

Psychiatric Morbidity and the Socio-Demographic Determinants of Deliberate Self Harm

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ABSTRACT

Background: Man's attempt to harm himself or to end his life is probably as old as himself. Even then, this topic fascinates researchers and it continues to be one of the most talked about, written and discussed subjects, but it still is an enigma. Deliberate self harm (DSH) is common; however, there is scanty data on this issue from India.

Objectives: To study the socio-demographic and the clinical profiles of the subjects who had the tendency to deliberately self harm themselves.

Materials and Methods: A cross sectional study was performed for a period of 1 year in a medical college and research institute in north India. The data were recorded in an especially designed proforma which documented the socio-demographic variables, psychiatric illnesses, psychosocial stress factors, past and family history and the details of the suicide attempt.

Chi-square, Fisher exact, and t tests were used to note the statistically significant associations.

Results: Younger people <25 years of age (53%) predominated in the study. Females (58%) outnumbered the males (42%). Most of the DSH patients were married and housewives, and were from urban and low socioeconomic backgrounds. A majority of the patients were 1st time attempters, they had no family history and they used poison as the most preferred method. Half of the patients (50%) had psychiatric illness which was predominated by depression (36%). Family quarrel (32%) and marital disharmony (17%) were found to be the most common precipitating factors for DSH.

Conclusion: Population based prospective studies, awareness programs, preventive measures and proper psychiatric referral systems should be built up to decrease the incidence of self harm.

Key Words: Suicide Attempt, Deliberate Self Harm, Intentional Self Harm, Poisoning, Parasuicide

INTRODUCTION

Deliberate self-harm (DSH), both fatal and non-fatal, is a challenging public health issue. Although various terms like 'attempted suicide', 'deliberate self-injury' and 'parasuicide' are used, the most accepted term in the recent times to describe such behaviour is 'Deliberate Self-Harm' (DSH), which is defined as 'self-poisoning or injury, irrespective of the purpose of the act' [1]. It is one of the most common causes of acute medical admissions for men and women [2].

Persons who attempt DSH may have various intentions, of which manipulative or threatening and suicidal intentions are the most important ones [3]. A majority of the persons who attempt DSH don't want to commit suicide [4]. They do so as they are depressed or they may have anger, jealousy or the desire for attention [3]. From the psychological point of view, DSH can be caused due to coping mechanisms from stress, to regulate unpleasant self states, as a form of self punishment and as a means of influencing others or it can provide an increased sense of mastery and control [5].

Especially in developing countries, DSH has become an important health problem [6]. It is a major cause of more than 5, 00,000 deaths per year in the Asia Pacific region [7]. Overall, the fatality in India, China, and Sri Lanka is >10% [6].

In India, about 1, 00,000 persons commit suicide every year, contributing to about 10% of the suicides in the world [8]. Suicide is among the top 10 causes of death in India and among the top 3 causes of death in those who are between 16 and 35 years of

age [9]. The national suicide rate for 2001 was 10.6 per 100 000 population, a 14.5% increase from the statistics of 1991 [9]. There is a lack of data in India regarding non-fatal DSH. It is estimated that the incidence of non-fatal DSH is 250 per 100 000 persons per year [10]. Indian research on DSH has shown that various socio-cultural and environmental factors are associated with suicidal behaviour [11-17].

As there is a paucity of data in Punjab regarding DSH, we aimed to assess the psychosocial factors and the psychiatric morbidity in the patients who had a tendency to deliberately self harm themselves.

MATERIALS AND METHOD

This study was a cross sectional analysis of the subject population. In this study, the cases of DSH were those who got admitted through accidental and emergency services, as well as through regular outdoor admissions of various specialities at AIMS, Bathinda, during the period from Jan 2010 to Dec 2010. After getting permission from the institutional ethics committee, those cases which were kept under observation were interviewed when the clinical improvement became sufficient to conduct an interview. The inclusion criteria of a case with DSH was a deliberate non fatal act, whether it was physical or whether it was a drug over dosage or poisoning, which was done in the knowledge that it was potentially harmful and in the case of the over dosage, that the amount which was taken was excessive. Informed consent was obtained from each patient or the first of kin if the patient was unconscious. Patients with accidental or homicidal poisoning were not included. The number of cases which were

studied was 104, among whom 2 patients died and the rest of the 2 didn't want to participate in the study and so were excluded from it. A specially designed proforma was used for identification, socio-demographic data and case history. The diagnosis of psychiatric disorder was made by the ICD-10 criteria. Upper, middle, and lower socioeconomic classes were defined on the basis of occupation, the place of residence and monthly income [18]. Farmers, street vendors, drivers and white washers were categorized in the lower class; school teachers, small business men, accountants and welfare workers were categorized in the middle class; army officers, doctors, pilots and civil servants were categorized in the upper class [18]. Chi-square, Fisher exact, and t tests were used to note the statistically significant associations wherever they were appropriate. A p-value which was <0.05 was considered to be significant.

