

# Psycho-social assessment of patients in ICU with deliberate self harm: An observational study

P S Rathi

<sup>1</sup>Assistant Professor, Department of Psychiatry, Sri Aurobindo Institute of Medical Sciences, Indore, 452010, Madhya Pradesh, INDIA.

Email: [drpawanrathi@yahoo.co.in](mailto:drpawanrathi@yahoo.co.in)

## Abstract

**Objectives:** To assess the socio demographic profile, prevalence of psychiatric disorders, methods employed and significant life events among the patients of deliberate self harm (DSH) admitted in the intensive care unit (ICU) of a tertiary care hospital. **Methods:** After taking approval from the institutional ethics committee and obtaining a written informed consent, 30 patients of DSH, admitted in the ICU were recruited for the study. A specially designed semi structured pro-forma was used to collect the socio-demographic details, DSM- IV-TR criteria was used to identify the psychiatric disorders, The Explanatory Model Interview Catalogue (EMIC) was used to identify the distress and Presumptive Life Stress Event Scale was used to identify any significant life events among the recruited subjects of DSH. **Results:** The mean age of the study group (n=30) was 29.3 yrs with the females constituting the majority (53.3%). Half of the subjects were married. Psychiatric disorders were identified among 59.3% of the subjects with depression constituting the major diagnosis. Depression was followed by alcohol dependence and adjustment disorder contributing 10% each. Most common method employed for DSH was poisoning (90%) followed by hanging (6.6%) and slitting of wrist (3.3%). 50% of the subjects, had significant contributory life events within last 6 months with marital conflict being commonest (13%). **Conclusions:** Psychiatric disorders are very commonly present among the patients of DSH. Marriage and gender do not play a significant role in DSH. The life events leading to the DSH were influenced by the traditional gender roles. Poisoning is the commonest method of DSH.

**Keywords:** deliberate self harm, depression, DSH, suicide.

## \* Address for Correspondence:

Dr. P S Rathi, Assistant Professor, Department of Psychiatry, Sri Aurobindo Institute of Medical Sciences, Indore, 452010, Madhya Pradesh, INDIA.

Email: [drpawanrathi@yahoo.co.in](mailto:drpawanrathi@yahoo.co.in)

Received Date: 12/10/2015 Revised Date: 20/11/2015 Accepted Date: 26/12/2015

## Access this article online

Quick Response Code:



Website:

[www.medpulse.in](http://www.medpulse.in)

DOI: 04 January  
2016

## INTRODUCTION

Suicide or deliberate self-harm is public health problem and is a common problem in the psychiatric practice. A distressing feature is the high frequency of occurrence of suicide. According to the WHO suicide is defined as the death arising from an act inflicted upon one-self with the intent to kill. Attempted suicide is defined as potentially

self-injurious action with a non-fatal outcome for which there is evidence either explicit or implicit that the individual intended to kill himself or herself.<sup>1</sup> Suicide is a result of complex interaction between the biological, psychological, social and impulsive factors. WHO reports say that most suicides in the world occur in the South-East Asia Region with India accounting for the highest estimated number of suicides overall in 2012. According to the report, 258,075 people committed suicide in India in 2012, with 99,977 women and 158,098 men taking their own lives. India's suicide rate was 21.1 per 100,000 people, according to the report. This report, the first WHO publication of its kind, presents a comprehensive overview of suicide, suicide attempts and successful suicide prevention efforts worldwide.<sup>2</sup> Suicide is accounted for 1.4% of all deaths worldwide, making it the 15th leading cause of death in 2012. Suicide rates are on the rise globally. The rates in 1998 were 1.8% and are expected to rise up to 2.4% in the year 2020.<sup>3,4</sup> The

