

CLINICAL PROFILE AND PSYCHIATRIC MORBIDITY IN PATIENTS WITH DELIBERATE SELF-HARM

Dr. Yogesh Motwani¹, Dr. Shobha Nair², Dr. Aditi Chaudhari³, Dr. Kaustubh Mazumdar⁴

¹Senior Resident, Department of Psychiatry, Pacific Institute of Medical Sciences, Udaipur.

²Consultant and Head, Department of Psychiatry, BARC Hospital, Mumbai.

³Consultant, Department of Psychiatry, BARC Hospital, Mumbai.

⁴Ex- Head Medical Division, Ex- Consultant and Head, Department of Psychiatry, BARC Hospital, Mumbai.

Article Info: Received 11 December 2019; Accepted 07 January, 2020

DOI: <https://doi.org/10.32553/ijmbs.v4i1.861>

Corresponding author: Dr. Yogesh Motwani

Conflict of interest: No conflict of interest.

Abstract

Background: It requires detailed research to understand the psychopathology behind DSH attempts. Apart from social factors, psychiatric disorders and individual coping mechanisms can contribute to DSH. This study will be helpful in knowing the prevalence of psychiatric morbidity in these patients.

Aims and Objectives: To study the Psychiatric morbidity in patients with DSH.

Materials and Methods: This is a retrospective, descriptive study including 42 patients who had history of DSH and were referred to psychiatry department of BARC Hospital, Mumbai. Patients who were below 45 years of age at the time of DSH and above 18 years at the time of study were included. Their socio-demographic data were collected, psychiatric diagnosis were noted from the case files, personality disorders were evaluated using ICD-10 IPDE. Data were analysed using descriptive and analytic statistical methods.

Results: 42.86% of the population was diagnosed as having psychiatric disorder. Most common disorder was depression. 7.14% of the patients were diagnosed as having borderline personality disorder.

Conclusions: Depression was the most common psychiatric disorder found in our study.

Key words: Deliberate self-harm, psychiatric disorders, personality disorders.

Introduction

Research on deliberate self-harm has increased in recent years, and much is now known about the prevalence and risk factors for DSH in various populations.

WHO defines deliberate self-harm as,

“An act with a non-fatal outcome, in which an individual deliberately initiates a non-habitual behaviour, that without any intervention from others will cause self-harm, or deliberately ingests a substance in excess of the prescribed or generally recognised therapeutic dosage, and which is aimed at realising changes which the subject desired via the actual or expected physical consequences.”(1)

Deliberate Self Harm (DSH) is becoming more common(2,3) and is associated with significant risk of suicide(2,4). The rate of non-fatal DSH is 10 times more than the fatal DSH(5). The overall incidence of fatal and non-fatal deliberate self-harm was 5.98 and 61.51 per 100,000 population per year, respectively(6).

The intentions of DSH vary from person to person. They may be to escape from a situation, to change someone's mind, to seek help, to make someone feel guilty or to die. Few of the precipitating factors leading to such intentions

being academic failure, unemployment, financial setbacks and debts, substance use disorders, social isolation and familial stressors. Such acts can be caused by inability to cope from stress, as a form of self-punishment, or as means of influencing others(7).

Psychiatric disorder is one of the most important factors in patients who attempt DSH. Depression is the most common psychiatric morbidity associated with DSH, followed by psychosis, substance dependence, anxiety disorders, social phobias and eating disorders. Presence of psychiatric morbidity in patients of DSH is a strong predictor of future DSH attempts and suicides(7). Personality disorders are also frequently seen in patients of DSH, borderline personality disorder being the most prevalent(8–11).

DSH is one of the top 5 causes of hospitalisation. After recovery from acute condition, most of them are referred for psychiatric consultation. A few who take discharge against medical advice or refuse psychiatric consultation miss out on the psychiatric evaluation. As a result, these patients with or without psychiatric morbidity remain unrecognised and untreated(12). Therefore it is important that such patients are detected and treated at earliest.

Keeping in mind the above factors this study will be helpful to understand the psychiatric morbidity in patients of deliberate self-harm.

