study was explained to the patients and to significant relatives of patients and a written informed consent was obtained.

All the patients were subjected to a thorough clinical examination which included physical and mental status examination. All the relevant socio-

demographic data, clinical data and the information regarding the suicide attempt was gathered and recorded using a specially designed proforma prepared for the clinical study. The socio-economic status of the patients was assessed using the Socio-economic Status Schedule (SESS, Sodhi and Sharma, 1986). The results obtained were analyzed with IBM SPSS statistics 21 using descriptive statistics.

RESULT

Socio-demographic variables

As shown in table 1, majority of the patients belonged to 18-30 years age group (70%), belonged to Hindu religion (66%), had completed primary education (98%), were married (54%), were employed (68%), residing in semiurban area (72%) and from a nuclear family (76%) with the average family income of more than Rs 3000 (62%). The patients were found to be of category III of the Socio Economic Status Schedule with the score of 21-35 (88%). The number of males and females was equal in this study.

TABLE 1: SOCIO- DEMOGRAPHIC FACTORS AND MEDICAL COMORBIDITY

| Socio-demographic variables | | Frequency | Percentage (%) |
|-----------------------------|-------------------|-----------|----------------|
| Age | 18-30 yrs | 35 | 70 |
| | 31-40 yrs | 7 | 14 |
| | 41-50 yrs | 4 | 8 |
| | 51-64 yrs | 4 | 8 |
| Gender | Male | 25 | 50 |
| | Female | 25 | 50 |
| Religion | Hindu | 33 | 66 |
| | Muslim | 7 | 14 |
| | Christian | 10 | 20 |
| Education | Degree | 8 | 16 |
| | Intermediate | 11 | 22 |
| | High school | 6 | 12 |
| | Middle school | 10 | 20 |
| | Primary | 14 | 28 |
| | Illiterates | 1 | 2 |
| Marital status | Single | 21 | 42 |
| | Married | 27 | 54 |
| | Widow/ widower | 2 | 2 |
| Occupation | Semi Professional | 3 | 6 |
| | Clerical | 2 | 4 |
| | Skilled worker | 6 | 12 |
| | Semi skilled | 15 | 30 |
| | Unskilled | 8 | 16 |
| | Unemployed | 16 | 32 |
| Location of residence | Urban | 5 | 10 |
| | Semi Urban | 36 | 72 |
| | Rural | 9 | 18 |
| Type of Family | Nuclear | 38 | 76 |
| | Joint | 11 | 22 |
| | Extended | 1 | 2 |

| | | | |
|------------------------|-------------------|----|----|
| Avg Monthly income | >3000 | 31 | 62 |
| | Rs. 2001-3000 | 14 | 28 |
| | Rs. 1001-2000 | 5 | 10 |
| Socio- economic status | SESS category II | 1 | 2 |
| | SESS category III | 44 | 88 |
| | SESS category IV | 5 | 10 |

DISCUSSION

The present investigation is carried out on a convenient sample of fifty patients with alleged history of attempted suicide admitted to departments of medicine and psychiatry of Father Muller Medical College Hospital, Kankanady Mangalore. This institute is a multispeciality, general private sector, teaching hospital, catering to the needs of South Kanada, Udupi and Northern districts of Kerala. By and large patients coming to this hospital belong to middle and lower socio-economic class. The hospital has six general medical units with bed strength of 360 in the medicine department and three psychiatry units in family and general psychiatry wards, with bed strength of 94. The present study is conducted from 1st September 2010 and data collection is completed by 31st August 2012.

In the present study, majority of the subjects (70%) are in the age group of 18-34 years and the age group of 51-60 have the least number of subjects. Similar findings have been reported by both Indian [1-9] and Western studies [10-12] showing suicide attempts more common in the age group of 18-34. One study finds attempted suicide rate to be more common in subjects above 50 years. [13] This indicates the growing trend of increased attempt among young adults, which may be due to sudden increase in responsibilities, job stress, marriage and problems with adjustment. This also points to poor coping skills in this age group which may improve as age progresses. It is also the usual age of onset for substance use and psychiatric disorders, which have a higher risk of suicide rates. This indicates the need for prompt recognition of suicidal ideation and treatment in this age group. The present study has equal number of male and female attempters. Some studies finds higher rates of attempt in females [7,8, 10-12,14-21] while in

others the rate is higher in males. [1-6,9,22-24]

