EPIDEMIOLOGY OF PSYCHIATRIC DISORDERS IN DELIBERATE SELF HARM VICTIMS

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ABSTRACT: There is limited literature linking psychiatric disorders to deliberate self from India. The study will certainly add to the existing information worldwide and will help us to develop preventive modalities in deliberate self harm and its recurrence. This prospective study extended for a period of one year from January 2010 to December 2010 on deliberate self harm victims aged 20 years and above who reported to the one of the tertiary health care center and teaching hospital of southern Karnataka; and referred patients to the psychiatric consultation to study the epidemiology of psychiatric disorders in deliberate self-harm (DSH) victims. The research was conducted on total of 113 of deliberate self harm victims. 69.03 % of deliberate self harm victims were males. 80.53% of victims are in the age group of 20 to 39 years. 43.36% deliberate self harm victims were employed. 77.88% deliberate self harm victims committed the act inside their residence. Poisoning was the commonest (76.11%) method of self-harm. Psychiatric illness was seen in 71.68% deliberate self harm victims and depression was the major culprit among them. This study emphasizes the role of psychiatric disorders in deliberate self harm which will go a long way in its prevention and recurrence.

KEYWORDS: Deliberate self harm; Psychiatric disorders; Poisoning; Depression

INTRODUCTION: Deliberate self harm (DSH) is an “an act with non-fatal outcome in which an individual deliberately initiates a non-habitual behaviour, that without intervention from others will cause self-harm, or deliberately ingests a substance in excess of the prescribed or generally recognised dosage, and which is aimed at realising changes that the person desires via the actual or expected physical consequences”.^{1,2} There are increasing instances of deliberate self-harm (DSH) episodes worldwide and is a challenging health issue. Deliberate self-harm is a complex event, associated with psychosomatic, biological, social factors and one important factor being psychiatric disorder.^{3,4} Current literature on DSH from countries worldwide have reported rising rates of psychiatric disorder.⁵⁻⁹ Comorbidity of psychiatric disorder was common in various studies.^{7,8,11} The objective of the present study was to study the psychiatric morbidity DSH victims in Mangalore, a coastal district in the Karnataka, India.

MATERIALS AND METHODS: The present prospective study extended for a period of one year from January 2010 to December 2010. The subjects were deliberate self harm victims, aged 20 years and above who presented to the one of the tertiary health care center and teaching hospital of southern Karnataka; and referred patients to the psychiatric consultation. As per the definition of DSH included acts of self-poisoning and self-injury.¹¹ Victims under the age of 20 years, ambiguous history regarding the event or who are incapable to understand or otherwise participate in the study (e.g. medically in poor condition, organic brain syndrome, severe mental disturbance, severe learning deficits) were excluded from the study. In case the patient was discharged before collecting all the information the remaining information was obtained during the follow up period. Information pertaining to the cases included in the present research was also gathered from the accompanying person with the victim. Informed consent was taken from all the patients who were included in the study. The study included 113 cases of deliberate self harm and data regarding socio-demographic profile and their psychiatric evaluation were collected in the pre-structured proforma. Data were entered and analyzed using the Statistical Package for the Social Sciences (SPSS, 2003)

RESULTS: Total of one hundred thirteen victims with deliberate self harm reported to the tertiary health care center and teaching hospital of southern Karnataka and victims who were referred for psychiatric consultation during the period of one years (January 2010 to December 2010. Of the 113 patients included in the study, 78 (69.03%) were males and 35 (30.97%) were females as depicted in the Table 1.

Majority of deliberate self harm cases were in the age group of 20 to 29 years, followed by the age group of 30 to 39 years, and 50 to 59 years respectively, as depicted in the Table 2. Most of the victims belonged to the Hindu religion (77.88%) followed by Christians (11.50%) and Muslims (10.62%). DSH was accomplished inside their dwellings in most of the cases (77.88%).

DISCUSSION: Deliberate self-harm is an acute, non-fatal act of self-harm carried out deliberately in the form of an acute episode of behavior by an individual with variable motivation.^{1,12} Other terms used to explain deliberate are parasuicide and attempted suicide. Prevalent ways of achieving deliberate self-harm includes self-cutting, self-poisoning, for example by overdosing on medicines. Deliberate self-harm encompass high suicidal intent, meticulous planning, and brutal outcome of the method used. Other acts of deliberate self-harm are characterised by no or low intention of suicide, lack of planning and concealing of the act, and low lethality of the method used. Suicide differs from deliberate self harm wherein suicide is an act with a fatal outcome, deliberately initiated and performed by the person with the knowledge or expectation of its fatal outcome.¹³ Deliberate self-harm may encountered in variety of conditions which include substance abuse, eating disorders, post-traumatic stress disorder, major depression, anxiety disorders, personality disorders and schizophrenia.¹⁴⁻¹⁹