Study characteristic	Male (n=42)	Female (n=58)	Total (n=100)
Age in years*			
16-25	17 (40%)	36 (62%)	53
26-40	18 (43%)	12 (21%)	30
>40	07 (17%)	10 (17%)	17
Marital Status [†]			
Married	29 (48%)	31 (52%)	60
Unmarried	11 (35%)	20 (65%)	31
Divorced/ Widowed/ Separated	02 (22%)	07 (78%)	09
Residence [‡]			
Urban	29 (69%)	54 (93%)	83
Rural	13 (31%)	04 (07%)	17
Family Type [§]			
Joint	23 (55%)	32 (55%)	55
Nuclear	19 (45%)	26 (45%)	45
Education			
Illiterate	09 (21%)	12 (21%)	21
Primary	02 (05%)	12 (21%)	14
Middle	02 (05%)	06 (10%)	08
Higher	06 (14%)	03 (5%)	09
>Higher	23 (55%)	25 (43%)	48
Occupation			
Household works	0	35 (60%)	35
Student	05 (12%)	15 (26%)	20
Unskilled work	13 (31%)	03 (5%)	16
Skilled work	08 (19%)	01(2%)	09
Employed	09 (21%)	03(5%)	12
Business	04 (10%)	0	04
Unemployed	03 (7%)	01 (2%)	04
Socioeconomic status			
Low	30 (71%)	39 (67%)	69
Middle	10 (24%)	05 (9%)	15
Upper	02 (5%)	14(24%)	16

[Table/Fig-1]: Deliberate Self harm (DSH) in association with Socio-demographic Variables

*P< 0.05 (Significant); † P > 0.05 (Non significant); ‡ p < 0.05 (Significant) §p >0.05 (Non significant).

RESULTS

Out of 100 patients, 42 were males and 58 were females. A majority of the sample belonged to the less than 25 years of age group (53%), were married (60%), had an urban residence (83%) and were from the low socio economic background (69%). Most of them were illiterate (21%), males doing unskilled work (31%) and females doing household works (60%) [Table/Fig-1]. The most common method of self harm was poisoning (87%), which was significantly higher (p<0.001) than other methods. Among the 100 patients, 53 females (91%) and 34 males (81%) tried poisoning as the most preferred method to self harm themselves. The 2nd most common method was burning (10%), followed by hanging or jumping. Most of the patients (92%) didn't have any past history of DSH. Only 8 patients (8%) of deliberate self harm, among whom 7 (12%) were female and 1 male (2.3%), tried to harm themselves in the past. Twenty two patients (22%; 24% male and 21% females) had a family history of DSH. According to the ICD-10 criteria, 50% patients were diagnosed to have psychiatric illness, among which a majority (36%) had depression (20 females; 34.4% and 16 males; 38%). Among other psychiatric disorders, phobia (3%), schizophrenia (3%), obsessive compulsive disorder (1%) and alcohol dependence syndrome (2%), were also observed in the study sample [Table/Fig-2].

Family conflict was the most common precipitating factor in both males and females. Thirty two percent of the patients had family quarrels. Among the 42 males, 15 (35.7%) and among the 58 females, 17 (29.3%) had family conflict as the major factor for DSH. Marital disharmony (17%), failure in exams (7%), failure in love (7%) and financial crises (7%) were a few other precipitating factors which were observed in our study. [Table/Fig-3]

Study characteristic	Male (n=42)	Female (n=58)	Total (n=100)	P value
Method				
Poisoning	34 (81%)	53 (91%)	87	p<0.001
Burning	06 (14%)	04 (7%)	10	
Others (Hanging, Jumping)	02 (5%)	01 (2%)	03	
Past history of self harm				
Yes	01 (2.3%)	07 (12%)	08	p>0.05
No	41 (97.7%)	51 (88%)	92	
Family history of self harm				
Yes	10 (24%)	12 (21%)	22	p>0.05
No	32 (76%)	46 (79%)	78	
Psychiatric Illness in Sample population (According to ICD-10 criteria)				
Depression	16 (38%)	20 (34.4%)	36	
Phobia	0	03 (5.1%)	03	03
Schizophrenia	01 (2.3%)	02 (3.4%)	03	
Obsessive Compulsive Disorder	0	01 (1.7%)	01	
Alcoholism	02 (4.7%)	0	02	
Others	0	05 (8.6%)	05	05
No psychiatric illness	23 (55%)	27 (46.5%)	50	