MATERIALS AND METHODS:

Study was conducted at Department of Psychiatry, B.A.R.C. Hospital, Anushaktinagar, Mumbai. All the patients who attempt DSH and are brought to our hospital are referred to psychiatric department after they are medically stable for further evaluation. Our department evaluates all these patients in detail and make individual psychiatric records which are stored in the department. The records contain details about the DSH event as well as the complete psychiatric workup done for these patients. Psychiatric diagnosis based on the ICD-10 criteria is made and maintained at the time of evaluation.

The diagnosis of psychiatric disorders as per ICD-10 made at the time of DSH attempt was noted from the individual psychiatric records of the patients.

Sample selection:

Study design was retrospective, descriptive study. The study investigated cases of DSH retrospectively over a 5 year period from 2013 to 2017. Using a 5% absolute precision and a confidence limit of 95%, we got a sample size of 41 out of the estimated 45 patients of DSH to be evaluated during the study period. The equation used was

$$\text{Sample size } n = [\text{DEFF} * Np(1-p)] / [(d^2 / Z^2_{1-\alpha/2} * (N-1) + p*(1-p))]$$

We included 42 patients in this study.

INCLUSION CRITERIA:

- Patients up to the age of 45 years at the time of DSH, referred to the Psychiatry department in the last 5 years. Patients referred during the period of study were also included.
- Patients competent and willing to give informed consent for the study.
- Patients who were suffering from a psychiatric disorder were included only after at least 6 months of remission of symptoms.

EXCLUSION CRITERIA:

- Patients who are less than 18 years at the time of evaluation were excluded as personality disorders cannot be diagnosed below 18 years of age.
- Patients above 45 years of age were excluded to make the study population more homogenous, as there were very few number of these patients.
- Patients who are unable to understand the questions of the scales used were excluded from the study.

INSTRUMENTS USED:

- ICD-10 Classification of Mental and Behavioural Disorders (WHO)

- The ICD-10 International Personality Disorder Examination (IPDE):

Statistical methods:

The data thus obtained was pooled and statistically analyzed using the IBM SPSS Statistics Version 23.0 software package. The scores on different scales were expressed in terms of descriptive statistics like mean, median, mode and standard deviation. Independent t test and ANOVA tests were applied where ever correlation between variables was to be established.

RESULTS:

SOCIO-DEMOGRAPHIC VARIABLES:

42 patients were studied with history of deliberate self-harm, out of which 30 were females and 12 were males. The socio-demographic profile of the study population at the time of evaluation was as follows:

AGE:

A total of 42 patients with age ranging from 18 to 47 years at the time of evaluation were studied. Mean age was 27.14 + 8.40 years.

Table 1:

AGE (years)	GROUP	FREQUENCY (n)	PERCENT (%)
18-25		24	57.14
>25		18	42.86

MARITAL STATUS:

15 (36%) patients were married and 27 (64%) were unmarried at the time of evaluation.

EDUCATION:

Table 2: Educational status.

EDUCATION	FREQUENCY (n)	PERCENTAGE (%)
Professional Degree	5	11.90
Graduate	9	21.43
Intermediate/Diploma	15	35.71
High school	7	16.67
Middle school	6	14.28
Primary school/ Illiterate	0	0

OCCUPATION:

Table 3: Occupational status.

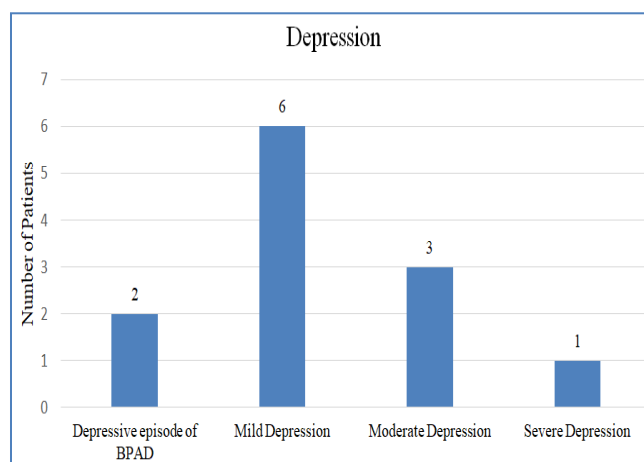
OCCUPATION	FREQUENCY (n)	PERCENTAGE (%)
Professional	4	9.52
Clerical	3	7.14
Semi-skilled	9	21.43
Housewife	10	23.81
Student	13	30.95
Unemployed	3	7.14

PSYCHIATRIC DISORDERS:**Table 4:** Frequency of psychiatric disorders.