The present study showed male preponderance. The studies conducted globally demonstrate a varying trend. Some researchers propose that deliberate self harm has female predilection¹⁶⁻²⁹, whereas others proposes view contrary to this.³⁰⁻³² Several other studies found self-harm to be gender neutral.^{19,33-36} Most of the deliberate self harm victims fall in the age group of 20 to 39 years. The similar trend observed in the studies conducted in northern India.³⁷ The lower rates of deliberate self harm in lower age group can be explained with several reasons. Children do not develop definite ideas of the nature and thoughts of death before the

age of 7 or 8 years and do not get a more reliable insight in the phenomenon before the age of 12 or 14 years. Their immature mind do not process the ability to plan and execute the act of deliberate self harm³⁸ In comparison with adolescents, children are better secluded against contemplating and planning suicide by the lower incidence of depressive disorders, the higher extent of family care and the cordial relationship with the parents. The victims less than 15 years of age rarely suffer from psychiatric disorders, expressed less suicidal intent and were less exposed to stressors like interpersonal/parental conflicts or romantic disappointment. The conclusion was drawn that children are not more resilient but are less exposed to risk factors and for that reason have a lower suicide rate.³⁹

Our study is in concurrence with earlier studies which revealed that deliberate self harm are generally executed when the patient is at his familiar place i.e. at his residence.⁴⁰⁻⁴² Deliberate self harm was usually committed in locality familiar to the victim, in particular the parental flat or the close vicinity of their home. In keeping with the reflections concerning the choice of the method, the familiar setting is possibly preferred because it provides easy access to the necessary implements and makes possible the commitment of suicide within a short time leaving no opportunity to reconsider the decision.⁴¹ Our study showed preponderance of employed individuals resorting to this drastic step. This may be explained from the fact that employed individuals are surrounded by stress at work place, from the family and their inability cope up with professional and personal life. Another study revealed that as many as 35% of college students report having performed at least one self-harm behavior in their lifetime.⁴³ Several studies have found higher rates of self-harm in individuals from younger generations.^{16,33,34,44}

Self poisoning was the commonest method of deliberate self-harm in our study. The methods of deliberate self harm employed generally reflect the different possibilities available in the community. Study conducted by Birkhead et al. revealed drugs or poisons to be most common methods of attempted suicide (71.1%), and the use of firearms was the most common method of suicide (69.8%).^{45,46} Some researchers reported a substantially rise of self-inflicted gunshot wounds.^{41,47} Usage of firearm, sharp edged weapons for accomplishing deliberate self harm are not found in our study. Our study emphasized the role of psychiatric morbidity in deliberate self harm. The psychiatric disorders encountered in our study in the descending order of its existence were depression, bipolar disorders, schizophrenia and borderline personality disorder. The role of psychiatric disorders in deliberate self harm has been reported by various researchers both at national and international level.^{10,48} There is extensive literature attributing the role of depression and personality disorders in deliberate self harm.^{6-8,10,48} This study emphasizes the role of psychiatric disorders in deliberate self harm which will go a long way in its prevention and recurrence.

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Table 1: Gender distribution of DSH victims (n=113)

Sex	Number of cases	Percentage %
Male	78	69.03
Female	35	30.97

Table 2: Age-wise distribution of DSH victims (n=113)

Age in years	Number of cases	Percentage
20-29	55	48.67
30-39	36	31.86
40-49	5	4.42
50-59	13	11.51
60-69	2	1.77
>70	2	1.77

Most of the victims (43.36%) who suffered deliberate self harm were employed as depicted in the Table 4.

Table 3: Employment status of DSH victims (n=113)

Employment status	Number of cases	Percentage
Employed	49	43.36
Unemployed	28	24.78
Household	26	23.01
Student	8	7.08
Not known	2	1.77

Most of the victims consumed poisons (76.11%) followed by self injury as depicted in the Table 4.

Table 4: Method employed by DSH victims (n=113)

Method	Number of cases	Percentage
Self poisoning	86	76.11
Self injury	25	22.12
Both	2	1.77

Psychiatric illness was said to be the reason for deliberate self harm in 71.68% of victims as illustrated in the Table 5.

Table 5: Method employed by DSH victims (n=113)

Method	Number of cases	Percentage
Psychiatric illness	81	71.68
Financial problem	16	14.16
Love failure	8	7.08
Failure in the exam	4	3.54
To threaten the family members	4	3.54

Among the psychiatric disorders most of the victims were suffering from depression followed by bipolar disorders, schizophrenia and borderline personality disorder as illustrated in Table 6.

Table 6: Type of psychiatric illness in DSH victims (n=81)

Type of psychiatric illness	Number of cases	Percentage
Depression	66	81.48
Bipolar disorders	11	13.58
Schizophrenia	3	3.70
Borderline personality disorder	1	1.24