WHO estimates that every year more than 8,000,00 people take their own lives and there are many more who attempt suicide around the world. This corresponds to one death every 40 seconds. However, WHO figures do not include the suicidal attempts which are about 20 times more common than the completed suicide and is estimated to be around 10 – 20 million per year.<sup>2</sup> In India suicide attempts are more common in females of whom the majorities were Hindus, married, and the suicide rate is three times higher in rural areas than the overall national rate. Majority were staying in a nuclear family and they were unemployed.<sup>1</sup> The social circumstances are also important including those who are isolated or living in areas of socioeconomic deprivation have increased rates of suicide and suicide attempters.<sup>[5]</sup> Frequently, the type of events experienced by younger people is related to relationship difficulties, but in older people it is more likely to be health or bereavement related.<sup>6</sup> Vulnerability factors such as early loss or separation from one or both parents, childhood abuse, unemployment, and the absence of living in a family unit are contributory.<sup>7</sup> Many patients consider that their problems are insolvable and although self-harm is an immediate but not a long-term response, they often cannot think of any other way out of their situation at that time.<sup>8</sup>

This focus is also highlighted in the September 10, 2012 World Suicide Prevention Day theme “Suicide Prevention across the Globe: Strengthening Protective Factors and Instilling Hope”.

### AIM AND OBJECTIVES

- Socio-demographic profile of patient admitted to ICU for DSH.
- Prevalence of psychiatric disorder in these patients.
- Significant life event in association with attempt.
- Perception of expected outcome of attempt.
- Different methods used in DSH

### MATERIALS AND METHODS

This is an observational study, undertaken to study the psycho-social assessment of patients with deliberate self-harm among the patients admitted in intensive care unit of SAIMS medical college. A total of 30 cases of patients who attempted DSH and were admitted in the ICU SAIMS medical college during study were included in this study. The clearance from institutional ethical committee was obtained before starting the study. An informed and bilingual consent was obtained from each patient. Data was analyzed using descriptive analytical methods. All the subjects underwent thorough physical examination. After getting voluntary informed consent the data was collected in specially designed semi-

structured Performa. The data pertaining to socio-demographic characteristics, clinical features and information regarding the attempts was gathered and recorded. The diagnosis was based on diagnostic criteria of DSM-IV-TR. History of the patient was recorded in a semi-structured history form. Focus was on psycho-social aspects of attempted suicide. Detailed description of attempts and the method used was also recorded. The diagnosis was reviewed as per DSM-IV-TR checklist. The review of diagnosis involved interview from patient and their care givers and clinical observations of signs and symptoms. Patients were rated as per Explanatory Model Interview Catalogue (EMIC) guidelines related to suicide attempt by Parkar and Weiss. For life events, Presumptive Stressful Life Events Scale (PSLE), Singh *et al* scale was used. The data thus obtained was compiled and analyzed.

### RESULTS

There was female preponderance (53.3%) in the study, whereas male were 46.7 %. The mean age for males was 30.9 years but was lower for females - 27.9 years. The most common method of DSH was self poisoning (90%), followed by hanging (6.6%) and slitting of wrist (3.3%). Poisoning was the most common method used by both genders. In 50% of cases, within the last 6 months contributory life events had occurred. Marital conflict (13%) ranked maximum points among the contributory life events followed by financial problem and family conflict 12% each, unemployment, job and finance 9%, conflicts in love and academic failure 9% each, whereas 36% of the patients did not reveal any factors. Life events related traditional gender roles were seen to be more significantly affecting suicidal attempt. Of all patients 39.3% were found to have depression, alcohol dependence and adjustment disorder accounted for 10% each, while 40% didn't had any psychiatric illness. Though support was received, it was perceived to be inadequate that prior attempt of DSH were seen exclusively in males and majority of them had alcohol dependence as co morbidity. Prior help seeking from close family members was significant in females, while those from friends' were more common in males.

