A study of individuals with intentional self-harm referred to psychiatry in a tertiary care center

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ABSTRACT

Background: Intentional self-harm (ISH) is one of the commonest yet neglected entities of Consultation liaison Psychiatry. More researches in the field of ISH are needed to effectively manage this problem. Aim: To study the socio-demographic and clinical profile of subjects of ISH referred to Psychiatry in a tertiary care hospital. Materials and Methods: All subjects of ISH referred to department of Psychiatry, of a tertiary centre, on specified days were recruited in to the study after obtaining an informed consent. Socio-demographic details, details of psychiatric assessment were documented using a semi structured proforma. Appropriate management was done. Results: Forty one subjects were included in the study. About two third of them belonged to the age group of 18 to 35 years. 56% of them were males, and 71% were married. House wives and students formed a significant proportion of sample. Most common method of ISH was self-poisoning. About two third of the patients had no diagnosable psychiatric illness. Interpersonal conflicts with family members (47%), conflicts with spouse (22%), broken emotional relationship (18%) were common causes for impulsive acts of ISH. Conclusions: ISH is common amongst young, married males. About two third of those who attempt ISH have no diagnosable psychiatric illness, in rest, neurotic stress related disorders, personality disorders and substance use disorders were predominant.

Keywords: Intentional self-harm, liaison psychiatry, psychiatry referrals

INTRODUCTION

Intentional self-harm (ISH) is defined as “an act of intentional self-poisoning or injury, irrespective of apparent purposes of the act.”[1] Fatal and nonfatal ISH are major public health concerns globally.[2] ISH is associated with increased risk of repeated self-harms. Moreover, nonfatal self-harm is a major risk factor for completed suicide.[3,4]

As per the WHO statistics, almost one million people die from suicide and 20 times more people attempt suicide every year. A global mortality rate of 16 per 100,000 is reported, which amounts to one death every 40 s and one attempt every 3 s, on average.[5]

More researches on ISH are required, especially from this part of the word, to better understand this complex clinical entity and also to lay down effective therapeutic and preventive protocols. This study was taken up at a tertiary care center psychiatry unit to study the sociodemographic and clinical factors associated with ISH.

MATERIALS AND METHODS

The study was conducted at the Department of Psychiatry, King George Medical University, Lucknow. Sample was drawn from indoor individuals of deliberate self-harm (DSH), who were referred to the department of psychiatry from various departments, on selected days of the week. Patients fulfilling selection criterion for the study were included. Patients not having a reliable informant and those not consenting for the study were excluded.

The patients were assessed by a psychiatry trainee, under supervision of a consultant psychiatrist. The details of the patients were documented in a semi-structured proforma. The following information was noted:

- Demographic details (age, gender, marital status, education, occupation)
- Psychiatric assessment (including brief clinical diagnosis)
- Psychological assessment (using SCL-90-R, BDI, MMPI-2)
- Treatment (if any)

The study was approved by the institutional ethics committee. All patients or their legal guardians provided written informed consent.

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sociodemography and clinical findings were recorded using a semistructured pro forma. The International Classification of Diseases, 10th edition, classification of Mental and Behavioural Disorders-Diagnostic Criteria for Research (ICD-10, DCR) was used to make psychiatric diagnosis.

**RESULTS**

**Sociodemography**

Forty-one individuals were included in this study. There was a slight male preponderance in the sample (56.1%). The mean age of sample was 33.05 (±17.24) years. About 44% of the sample was in the age group of 18–35 years. About 39.04% of the patients of ISH were educated up to high school. Majority of them belonged to rural background and were married. Most common occupational group was homemakers (31.7%), followed by students (24.4%) [Table 1].

**Method of self-harm**

The most common mode of self-harm was self-poisoning (85%). Among the individuals of self-poisoning, about half of the patients used insecticides. About 31% of the patients of self-poisoning used corrosive poison, and about 11% used psychotropic medications [Table 2].

**Clinical profile of individuals with deliberate self-harm**

The most common psychiatric illnesses among the individuals of ISH were neurotic, stress-related and somatoform disorder (9.76%), substance-use disorder (9.76%), and personality disorder (9.76%) [Table 3]. The intriguing finding was that about two-thirds (61%) of the individuals had no diagnosable psychiatric illness and their act of DSH was found to be impulsive, preceded by some psychosocial stressors [Table 4].

The sociodemographic variables (age, sex, domicile, education, and occupation) of patients with and without diagnosable psychiatric illness were compared. No statistically significant difference was found in any of these variables.

Further, on exploring the psychosocial stressors those led to DSH, the most common reasons were interpersonal conflicts with family members (46.34%), followed by interpersonal conflicts with the spouse/partner (21.96%) and broken emotional relationship (17.08%).

