Intentional self-harm in individuals referred to consultation liaison psychiatry services in a tertiary care hospital

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Abstract:

BACKGROUND: Intentional self-harm (ISH) is one of the most important entities of consultation-liaison psychiatry. This study aimed to assess the clinical profile of individuals with intentional self-harm referred to consultation-liaison (CL) psychiatric services in a tertiary care hospital.

MATERIALS AND METHODS: The present study was a cross-sectional hospital-based study, in which purposive sampling was done for sample selection. A total of 60 subjects of ISH referred for evaluation in a tertiary care psychiatry hospital on specified days were recruited to the study after obtaining informed consent. Demographic and clinical details such as the nature of the self-harm attempt, method of attempt, number of attempts, the reason for the attempt, and regret/remorse about the attempt were documented using the semi-structured proforma.

RESULTS: A total of 60 subjects were included in the study. About 80% of them were below the age of 30 years. The majority (80%) were females, 65% were from a rural background, 56.7% were married. The most common method of ISH was self-poisoning. Interpersonal conflicts with family members (50%), followed by interpersonal conflicts with the spouse/partner (21.7%) were the commonest reason/precipitating factors that lead to intentional self-harm. Also, 45% of our study population did not have any diagnosable psychiatric illness at the time of assessment, and the most common psychiatric diagnosis was personality disorders (20%).

CONCLUSION: Intentional self-harm is common in young married females from rural backgrounds. Self-poisoning is the most common method of deliberate self-harm. More than half of the individuals were diagnosed with the psychiatric illness at presentation.

Keywords: Intentional self-harm, personality disorder, self-poisoning

Introduction

Intentional self-harm (ISH) is defined as “an act of intentional self-poisoning or injury, irrespective of apparent purposes of the act”[1] and is one of the top five causes of acute medical admissions for both men and women.[2] As in many countries, ISH in India is an unrecognized, hidden, and silent epidemic.[3] Although the literature is very scant from the Indian subcontinent, the available data suggest that the number is rising steadily and that the risk factors associated and methods employed for self-harm are strikingly different from those reported in Western data.[4]

Over 100,000 people die by suicide in India every year.[5] As per the National Crime Records Bureau (NCRB) data, the number of suicides in the country in the decade 1997–2007 has shown an increase of 28% (from 95,829 in 1997 to 122,637 in 2007). It also indicates an increase of 3.8% (113,914 to 11,812) from 2006 to 2016.

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to 2007.[6] Self-harm attempts range from 10 to 40 times more frequent than completed suicide.[7] It is estimated that there will be at least 5 million self-harm attempts each year and hence ISH will be a major public and mental health concern in India.[8] With this background, the aim of our study was to study the demographic and clinical profile of subjects with “intentional self-harm” referred to consultation-liaison psychiatric services for evaluation in a tertiary care hospital.

### Materials and Methods

#### Study design and settings
The present study was a hospital-based cross-sectional study.

#### Study participants and sampling
A total of 60 subjects were included in the study. A purposive sampling technique was used for selecting the sample. The study population consisted of all patients of intentional self-harm referred to consultation-liaison psychiatric services for evaluation on selected days of a week over a period of 6 months, from October 2020 to March 2021 who consented to the study.

#### Inclusion criteria
- Those who consent.

#### Exclusion criteria
- Those who do not consent
- Those not having a reliable informant

#### Data collection and technique
All study subjects were thoroughly evaluated by a senior resident psychiatrist on the basis of history and mental status examination, and the diagnosis was confirmed by a consultant psychiatrist as per the ICD-10 diagnostic criteria.[8] A semi-structured proforma was created to record demographic and clinical details. The data were entered into an Excel sheet and tabulated. The data were analyzed using Epi Info 7.0. Categorical variables are summarized as frequencies and percentages. Continuous variables are summarized as mean and standard deviations.

#### Ethical consideration
The study was approved by the institutional ethics committee.

### Results

#### Demographic profile
A total of 60 individuals were included in our study. The majority of our study population were females (80%), married (56.7%), and were in the age range of a group of 20 to 29 years (45%), followed by 10 to 19 years (35%) with a minimum age of 15 years. The mean age of the study population was 24.86 ± 6.76 years. The most common occupational group was homemakers (38.3%), followed by students (21.7%). About 46.7% of the patients of ISH were educated up to class 10th. The majority (65%) of them belonged to rural backgrounds [Table 1].

The most common reason/precipitating factor that led to ISH was interpersonal conflicts with family members (50%), followed by interpersonal conflicts with the spouse/partner (21.7%), broken relationships (18.3%), and exam-related stress (10%). Most (86.7%) individuals had a regret/remorse about the attempt and only 10% of patients had a previous history of ISH [Table 2].

When the study population was assessed for psychiatric illness, nearly half (45%) of them were having no psychiatric illness and the act was purely impulsive. The most common psychiatric illnesses among the individuals of ISH were personality disorder (20%), followed by mood disorder (13.3%), anxiety/stress-related

| Table 1: Demographic profile |
|-----------------------------|
| Variables                  | Number (%) |
| Age (y)                    |            |
| <19                         | 21 (35.0)  |
| 20-29                       | 27 (45.0)  |
| 30-39                       | 8 (13.3)   |
| ≥40                         | 4 (6.7)    |
| Gender                      |            |
| Male                        | 12 (20.0)  |
| Female                      | 48 (80.0)  |
| Residence                   |            |
| Rural                       | 39 (65.0)  |
| Urban                       | 21 (35.0)  |
| Marital status              |            |
| Married                     | 34 (56.7)  |
| Unmarried                   | 26 (43.3)  |
| Occupation                  |            |
| Student                     | 13 (21.7)  |
| Homemaker                   | 23 (38.3)  |
| Farmer                      | 8 (13.3)   |
| Semiskilled worker          | 10 (16.7)  |
| Employed                    | 6 (10.0)   |
| Education                   |            |
| Up to 10th class            | 28 (46.7)  |
| 10th class and above        | 32 (53.3)  |
disorder (10%), psychotic disorder (6.7%), and substance use disorder (5%) [Table 3].

