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Original Article

Study on Deliberate Self Harm in a Tertiary Hospital

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Abstract

The term 'Deliberate Self Harm' (DSH) is often used to describe behaviors through which people inflict acute harm upon themselves with non-fatal outcome, when the behaviors are somewhat linked to, but do not result in death. This cross-sectional retrospective study included 66 subjects admitted with DSH in the Department of Medicine of Rajshahi Medical College Hospital during the period of January 2006 to July 2006.

Among the respondents 57.57% were female and 42.42% were male, when they were mostly Muslims (89.39%) and only 10.61% were Hindus. As regards to occupation 46.96% were students, 30.30% were housewives and rest belong to others. 68.01% were in the age of 17-28 years. 50% were uneducated, 24.24% completed SSC and rests were in other classes. 42.42% were married, 45.45% were unmarried and others were either separated or divorced. DSH was mostly preceded by recent quarrel (34.84%), followed by poor interaction with parents (19.69%) and rejection of love (18.18%).

The common adopted method of self-harm were ingestion of poisons (59.09%) and different self-medication (30.30%). 93.93% had the first attempt, 4.54% had second attempt and only 1 had the third attempt. The motivations were frustration (59.09%), making other feel guilty (25.75%) and to die (10.60%). Psychiatric diagnosis included relational problem (54.54%), major depressive disorder (34.84%), schizophrenia (4.54%) and adjustment disorder (3.03%).

This study, in fact suggests a special need for the assessment of DSH and formulation of a comprehensive treatment approach.

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Introduction

Attempted suicide or deliberate self-harm is a major public health problem to be addressed like any other medical condition. The term 'Deliberate Self Harm' (DSH) is often used to describe behaviors through which people inflict acute harm upon themselves with non-fatal outcome, when the behaviors are somewhat linked to, but do not result in death. DSH was often preceded by some life event or stressors in the present study. The three commonest causes are recent quarrel, poor communication with parents and rejection of love. Other notable factors are chronic physical illness, poverty and interpersonal problem. In Bangladesh,

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common causes of attempted suicide are marital problems, family problem, illness, love disappointment, Dowry harassment, financial problems and unemployment. But this scenario changes with time as socio-cultural and economic conditions of the society changes. This study is conducted with a view to analyze the recent situation and causes of DSH among the admitted patients in a non-psychiatric hospital.

Materials and Methods

A total number of 66 patients hospitalized in different Medicine Units of Rajshahi Medical College Hospital with the history of deliberate self-harm, were included in this cross-sectional retrospective study. Data were collected during the period of January 2006 to July 2006. The Socio-demographic status was recorded by a semi-structured questionnaire. Suicide intent scale[1, 2] and the diagnostic criteria of DSM-IV[3], were employed to assess the respondents. Lastly the results were depicted in table, after statistical analysis.

Results

The sample of this study consisted of 66 patients, admitted with the history of deliberate self-harm. The important parameters of sociodemographic status of the respondents were age, sex, religion, education and marital status, which are projected below in the tables.

Table-I: Age distribution of the respondents (N: 66)

Age group (years)	Number of Patients	Percentage (%)
16 years	5	7.57%
17-28 years	40	60.60%
29-39 years	7	10.60%
40-50 years	7	10.60%
51 and above	7	10.60%

Table-II: Sex distribution of the respondents (N: 66)

Sex	Number	Percentage (%)
Male	28	42.42%
Female	38	57.57%

Table-III. Distribution of respondents by religion.

Religion	Number of Patients	Percentage (%)
Muslim	59	89.39%
Hindu	07	10.60%

Table-IV: Distribution of Respondents by Occupation.

Occupation	Number of Patients	Percentage (%)
Service	02	3.03%
Housewife	20	30.30%
Cultivator	02	3.03%
Unemployed	06	9.09%
Daily wage earner	02	3.03%
Business	01	1.51%
Student	31	46.96%
Intern-Doctor	02	3.03%

Table-V: Distribution of Respondents by Educational level (N: 66).

Level of Education	Number of Patients	Percentage (%)
SSC	16	24.24%
HSC	08	12.12%
Honors	03	4.54%
Graduate	02	3.03%
Medical Student	01	1.51%
Masters	01	1.51%
MBBS	02	3.03%
Uneducated	33	50%

Table-VI: Distribution of Respondents by Marital Status (N: 66).

Marital Status	Number of Patients	Percentage (%)
Married	28	42.42%
Unmarried	30	45.45%
Divorce	05	7.57%
Separated	03	4.54%

Table: I: Shows that most (60.60%) of the respondents were in the age group of 17-28 years. The middle-aged respondents (40 and above) were about 14 in number. Females were predominant (57.57%) and rest 42.42% were males (Table: II). 89.39% were Muslims and only 10.60% were Hindus (Table-III). Table-IV, shows that most were student (46.96%) and housewife (30.30%). But among others 02 intern-doctors, were also found to have deliberate self-harm. As regards to educational status (table-V), 50% were uneducated, 24.24% had SSC, 12.12% had HSC and very few had graduation or post graduation. Most of the respondents were unmarried (table-VI), 42.42% were married and rest 8 were either divorced or separated.

