

## Study of Associated Psychosocial Factors in Attempted Suicide Patients

Dr. Tara R<sup>1</sup>, Dr. Tejkumar C<sup>2</sup>, Dr. Srilakshmi Kollu<sup>3\*</sup>

<sup>1</sup>Assistant professor, Department of Psychiatry, Siddhartha Medical College, Vijayawada, Andhra Pradesh, India

<sup>2</sup>Assistant professor, Department of Community Medicine, Siddhartha Medical College, Vijayawada, Andhra Pradesh, India

<sup>3</sup>Assistant professor, Department of psychiatry, Guntur Medical College, Guntur, Andhra Pradesh, India

### Original Research Article

\*Corresponding author

*Dr. Srilakshmi Kollu*

#### Article History

*Received: 01.09.2018*

*Accepted: 13.09.2018*

*Published: 30.10.2018*

#### DOI:

10.36347/sjams.2018.v06i10.008



**Abstract:** India accounts for about one-tenth of suicides in the world statistically, with its youth at the highest risk. To study the demographic profile and other related details of attempted suicides, the present study carried out in the department of psychiatry of Govt general hospital, Vijayawada during the period December, 2017 to July, 2018. Total 60 subject included in the study. Suicides are more common in young and below 35 years of age. Women (73%) outnumbered Men in the study. More number (53%) of the subjects had education below or up to 10th std.. Most of the suicide attempters were married (75%), (55%) constituted unskilled labour by occupation and (26%) belong to low-middle socioeconomic status. The most common method of self-harm was consumption of organ phosphorous compounds (41patients) followed by drug over dose (10 patients).73.3% of the suicide attempters suffered from stressful life events in the past only 26.7% suffering from stress in life presently.

**Keywords:** Suicide, organ phosphorus compounds, psychosocial factors, stressful life events.

### INTRODUCTION

Suicide ranks among the most tragic events in human life, causing a great deal of serious psychological distress among the relatives of the victim at the family level as well as great economic problems for the whole society. In the last half a century, suicide rates have increased by about 60% [1]. Nearly one million people commit suicide worldwide every year. Suicide is among the ten leading causes of death for all ages in most of the countries for which information is available throughout the world.

The World Health Organization, having declared the suicide as one of the most important areas of public health, has been facilitating comprehensive strategies for suicide prevention [2].

The modern era of the study of suicide began around the turn of the 20th century. Durkheim examined suicide in relation to social factors, and concluded that the suicide in a given population varies according to the degree with which the individuals are integrated and regulated by society [3]. He proposed four types of suicide, based on the degrees of imbalance of two social forces: social integration and moral regulation [4].

India being an agrarian country there has been serious concern about suicides in farmers [5]. While the number of farm suicides kept increasing, the number of farmers has fallen since 2001, with countless thousands abandoning agriculture in distress [6]. Of the 15000 Indian farmers who committed suicide between 1997 and 2005 64% were from the states of Maharashtra,

Andhra Pradesh, Karnataka, Madhya Pradesh and these accounted for 43.9% of all suicides [5].

Psychosocial factors in suicide attempters have been the interest of many researchers. However, most of the studies have focused attention on prevalence of psychosocial disorders in cases of attempted suicide.

There is paucity of case-control studies with regarding to psychosocial cases in suicide attempters, especially in Indian context [7]. Suicide is among the ten leading causes of death for all ages in most of the countries for which information is available throughout the world [2]. In the year 2000, a suicide was attempted every 3 seconds and completed every 40 seconds, resulting in about a million deaths worldwide [8]. Suicide is an important cause of premature mortality, accounting for an estimated 877000 deaths every year [9]. It is estimated that almost one million (1000000) people die by suicide worldwide each year [10].

Very few Indian studies have addressed the issue of psychosocial issues. Risk for suicidal behaviour differs markedly among individuals; factors such as socio-demographic differences, personality traits, and stress full life events all contribute to individual differences in risk. The question of whether various risk factors contribute independently to suicidal behaviour or whether some risk factors are confounded with more basic individual differences has not been thoroughly investigated. Therefore, additional information about the characteristics of those at risk and plausible means of prevention are needed [11].

Hence a study that describes in detail about the socio demographic variables, psychosocial factors and stressful life events among suicide attempters was planned.

#### AIM AND OBJECTIVES

- To study the demographic profile and other related details of attempted suicides.
- To assess the presence of associated psychosocial factors.
- To assess the increasing stressful life events preceding the event, that could be contributive to the event.

#### MATERIALS AND METHODOLOGY

##### Type of study

The current study is a descriptive, inferential and hospital based study.

##### Source of data

Sample for the current study is patients who had attempted suicide and were referred to the Psychiatric services at the Govt general hospital, Vijayawada during the period December, 2017 to July, 2018.

##### Method of collection of data

##### Sampling method

From the above sources, all consecutive cases attending out-patient Department of Psychiatry, who fulfilled the inclusion criteria and did not get excluded, were selected for the current study.