Discussion

The majority (80%) of our study population was below the age of 30 years, 45% of them belonged to the age group of 20 to 29 years. The propensity of young adults for ISH is a constant finding across different cultures and clearly indicates the vulnerability of this age group. The social pressures such as study-related problems, domestic responsibilities, breaking up of emotional relations, and financial insecurity may be possible reasons leading to increased ISH in this age group. The psychosocial problems faced by this particular age group, which eventually lead to the attempts of ISH need to be addressed at the personal, family, and community levels.

There was a significant female preponderance (80%) in the present study, which may be due to increased family stress such as increased household work, altercations with family members, and taking up multiple roles by females, and this finding is in contrast with other Indian studies.[11,12] Marriage is an almost universal phenomenon in India and the predominance of married subjects (56.7%) in our sample could be explained by the same.[13] Similar results are shared by the multinational study by Fleischmann et al.,[14] in which subjects from an Indian center who indulged in self-harm were more frequently married than single.

Also, 65% of our study population belonged to a rural background, which is consistent with various Indian studies.[10,12] Self-poisoning (88.4%) was the most common method of ISH attempt in the current study. Organophosphorus compound was the most common substance used for self-poisoning. Most Indian studies had similar findings.[3,15,17] The possible reasons are (1) easy availability of insecticides, (2) about 13.3% of patients of ISH were farmers, who routinely come across insecticides in their fields and houses, and (3) it is a relatively less painful method. Bose et al.,[18] in their study on self-harm in south India, found that about 80% of patients of self-poisoning found the insecticide within the house or just within the house vicinity. The same authors also found that most pesticides available in the market were very toxic and considered as “restricted use pesticides” in many countries. A recent survey of the pesticide storage methods among the formers also unveiled the universal practice of unsafe storage of pesticides.[19]

The most common reasons for ISH were interpersonal conflicts with the family members, followed by conflicts with spouse or partner and broken relationships. These findings have been well acknowledged in previous Indian literature.[19] About 45% of the patients of ISH had no diagnosable psychiatric illness. This is in accordance with some previous studies from India.[15,20] Similarly, Parker et al.[21] reported that 45% of subjects who attempt suicide/self-harm themselves do not have a diagnosable psychiatric illness. These findings suggest that ISH is not only limited to psychiatrically ill subjects but is also used by so-called normal persons as a coping mechanism under stress to communicate their needs and distress.

In our study, personality disorder constituted the most common diagnosis in 20% of the study population, which nearly matches the existing literature in the world.[22] It is to be noted that 65% of individuals had a diagnosable psychiatric illness, but most of them had not sought treatment for the same. This implies that there is an urgent need to promote education regarding the nature of psychiatric disorders and their treatability across the community to allow their early detection and timely intervention, thereby minimizing suicide attempts/ISH. This is one of the first studies from our institution.

Table 2: Clinical profile

| Variables | Number (%) |
|-----------|------------|
| Past history of intentional self-harm | |
| Yes | 5 (8.3) |
| No | 55 (91.7) |
| Nature of self-harm | |
| Impulsive | 37 (61.7) |
| Intentional | 23 (38.3) |
| Method of attempt | |
| OP Poisoning | 30 (50.0) |
| Household agents | 13 (21.7) |
| Psychotropic medication | 10 (16.7) |
| Self-cutting | 7 (11.6) |
| Reason/precipitating event before attempt | |
| Interpersonal conflict with family | 30 (50.0) |
| Interpersonal conflict with spouse | 13 (21.7) |
| Broken relationship | 11 (18.3) |
| Exam related stress | 6 (10.0) |
| Regret/remorse about the attempt | |
| Present | 52 (86.7) |
| Absent | 8 (13.3) |
| Number of attempts | |
| First | 54 (90.0) |
| More than one | 6 (10.0) |

Table 3: Psychiatric diagnosis

| Psychiatric diagnosis | Number (%) |
|-----------------------|------------|
| Personality disorder | 12 (20.0) |
| Mood disorder | 8 (13.3) |
| Anxiety, stress-related disorder | 6 (10.0) |
| Psychotic disorder | 4 (6.7) |
| Substance use disorder | 3 (5.0) |
| No psychiatric diagnosis | 27 (45.0) |
on subjects with ISH availing CL psychiatry services of the department.

Limitations and recommendations
Our results cannot be considered as truly representative of the population as the cases were taken on the selected days of the week and all cases who present with intentional self-harm are not referred for psychiatric consultations. Some are discharged prior to assessment and in some cases, families do not disclose the facts to the treating doctor due to legal issues.

Conclusion
Intentional self-harm is common in young married females from rural backgrounds. Self-poisoning is the most common method of ISH. More than half of the individuals were diagnosed with the psychiatric illness at presentation. The young age group represents the most vulnerable group in need. More than half of the individuals were diagnosed with the psychiatric illness at presentation, which clearly argues for the need for early, prompt diagnosis, and treatment of such cases to preempt such attempts. Personality disorder remains the most common diagnosis; its early identification and proper intervention can lead to a reduction in suicide attempts/intentional self-harm and perhaps completed suicides. Modifying the interpersonal relationship problems in the family might help in preventing many suicide attempts/intentional self-harm. There is also a need to develop a clear policy for the sale and possession of insecticides.

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Conflicts of interest
There are no conflicts of interest.

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