Table-VII: Patterns of physical illness among the respondents

Diseases	Number (13)
Urinary tract infection	01
Hypertension	01
Low back ache	02
Non ulcer dyspepsia	05
Stroke	02
Diabetes mellitus	01
Asthma	01
Total	**13 (19.69%)**

Table-VII: represented existing physical illness, only among 13 respondents. The rest didn't have any diagnosis of physical illness during psychiatric assessment.

Table-VIII: Distribution of Methods adopted for self destructive behaviors

Self destructive behaviors	Number	Percentage (%)
Organophosphoric acid ingestion	39	59.09%
Carbolic acid ingestion	01	1.51%
Ingestion of Antidepressant, BDZ, antipsychotic & Hypnotics	20	30.30%
Ingestion of 'Harpic' (Toilet Cleaner)	03	4.54%
Hanging	01	1.51%
Cutting wrist	01	1.51%
Cutting scrotum	01	1.51%

Table: VIII shows that the most common method of DSH was Organo-phosphorus poisoning (59.09%) and ingestion of different drugs (30.30%). 4 patients had carbolic acid and Harpic ingestion. Each 1 attempted with hanging and cutting wrist. Only 1 had scrotal cutting, who later on was diagnosed to suffer from schizophrenia.

Table-IX: Distribution of stressful life events of the respondents.

Stressful life events	Number	Percentage (%)
Chronic physical illness	06	9.09%
Recent Quarrel	23	34.84%
Recent Transfer	1	1.51%
Death of Son (bereavement)	1	1.51%
Rejection of love	12	18.18%
Poor communication with parents	13	19.69%
Poverty	05	7.57%
Arrest by police	01	1.51%
Interpersonal problem	02	3.03%
Dowry	1	1.51%
Dismissal from job (garments factory)	1	1.51%

34.84% documented recent quarrel (Table: IX) as the most common stressors, preceding the DSH. The other common stressors were poor communication with parents (19.69%) and rejection of love (18.18%). The remaining life events were bereavement, recent transfer, chronic illness, dowry, poverty, arrest by police and dismissal from job.

Table-X: Distribution of psychiatric illness among the respondents.

Types of Psychiatric illness	Number	Percentage (%)
Major depressive disorder	23	34.84%
Relation problem with spouse	08	12.12%
Relation problem with in-laws	15	22.74%
Relation problem with parents	13	19.63%
Schizophrenia.	03	4.54%
Adjustment disorder	02	3.03%
Hypochondriasis with Trichotillomania	1	1.51
Delusional disorder (Jealous type)	1	1.51%

The psychiatric diagnosis among the respondents (Table: X) showed relational problem (54.54%) as the commonest one. 34.84% had major depressive disorder, 4.54% had schizophrenia, 3.03% had adjustment disorder; and each one had delusional disorder (jealous type) and hypochondriasis with trichotillomania.

Table-XI: Distribution of number of attempts by the respondents

Number of attempts	Number	Percentage (%)
First attempt	62	93.93%
Second attempt	03	4.54%
Third attempt	01	1.51%

Most of the respondents made first attempt (93.93%), as illustrated in table: XI.

Table-XII: Pattern of intent and motivation of the respondents.

Intent and motivation	Number	Percentage (%)
Impulsively due to immediate frustration	39	59.09%
To die	07	10.60%
To make other fell guilty	17	25.75%
Uncertain	03	4.54%

Most of the respondents (59.59%) committed self-destructive behavior impulsively, due to immediate frustration (Table-XII). 25.25% wanted to make other feel guilty, 10.60% wanted to die ant 4.54% were uncertain.