##### Inclusion criteria

- Age between 15-65 yrs.
- Both sexes.
- Patients having cognitive faculty.

##### Exclusion criteria

- Mental retardation.
- Patients without reliable informants.
- Patients not cooperative and not given consent.
- Patients suffering from cognitive deficit.

##### Tools used for assessment

- An Intake Pro forma to record socio-demographic features and details of suicide attempts.
- Socio- Economic scale by O.P. Aggarwal.
- Physical symptoms scale by Kapur.
- Family and Social Integration Shedule-Venkoba Rao
- The presumptive stressful life event scale.

#### RESULTS

In the present study 44(73.3%) subjects belongs to 15-35 years, 13(21.7%), 3(5%) subjects belongs to 36-55 years and above 56 years respectively. out of total 60 subjects. In this males were 24(40%) and females were 36(60%).

45(75%) of the subjects are married, while unmarried and divorced constituted 11(18.3%) and 4(6.7%) respectively. Majority of the subjects belong to Hindu religion. 47(78.3%), 10(16.7%), 3(5%) belongs to Hindu, Christian and Muslim religion respectively. 32(53.3 %) of the subjects were educated and 28(46.7%) were uneducated. 33(55%) of the subjects were unskilled, 27(45%) were skilled.

16(26.7%) of the subjects belong to lower middle class, 15(25%) were very poor/below poverty line, 10(16.7%) were poor, 8(13.3) were upper class, 6(10%) upper middle class and 5(8.3%) belongs to high socio economic status. 48(80%) of the subjects belong to nuclear family and 12(20%) belongs to joint family.

41(68%) of the subjects chose organophosphorous compounds as method of self-poisoning, 10(17%) attempted with drug overdose and 9(15%) attempted suicide with burs. Nearly 42(70%) of the attempts were impulsive and 18(30%) suicides were planned. 13(21.7%) of the subjects had left suicide note and in remaining cases no suicide note were found. 26(46.7%) of the attempts were made in night time, 16(26.7%) were in the evening, 10(16.7%) were in the morning and 6(10%) were in the afternoon.

35(58.3%) of the attempters were spotted by attendants after the event, 15(25%) by self-communication and 10(16.7%) were brought by police personnel. 50(83.3%) of the subjects had no consultation prior to the attempts, 6(10%) and 4(6.7%) had consultation with physician and psychiatrist respectively.

48(80%) of the subjects were guilty after attempt, 9(15%) were not guilty and 3(5%) were indifferent after attempt. 53(88.30%) of the subjects did not suffer from any physical illness prior to the attempt, 3(5%) were with tuberculosis, 2(3.3%) with renal calculi, 1(1.7%) with hypertension and acid peptic disease each.

Majority of female suicide attempters 75% were having stressful life events in a year. 29.2% of male suicide attempters were having life time events. PSLE has no statistically significant association with sex ( $p=0.72$ )  $p<0.05$  is considered significant. 100% of divorced, 81.8% unmarried suicide attempters have number of life events in past one year. PSLE is not statistically significant with marital status ( $p=0.314$ )  $p<0.05$  is considered significant. 84.4% of educated and 60.7% of uneducated suicide attempters were identified with stress in recent life events. Stress has high statistical significance with education ( $p=0.039$ )  $p<0.05$  is considered significant

**DISCUSSION**

This study has provided information about the relationship of attempted suicide to a number of factors such as age, sex, marital status, employment status, educational background, method and circumstances led to attempt, motivation, and psychosocial factors and stress associated with suicide attempters.

**SOCIODEMOGRAPHIC FEATURES**

**Age**

Peak occurrence of suicides was in the age groups of 15-35 the youngest and oldest being 16 and

66 years respectively. This finding coincides with the observations made by Srivatsava *et al.* [12] and Haw *et al.* [13]. Rao [14] noted that majority of individuals were in age range between 15- 25 years in both sexes.

**Gender**

Female preponderance of 60% in the sample is in conformation with other studies on attempted suicide observed by Srivatsava *et al.* [12] and Oquendo [15]. Contrary to the above male preponderance was seen in the studies of Rao [14].

**Religion**

It is very difficult to make any observations from the religious prospective as 85% Indian population are Hindus, which coincides with studies observed by Kumar *et al.* [16] and Joseph Raj *et al.* [17].

**Education**

Majority of the suicide attempters in the present study had only primary education. This is contrary to the study observed by Chandrasekaran *et al.* [7]. Different domiciliary background could be the reason for this observation

Education	Present study	Chandrasekhar <i>et al.</i> [7]
Uneducated	46.7%	24.9%
Primary education	30%	6.5%
High school	18%	46.6%

**Socioeconomic status**

The observation made in the present study that maximum number of suicide attempters belong to low

socioeconomic status, which is in accordance with the findings observed by Chandrasekaran *et al.*[7] Haw *et al.* [13].