[Table/Fig-2]: Method, Characteristics and psychiatric morbidity in the patients of Self Harm

Items	Male (n=42)	Female (n=58)	Total (n=100)
Family quarrels	15 (35.7%)	17 (29.3%)	32
Marital disharmony	07 (16.6%)	10 (17.2%)	17
Failure in Exams	02 (4.7%)	05 (8.6%)	07
Failure in love	01 (2.3%)	06 (10.3%)	07
Psychiatric Illness	03 (7%)	07 (12%)	10
Physical Illness	02 (4.7%)	01 (1.7%)	03
Financial crises	06 (14.2%)	01 (1.7%)	07
Poverty	02 (4.7%)	01 (1.7%)	03
Death of close relative	0	02 (3.4%)	02
Unemployed	01 (2.3%)	01 (1.7%)	02
Loss of job	02 (4.7%)	0	02
Others	01 (2.3%)	04 (6.8%)	05
Did not reveal	0	03 (5.2%)	03

[Table/Fig-3]: Reported precipitating factors in Deliberate Self Harm

DISCUSSION

In both the sexes, suicidal behaviour was more frequent among younger individuals, as in other Indian studies. [12], [14], [19] In our study, a majority of the patients were females, which corroborated with the findings of various Indian [19], [20] and Western studies [21] but the opposite has also been reported [11], [15], [22].

A low educational status was found among 21% of the individuals, which may have influenced the help-seeking and decision-making and thus it could be an important risk factor for DSH [20], [21], [22], [23]. As marriage is a strong cultural practice in India, most of the DSH patients were found to be married, which was similar to the findings of other Indian studies [14], [24]. There was no difference as such in the married male or female groups, which was against the findings of a study by Chowdhury et al [19]. This may be due to the urban/ rural differences, the educational status and the cultural differences between the different study groups. As culture strongly creates some stressors after the marriage of Indian females, marriage may make them more prone to DSH. In our study, most of the patients were from the urban background, although in few studies, rural areas were more prone to have DSH subjects [7]. This was probably due to the location of the institute and the lack of the referral system from the rural hospitals in this area.

The most common method was found to be poisoning, which was similar to the findings of most of the studies in India [11], [19], [22], [24], [25], while Khurram et al [26] found that benzodiazepines were the commonly used substances for DSH. In particular, pesticide self-poisoning is now considered by the WHO to be the commonest method of fatal self-harm worldwide [27],[28] but it is rarely seen in the west [29]. It is due to the easy availability of the insecticide poisons, the carelessness of the people and their accessibility to these poisons. . It implies that legislative control and awareness education is required in the community as soon as possible.

In many studies, [30],[31] it was found that marital disharmony, economic hardships and scolding by/disagreement with other family members were the major precipitating factors, which establishes the findings of our study too. It is to be noted that 50% of our study subjects had diagnostic psychiatric illnesses which were predominated by depression (36%), which corroborated with the findings of Das et al [22], while Haw C et al, 2001 [32] found

92% of the patients to have psychiatric disorder in their study group, among which affective disorder was the most prevalent one (72%).

LIMITATIONS

Our study was a hospital based study where a majority of the patients got admitted from the urban population. Hence, our sample could'nt be considered as truly representative of the population, as all the cases who presented with deliberate self harm were not referred to the hospital; few are discharged prior to psychiatric assessment and many of their family members didn't want to disclose the true facts due to possible legislative actions. The findings of the present study may not be applicable to other regions. The regional characteristics should be considered while planning preventive strategies. So, the findings of our study should be interpreted in this background.

CONCLUSIONS

The findings and interpretations of the patients in our study were confined to the hospital patients only, which is the tip of the iceberg. Population based studies should be promoted to find out the vulnerable groups and to identify the psychological, behavioural and the relationship-related issues among them to design effective interventional strategies. Many of those who attempted self harm and survived actually wanted to die and many did not. But there is no nomenclature for these distinctive groups. Future research should be performed to define these two groups to better understand the clinical situation and the management of the patients.

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DECLARATION ON COMPETING INTERESTS:

No competing Interests.

Date of Submission: **Mar 01, 2011**
Date of Peer Review: **Mar 25, 2011**
Date of Acceptance: **May 31, 2011**
Date of Publishing: **Jun 13, 2011**