Discussion

Deliberate self-harm, although interchangeably referred to attempted suicide, is often 'aimed at realizing changes which the subject desired via the actual or expected physical consequences'[4]. About 10-20% of emergency hospital admission in Bangladesh is attempted suicide[5]. The present study included a total member of 66 respondents, which made an overview of the sociodemographic parameters, pattern of suicidal intent, life events, underlying psychiatric illness and the methods of the self destructive behavior, involving deliberate self harm. In the present study most (60.60%) of the respondents were young female (57.57%) and Muslims (89.39%). The significant proportions were student (46.96%) and housewife (30.30%), 9.09% were unemployed and 3.03% were young doctors even. Half (50%) were uneducated, 24.24% had SSC and very insignificant respondents were higher educated. The unmarried respondents were little more than those of married one (45.45% vs 42.42%). However about 8 were either divorced or separated. The average rate of suicide in Bangladesh has been reported to be 8-10/1,00,000 population/year against the global average of about 14.5/1,00,000 population/year. The highest rate of suicide has been observed in Jhenaidah and Jessore district of the country with average figure 29-33/ 1,00,000 population/year[6]. The females were found to commit suicide more than male in Bangladesh which is reverse of the figure in majority countries of the glob where males are observed to commit suicide more than females, as illustrated in the same study. Ratio of suicide in male to female is about 3:2, 3:1 and 4:1 in India, Srilanka and UK[7] respectively. Among suicide population 58% were women in Bangladesh, compared with 42% of men. Gururaj G et al[8], in their study noted that in South East Asian region, 25-60% of DSH takes place in the age group of 15-29 years. In another study[9] housewife constituted the highest percentage (67.28%) of suicide victim in Bangladesh. In the WHO multicentre study[10] into Para suicide the female attempted suicide rates were higher then the male suicide attempt rates. The finding indicate that suicide attempter disproportionately have had low education, and have high levels of unemployment, poverty and divorce.

In our study 19.69% had some physical illness during their self-destructive behavior. Unni KES[11] in his study of Indian population commented that more than one third or the persons were actively ill at the time of the attempt, and more than 90% of the attempts were influenced by the illness. Method adopted in DSH as revealed in this study, were mostly Organo-phosphorus poisoning (59.09%) and ingestion of different drugs (30.30%). Only each 1 had hanging and cutting of scrotum. As regards to deliberate self-laceration, other literature[12] noted three forms, viz (i) deep and dangerous wounds infected with serious suicidal intent, more often by men; (ii) self-mutilation by schizophrenic patients (often in response to hallucinatory voices) or people with severe learning difficulties; and (iii) superficial wounds that do not endanger life, more often by women. Self poisoning has been found to be the commonest method of suicide in Bangladesh. Rate of self-poisoning as commented by Gururaj G et al (2001), is 70% in Srilanka, 47% in Indonesia, 37% in India and 23% in Thailand. In the present study, the second most common method of attempted suicide was ingestion of different drugs other than hanging, which simulated with the report by Islam MN et al[13]. In the WHO Multicentre study 64% of males and 80% females used self-poisoning as the method of DSH.

DSH was often preceded by some life event or stressors in the present study. The three commonest causes were recent quarrel (34.84%), poor communication with parents (19.69%) and rejection of love (18.18%). Other notable factors were chronic physical illness (9.09%), poverty (7.57%) and interpersonal problem (3.03%). Study by Ali M[14] in Bangladesh, depicted that common cause of attempted suicide were marital problems

(23.1%), family problem (23.1%), illness (16.3%), love disappointment (9.5%), Dowry harassment (16.3%) financial problems (7.7%) and unemployment (4.8%). Roy A[15] commented that, the circumstances surrounding a suicide attempt invariably involve recent life change, particularly interpersonal stressors. Among them five are particularly significant events, viz, serious arguments with spouse, having a new person in the home, serious illness of the family member, serious personal physical illness, and having to appear as a defendant in court.

Hospital studies show that the about 40% of those who attempt suicide have a history of psychiatric treatment. The present study documented major depressive disorder (34.84%) and relational problem (54.54%) as the common psychiatric co-morbidity. In a Bangladeshi study[16] the psychiatric disorder among the respondents of DSH were major depression (46.2%), personality disorder (07.7%), substance related disorder (3.8%), schizophrenia (2.8%), adjustment disorder (1.01%) and Bipolar disorder (1%).

As regards to the repetition, in the present study 93.93% had the only one attempt, 4.54% had second attempt and only 1.51% had the third attempt. Follow up studies by Appleby L (1993)[17] show that between 13 and 35% will repeat the attempt during the next 02 years. During this time, up to 2% will make two or more attempts, 2.5% three or more attempt, and 1% five or more attempts. Another review by Owens et al (2003)[18], documented that about 1 in 6 repeats the deliberate self-harm within 1 years; again about 1 in 4 repeats the deliberate self harm within 4 years. So far the motivation and intent are considered the majority respondents (59.09%) in this study made the suicidal attempt impulsively following frustration when 25.75% wanted to make other feel guilty and 10.60% wanted to die.

A noted study by Hawton K (2000)[19], revealed some few more causes of DSH, which were viz, to die, to escape from unbearable anguish, to get relief, to change the behaviour of others, to escape from a situation, to show desperation to others, to make other feel guilty and to get help.

Conclusion

Attempted suicide or deliberate self-harm, as such is a major public health problem to be addressed like any other medical condition. They seem to reflect the degree of powerlessness and hopelessness of young people with low education, low income, unemployment and difficulties in coping with life stress. Although we know that the person with suicide attempts are at high risk for future fatal and non-fatal suicidal behaviour, we still need to develop better means to help them and to prevent the repetition of all those self destructive behaviour.

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