### DISCUSSION

Suicide or deliberate self-harm is a common public health problem in the psychiatric practice. Suicides rates are rising every year. In the following section we will be elaborating our findings in context of available literature. To make discussion more clear, we have arranged discussion in different headings as follows

#### Socio-Demographic Characteristics

In this study female preponderance (53.3%) was seen, male were 46.7 %. 50% patients were married while 46.7% patients were unmarried and 3.3% divorced. In India a study by Rajiv Radhakrishnan and Chittaranjan Andrade says that, marital status is not necessarily protective and the female: male suicide ratio was found to be higher among married partners.<sup>9</sup> According to The NCRB data, 70.3% of the suicide victims were married while 22.6% were never married/spinster. Divorcees and separated spouses have accounted for about 3.5% of the total suicide victims. The proportion of widowed and widower victims was around 3.7%. Marriage is not a strong protective factor for suicide attempts in developing countries. In 2009, 70.4% of all suicide victims in India were married and 21.9% were unmarried.<sup>11</sup> Majority of the patients belonged to Hindu religion (60%), followed by Buddhist (13%), Muslim (10%), Sikh (8%), Christian (7%) and Parsians (2%). According to Dervic K *et al.* in a study after other factors were controlled, it was found that greater moral objections to suicide and lower aggression level in religiously affiliated subjects may function as protective factors against suicide attempts.<sup>10</sup> Occupation of 30% patients was house maker and 30% were student, while 27 % were businessman and rest 13% were unemployed. Recent data of NCRB of India says that Housewives accounted for 53.8% of the total female victims and nearly 18.2% of total victims committing suicides.<sup>11</sup> Majority of patients were primary educated (60%), 37% were graduates and illiterate were 3%. NCRB data says that the maximum numbers of suicide victims were educated up to primary level (23.0%). Middle school educated and Illiterate persons accounted for 23.0% and 19.7% respectively. About 3.4% suicide victims were graduated and only 6% victims were post-graduates.<sup>11</sup>

#### Method for DSH

Most common method of DSH was self poisoning (90%), followed by hanging (6.6%) and slitting of wrist (3.3%). The method of committing suicide depends on availability of easily available option like poison or rope for hanging. NCRB data says 'hanging' (33.2%), 'consuming poison' (32.3%), 'self -immolation' (8.8%) and 'drowning' (5.9%) were the prominent means of committing suicides.<sup>11</sup>

#### Psychiatric Diagnosis

59.33% patients had psychiatric diagnosis. No psychiatric diagnosis was seen in 40 % of the total subjects. Depression was the major diagnosis seen in 39.3 % followed by alcohol dependence, adjustment disorder contributing 10% each. As per other studies the rates of psychiatric diagnosis was as high as 59.7% and 93% among suicide attempters.<sup>9</sup> During the year 2012 in India 6.3% of suicides were committed due to psychiatric

illnesses as against 6.4% of such suicides at national level as per causal analysis of suicides in cities. Similarly, the share of suicides due to 'unemployment', 'love affairs', 'drug abuse / addiction', 'failure in examination' and 'family problem' were comparatively higher than their respective national averages.<sup>11</sup>

#### Predisposing factors

In this study we observe that Marital conflict (13%) ranged highest, followed by financial problem and family conflict (12% each), unemployment, job and finance (9%), conflicts in love and academic failure (9% each). 36% of the patients did not reveal any factors. In this study we found that with 50% of the patients, some contributory life events had occurred within the last 6 months. Other studies also support occurrence of excess of life events, especially in the month before the self-harm attempt, the factors responsible for suicidal attempts are multiple, and occur either as single or in combination. 'Family problems' and 'illness' accounted for 23.8% and 22.3% of the various causes of suicides respectively. Divorce, dowry, love affairs, cancellation or the inability to get married, illegitimate pregnancy, extra-marital affairs, and such conflicts relating to the issue of marriage, play a significant role particularly in the suicide of women in India.<sup>12</sup>

#### CONCLUSIONS

Psychiatric disorders are very commonly present among the patients of deliberate self-harm. Depression is leading the list followed by substance abuse and adjustment problems. Poisoning is the commonest method of DSH. Significant life events in last 6 months can predispose self harm, marital conflict; financial crises, unemployment and job related stress can alarm DSH. Marriage and gender do not play a significant role in DSH. The life events leading to the deliberate self harm were influenced by the traditional gender roles.