SES	Present study	Chandrasekaran <i>et al.</i> [7]
Low SES	41%	82.7%

**Mode of attempt**

In present study organophosphorous poisoning was predominantly used mode of attempt for attempting

suicide, reason may be at the easy availability to these compounds. This coincides with the observations made in studies like Latha *et al.* [18]. Harris *et al.* [19].

Mode of attempt	Present study	Latha <i>et al.</i> [18]
Organophosphorous	67%	67%
Drug overdose	16.7%	29%
Others	16.3%	3%

**Suicidal ideation**

In present study only 26.7% of subjects had prior suicidal ideation which coincides with statistical figure 23.25% of study conducted by Ponnudurai *et al.* [20].

coincides with studies from Srivatsava *et al.* [12], Chowdhary *et al.* [21].

**CONCLUSION**

In conclusion, this study found that majority of suicide attempters had psychosocial factors and stressful life events. Hence it is useful to screen for psychosocial factors and stressful life events in suicide attempters as this has treatment implications like counselling psychotherapy, pharmacotherapy and treatment outcomes.

**Stressful life events**

In the present study 73.3% of the subjects suffered from stressful events in past 1 year and only 26.7% suffered from stress in lifetime events, which

Present study also infers that almost all subjects suffered from psycho social stress in various aspects like inter personal, financial, marital and family matter which can be solved by proper planning, life style changes and psychotherapy.

#### REFERENCES

1. Li J, Lambert CE, Lambert VA. Predictors of family caregivers' burden and quality of life when providing care for a family member with schizophrenia in the People's Republic of China. *Nursing & health sciences*. 2007 Sep;9(3):192-8.
2. World Health Organization. Suicide report. Geneva: World Health Organization. 1993.
3. Durkheim E. Suicide: a study of sociology. New York: Free Press. 1951.
4. Dunman LJ. The Emile Durkheim archive. 2008(1). Available from: URL:<http://durkheim.itgo.com/suicide.html>.
5. Sainath P. Farm suicides rising, most intense in 4 states. *The Hindu*. 2007 Nov 12;12.
6. Sainath P. Farm suicides worse after 2001—study. *The Hindu*. 2007 Nov;13.
7. Chandrasekaran R, Gnanaseelan J, Sahai A, Swaminathan RP, Perme B. Psychiatric and personality disorders in survivors following their first suicide attempt. *Indian J Psychiatry* 2003;45(11):45-8.
8. World Health Organization. World Health Organization Suicide Prevention.
9. World Health Organization. Diet, nutrition, and the prevention of chronic diseases: report of a joint WHO/FAO expert consultation. World Health Organization; 2003 Apr 22.
10. World Health Organization, Public Health Agency of Canada, Canada. Public Health Agency of Canada. Preventing chronic diseases: a vital investment. World Health Organization; 2005 Sep 28.
11. Grucza RA, Przybeck TR, Cloninger CR. Personality as a mediator of demographic risk factors for suicide attempts in a community sample. *Comprehensive Psychiatry* 2005;46:214-22.
12. Srivastava MK, Sahoo RN, Ghotekar LH, Dutta S, Danabalan M, Dutta TK, Das AK. Risk factors associated with attempted suicide: A case control study. *Indian journal of psychiatry*. 2004 Jan;46(1):33.
13. Haw C, Hawton K, Houston K, Townsend E. Psychiatric and personality disorders in deliberate self-harm patients. *Br J Psychiatry*. 2001;178:48-54.
14. Rao VA. Attempted suicide: an analysis of one hundred and fourteen medical admissions into the Erskine hospital, Madurai. *Indian Psychiatry*. 1965;VII(4):253-64.
15. Oquendo MA, Bongiovi-Garcia ME, Galfalvy H, Goldberg PH, Grunebaum MF, Burke AK et al. Sex differences in clinical predictors of suicidal acts after major depression: a prospective study. *Am J Psychiatry* 2007;164:134-41.
16. Kumar PNS, Kuruvilla K, Dutta S, John G. Jayaseelan. Psychological aspects of attempted suicide: study from a medical intensive care unit. *Indian J Psychological Medicine*. 1995;18(2):32-42.
17. Joseph Raj MA, Kumaraiah V, Bhide AV. Social and clinical factors related to deliberate self-harm. *NIMHANS J*. 2000;18(1&2):3-18.
18. Latha KS, Bhat SM, D'Souza P. Suicide attempters in a general hospital unit in India: their socio-demographic and clinical profile – emphasis on cross-cultural aspects. *Acta Psychiatr Scand*. 1996;94:26-30.
19. Harriss L, Hawton K, Zahl D. Value of measuring suicidal intent in the assessment of people attending hospital following self-poisoning or self-injury. *Br J Psychiatry*. 2005;186:60-6.
20. Ponnudurai R, Jeyakar J, Saraswathy M. Attempted suicides in Madras. *Indian J Psychiatry*. 1986;28(1):59-62.
21. Chowdhary AN, Banerjee S, Brahma A, Biswas MK. Pesticide poisoning in nonfatal, deliberate self-harm: a public health issue. *Indian J Psychiatry*. 2007;49(2):117-20.