PSYCHIATRIC DISORDER	FREQUENCY (n=18)	PERCENTAGE (%)
Depression	12	28.57
Adjustment disorder	3	7.14
Acute stress reaction	1	2.38
Alcohol dependence	1	2.38
Schizoaffective disorder	1	2.38

Out of these 18 patients, 5 had a pre-existing psychiatric diagnosis.

Out of 12 patients of Depression, 6 patients had mild, 3 had moderate, 1 had severe depression and 2 of the patients had depressive episode of bipolar affective disorder.

**Figure 1:** Depression in patients.**PERSONALITY DISORDERS:**

Evaluation to diagnose personality disorder was done by using ICD-10 International Personality Disorder Examination. We found that 3 individuals out of 42 were having emotionally unstable, borderline type personality disorder. All the 3 individuals were females.

DISCUSSION:**PSYCHIATRIC DISORDERS:**

In our study, out of 42 patients, 18 (43%) patients were diagnosed as having psychiatric disorder according to ICD-10 criteria. Out of the 18 patients, 12 were diagnosed as suffering from depression, 3 as adjustment disorder, 1 as acute stress reaction, 1 as alcohol dependence and 1 schizoaffective disorder. Out of 12 patients of Depression, 6 patients had mild, 3 had moderate and 1 had severe depression. 2 of the patients had depressive episode of

bipolar affective disorder. Depression was the most common psychiatric diagnosis in our patients of DSH.

Similar findings were seen in other studies. A major subgroup of patients suffer from depression as shown in studies by Kumar and George in 2013 (24%)(13), Das et al. in 2008 (30.7%)(14), Sarkar et al. in 2006 (30.8%)(15), Chandrasekaran et al. in 2003 (31%)(16), Narang et al. in 2000 (35%)(17), P.N. Suresh Kumar in 1998 (32%)(18), and Gupta and Singh in 1981 (24%)(19).

There were other studies which reported higher prevalence of psychiatric disorders in the patients with history of DSH. A study done by Kar in Orissa, published in 2010, 82.6% patients were diagnosed as having psychiatric disorder(20). Singh et al. reported a clear increase in diagnosis of psychiatric conditions from 2002 (50%) to 2012 (81%)(21). Study by Haw et al. in UK reported that 92% of the patients were diagnosed with at least one psychiatric disorder(22). Suominen also reported that 82% of the suicide attempters suffered from comorbid mental disorders.(23)

Among the 18 patients who were diagnosed with a psychiatric disorder, 5 (28%) patients were having a pre-existing psychiatric diagnosis and had come to seek help for the same.

The relationship between suicidal behaviour and psychiatric diagnosis has always been a matter of debate pertaining to the Indian context with low rate of psychiatric morbidity. The psychiatric diagnosis depends on the method of identification and classificatory system adopted(13).

As seen in our study and also quoted by Das et al. that intentional self-harm is not only limited to psychiatrically ill subjects, but it is also used by the so-called normal persons as a coping mechanism under stress to communicate their needs and distress(14).

Depression remains the most common psychiatric diagnosis in patients of DSH in our study as well as in many other Indian and western studies.

PERSONALITY DISORDERS:

In our study, 3 out of 42 individuals were diagnosed as having personality disorders. All 3 were having emotionally unstable, borderline type personality disorder. All the 3 were females and 2 out of them had history of multiple DSH attempts. The lethality of the act in all 3 cases was low. The individuals accounts for approximately 7% of the cases. The prevalence of personality disorders in DSH cases in our study was in keeping with other Indian studies by Das et al.(4.8%)(14), Kar(2%)(20) and Chandrasekaran et al.(7%)(16).

Some studies have reported higher prevalence of personality disorders in DSH population. In the study by Haw et al., 45.9% of the patients met the criteria for at

least one personality disorder. Nath et al. also reported a much higher prevalence of personality disorders. Similarly a study by Gupta and Singh showed 42% patients to have average personality pattern.