#### CLINICAL IMPLICATIONS

In this study Psychiatric disorders are seen in 59.3% of deliberate self-harm (DSH) patients and therefore they need careful screening for psychiatric symptoms. 39.3 % of DSH patients have depression, therefore treatment with antidepressants or ECT may often be indicated for these patients which would be lifesaving. In this study 64% DSH patients have predisposing factors and may need social support after they are discharged from ICU by involving multiple agencies.

#### LIMITATIONS

However, this study is not without limitations. This was an observational study and the cases admitted in the ICU may not be representative of the actual sample. There

may have been a small bias towards patients with somewhat greater psychopathology being included in the study sample. Sample size is also not calculated in the study. Hence the study results cannot be generalized. Psychiatric disorder was assessed using a structured clinical diagnostic schedule which may have influenced the reporting of symptoms.

## REFERENCES

1. Ramdurg S, Goyal S, Goyal P, Sagar R, Sharan P, Socio-demographic profile, clinical factors and mode of attempt in suicide attempters in consultation liaison with psychiatry in a tertiary care centre, *Ind psychiatry J*: 2011; 20(1):11-6.
2. World Health Organization. Suicide prevention (SUPRE). [cited 2014 January 20<sup>th</sup>] Available from URL: [http://www.who.int/mental\\_health/prevention/suicide/suicideprevent/en/](http://www.who.int/mental_health/prevention/suicide/suicideprevent/en/)
3. Unni S, Human self destructive behavior, In: Vyas, Ahuja Eds, *Textbook of Post graduate psychiatry*, 2nd ed, Jaypee publishers, New Delhi, 1999, 112 – 120.
4. Kerkhof, A.J.F.M and Arensman. E. Attempted suicide and deliberate self harm, *Epidemiology and Risk Factors*. In: Gelder, M.G. Juan J Lopez-Lbor Jr., Andreasen N. C, editors: *New Oxford Text Book of Psychiatry*, Oxford University Press, 2000, 1st Edition, p1041.
5. Gunnell DJ, Peters TJ, Kammerling RM, Brooks J. Relation between parasuicide, suicide, psychiatric admissions, and socio-economic deprivation. *BMJ*. 1995; 311:226–30.
6. Dennis M, Wakefield P, Molloy C, Andrews H, Friedman T. Self-harm in depressed older people: A comparison of social factors, life events and symptoms. *Br J Psychiatry*. 2005; 186:538–9.
7. De Vanna M, Paterniti S, Milievich C, Rigamonti R, Sulich A, Faravelli C, *et al*. Recent life events and attempted suicide. *J Affect Disord*. 1990; 18:51–8.
8. Milnes D, Owens D, Blenkiron P. Problems reported by self-harm patients: Perception, hopelessness, and suicidal intent. *J Psychosom Res*. 2002;53:819–
9. Rajiv Radhakrishnan, Chittaranjan Andrade. Suicide: An Indian perspective. *Indian Journal of Psychiatry* 2012;54:304-19
10. Dervic K, Oquendo MA, Grunebaum MF, Ellis S, Burke AK, Mann JJ. Religious affiliation and suicide attempt. *Am J Psychiatry*. 2004 Dec; 161(12):2303-8.
11. National Crime Records Bureau, Ministry of Home Affairs (MHA), Government of India
12. Santosh Ramdurg, Shrigopal Goyal, Prashant Goyal, Rajesh Sagar, Pratap Sharan. Sociodemographic profile, clinical factors, and mode of attempt in suicide attempters in consultation liaison psychiatry in a tertiary care center. 2011 | 2012 Jul; 20 | Issue: 1 | : 11-16.

Source of Support: None Declared  
Conflict of Interest: None Declared