**DISCUSSION**

There was a slight male preponderance in study sample, a finding that is well established in Indian studies, but contradictory to the Western literature. The possible reason given is glorified status and more expectations from

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**Table 1: Demographic profile of the patients of intentional self-harm**

| Demographic/clinical factors          | Value/percentage |
|--------------------------------------|------------------|
| Sociodemographic variables           |                  |
| Mean age                             | 33.04±17.24      |
| Males                                | 56               |
| Rural domicile                       | 54               |
| Married                              | 70               |
| Methods of self-harm                 |                  |
| Poisoning                            | 85               |
| Hanging                              | 12               |
| Self-stabbing                        | 3                |
| Psychiatric diagnosis                |                  |
| Affective disorder                   | 4.88             |
| Psychotic disorder                   | 2.44             |
| Neurotic, stress-related disorder    | 9.76             |
| Personality disorder                 | 9.76             |
| Substance-use disorder               | 9.76             |
| No diagnosable psychiatric disorder (impulsive acts) | 60.98 |
| Others                               | 2.44             |
| Reasons behind the impulsive acts    |                  |
| Interpersonal conflicts with partner  | 47               |
| Interpersonal conflicts with family   | 22               |
| Broken emotional relationship         | 18               |
| Study-related stress                 | 8                |
| Job-related stress                   | 5                |

**Table 2: Methods of intentional self-harm in the study subjects**

| Method                | Number (n=41) | Percentage |
|-----------------------|---------------|------------|
| Poisoning             | n=35, 85%     |            |
| Insecticides          | 19 (54%)      | 85         |
| Corrosive poisons     | 11 (31%)      |            |
| Psychotropic medications | 4 (11%)   |            |
| Analgesics            | 1 (2%)        |            |
| Hanging               | 05            | 12         |
| Self stabbing         | 01            | 3          |

**Table 3: Psychiatric diagnosis of the subjects with intentional self-harm**

| Psychiatric diagnosis                              | Number (n=41) | Percentage |
|---------------------------------------------------|---------------|------------|
| Affective disorder                                | 02            | 5          |
| Psychotic disorder                                | 01            | 2          |
| Neurotic, stress-related disorder                 | 04            | 10         |
| Personality disorder                              | 04            | 10         |
| Substance-use disorder                            | 04            | 10         |
| No diagnosable psychiatric disorder (impulsive acts) | 25            | 61         |
| Others                                            | 01            | 02         |
The above-mentioned findings are comparable to previous study findings. The possible reasons are: (1) easy availability of insecticide, (2) about 20% of patients of ISH were farmers, who routinely come across insecticides in their fields and houses, (3) it is a relatively less painful method, (4) popularity of insecticides as deadly poisons, and (5) increased media reporting of such acts. Bose et al., in their study of self-harm in south India, found that about 80% patients of self-poisoning found the insecticide within the house or just within the house vicinity.[19] The same authors also found that most of the pesticides available in 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 pesticide.[20] Appropriate education of farmers by the government agencies, regarding the “safe storage” of insecticides is advised. One of the ways that death caused by consumption of pesticides could be reduced is to limit the toxicity of the pesticides that are available for sale in the market.

About 60% of the patients of ISH had no diagnosable psychiatric illness. This is in accordance with some previous studies from the country.[8,21] The above-mentioned observations suggest that a significant number of those committing ISH are so-called normal persons. They commit ISH due to stress and as a coping mechanism to communicate their needs and distress.[8] Promotion of positive mental health in community such as healthy lifestyles, relaxation techniques, and meditation may be of great help in reducing such incidents. A role of media is also worth noting. Undue exaggerated reports of incidents of suicide or ISH may also lead to “copycat” attempts in community.[13]

Most common reasons of impulsive acts of ISH were interpersonal conflicts with the family members (46.34%), conflicts with spouse or partner (21.96%), and broken emotional relationship (17.08%). These findings have been well acknowledged in previous Indian literature.[8]

Among those who had a psychiatric illness, neurotic stress-, personality-, and substance-related disorders were most common (10% each). The existing Indian literature concludes that depressive and adjustment disorder are most frequent diagnoses. However, the sample size of patients with DSH (n = 41) was small in the present study; hence, the findings cannot be generalized.

The findings of this study should be interpreted keeping the following limitations in mind – (1) sample size is small, (2) study being done in a tertiary care center, the findings cannot be generalized to community, (3) the psychiatric diagnosis was made using CD 10-DCR and no detailed structured tools were used.
ISH was common in the age group of 18–25 years, among males and married persons. In 61% of individuals, the act was impulsive in nature; no major psychiatric disorder could be detected. Most common precipitating causes for impulsive acts of self-harm were interpersonal conflict with family members, followed by conflict with spouse and broken emotional relationship. Most common psychiatric diagnoses among the individuals were neurotic and stress-related disorders and personality disorder.

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Conflicts of interest
There are no conflicts of interest.

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