In general it is considered that, females are two to three times more likely to think about suicide and almost twice as likely to attempt but males are four times as likely to die by suicide. [25]

Married subjects are found to have higher rates of attempt (54%) compared to subjects who are single (42%). This finding is in agreement with most Indian [1,5,7,8,15,17,18,22] and a western [12] study. But, other studies, both Indian [2,3,6,24] and western [4,11,16, 25] study finds marriage to be a protective factor. Most of the attempts in married subjects are in the age group of 18-34 (50%), which may indicate the increased stress and responsibility following marriage seen in these subjects. Hindus are the most predominant group (66%) in the current study and it was in keeping with most Indian studies. [1-3,15,22] This could be because India is a predominantly Hindu country. It may also be due to the strong religious teachings and condemn against suicide in Christianity and Islam religion. 98% of individuals have completed minimum of primary education but only 38% have studied beyond matriculation. Some prior studies also finds higher rates of suicide attempts in educated patients (mostly upto intermediate) [1,3,5-7,15,22] while others finds increased risk in illiterates. [2,8,18] Higher levels among people with higher education may be due to better employment status leading to better financial status.

Most of the individuals who attempted suicide are employed (68%), with almost half of them being semiskilled workers comprising of farmers, fishermen, hunters and loggers (30%). Most of the reviews find rates to be higher in employed [2,5-7,12,13,17] subjects compared to unemployed [4,8,26] which supports the present study. According to Indian census

2007, 66% of population in Karnataka consists of rural area. Also, majority of the subjects are from semi-urban and rural areas. In India the most common occupation seen in towns and villages is farming, fishing also is very common in Mangalore, as it is a coastal area which explains the above finding. Majority of the subjects in the present study are from families with an average monthly income of more than 3000 (62%) which is not consistent with the past results, which shows the average monthly income of less than 3000 to be a higher risk factor for suicide attempt. [2,7] This difference may be because of the increasing number of working members in the families. Semi-urban group forms the largest domicile group in the present study (76%). This is a new finding, as all the prior studies finds increased rates in either rural [4,5,7,15,26] or urban [2,3,6,22] population. Many patients from semi-urban and rural areas attend hospitals in Mangalore, as it is a city. Semi-urban population around Mangalore is exposed more to the rapid modernization compared to that of the rural population, due to its closer proximity to the city. This rapid increasing in stress may explain the result.

As in most prior studies, in the present study finds higher rates (76%) of suicide attempt, in subjects from nuclear family. [3,5,6,8,22,26] In the rapid urbanizing India, stress and crisis are more frequent, especially regarding financial status. Joint families act as a buffer and reduce the stress to some amount. The individual also feels a sense of support and security, and gains the confidence to cope with the responsibilities, as it is shared among all the family members. Majority of the subjects (88%) belong to Socio-economic Status Schedule category III. None belong to either Category I or V.

Strengths and Limitations

The present investigation is carried out in a private sector general hospital of a medical college in Mangalore in a limited period of time during 2010 - 2012. It has several limitations and certain relative

merits. Some of the limitations are due to natural constraints of an investigation which is a thesis work undertaken by a single investigator in a stipulated period of time. Some others could be attributed to the innate research problems in the area of gathering details regarding socio-demographic details.

The population of this study is a selected one, attending a private teaching medical charitable institution in Mangalore which does not have the characteristics of the general population. Hence the subjects are not representative of the general population. Recruitment of convenient sample of subjects may lead to sample bias. The inclusion and exclusion criteria are specific. Hence the sample consists of homogenous group of suicide attempters. The size of the study sample is sufficient to assess socio-demographic profile of suicide attempters, but a larger sample size will be required to enhance the reliability and validity of the results. The present study is a descriptive, cross sectional clinical study and does not use any controls. The tool used has adequate established reliability and validity and is rater friendly, easy to administer, less time consuming thereby causing no discomfort to the patients. The assessment is not blind due to constraints of the study, therefore rater bias is possible. The investigator fails to look into the relevance of the important biological risk factors of suicide.

CONCLUSION

Present study concludes that risk of suicide attempt is higher in young married, educated adults from a nuclear, middle class, semi urban family.

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