Self-harming behaviour is well known in persons with emotionally unstable, borderline type personality disorder. Such behaviours have been attributed to the inherent tendency towards experiential avoidance, escape learning and impulsivity in these patients(24).

Literature has shown anankastic personality disorder to be more common in males with DSH attempts. But in our study we did not find any patient with anankastic personality disorder.

CONCLUSIONS

Psychiatric disorders:

- 42.86% of the patients of DSH were suffering from a psychiatric disorder.
- 11.9% had a pre-existing psychiatric diagnosis before the present DSH attempt.
- 28.57% (n=12) of the study population had depression. Amongst patients of depression, 6 had mild, 3 had moderate and 1 had severe depression. 2 of the patients had depressive episode of bipolar affective disorder.
- 7.14% had adjustment disorder, 2.38% had acute stress reaction, 2.38% had alcohol dependence and 2.38% had schizoaffective disorder.

Personality disorders:

- 7.14% of the patients were diagnosed as having emotionally unstable, borderline type personality disorder. 92.86% did not have any personality disorder.

LIMITATIONS

- The study has been conducted in patients who were availing health care from the services provided by the organization in which either they themselves, or their immediate relative was employed. The socio-demographic characteristics of this sample may not reflect that of the general population/other studies.
- There was no control group for comparison of coping skills with the study population, hence results had to be discussed with respect to the findings of previous studies.
- In the study population, convenience sampling was used as consecutive sampling was not possible. Those patients were included who came for evaluation for study on our request.

BIBLIOGRAPHY

1. Platt S, Bille-Brahe U, Kerkhof A, Schmidtke A, Bjerke T, Crepet P, et al. Parasiticide in Europe: the WHO/EURO multicentre study on parasuicide. I. Introduction and preliminary analysis for 1989. *Acta Psychiatr Scand.* 1992 Feb 1;85(2):97–104.
2. Hawton K, Fagg J. Suicide, and other causes of death, following attempted suicide. *Br J Psychiatry J Ment Sci.* 1988 Mar;152:359–66.
3. Kapur N, House A, Creed F, Feldman E, Friedman T, Guthrie E. Management of deliberate self poisoning in adults in four teaching hospitals: descriptive study. *BMJ.* 1998 Mar 14;316(7134):831–2.
4. Nordentoft M, Rubin P. Mental illness and social integration among suicide attempters in Copenhagen. Comparison with the general population and a four-year follow-up study of 100 patients. *Acta Psychiatr Scand.* 1993 Oct;88(4):278–85.
5. Diekstra RF. The epidemiology of suicide and parasuicide. *Acta Psychiatr Scand Suppl.* 1993;371:9–20.
6. Chowdhury AN, Banerjee S, Brahma A, Das S, Sarker P, Biswas MK, et al. A prospective study of suicidal behaviour in Sundarban Delta, West Bengal, India. *Natl Med J India.* 2010 Aug;23(4):201–5.
7. Hawton K, Houston K, Haw C, Townsend E, Harriss L. Comorbidity of axis I and axis II disorders in patients who attempted suicide. *Am J Psychiatry.* 2003 Aug;160(8):1494–500.
8. van der Kolk BA, Perry JC, Herman JL. Childhood origins of self-destructive behavior. *Am J Psychiatry.* 1991 Dec;148(12):1665–71.
9. Zlotnick C, Mattia JI, Zimmerman M. Clinical correlates of self-mutilation in a sample of general psychiatric patients. *J Nerv Ment Dis.* 1999 May;187(5):296–301.
10. Simeon D, Stanley B, Frances A, Mann JJ, Winchel R, Stanley M. Self-mutilation in personality disorders: psychological and biological correlates. *Am J Psychiatry.* 1992 Feb;149(2):221–6.
11. Stanley B, Gameroff MJ, Michalsen V, Mann JJ. Are Suicide Attempters Who Self-Mutilate a Unique Population? *Am J Psychiatry.* 2001 Mar 1;158(3):427–32.
12. Kudo K, Otsuka K, Endo J, Yoshida T, Isono H, Yambe T, et al. Study of the outcome of suicide attempts: characteristics of hospitalization in a psychiatric ward group, critical care center group, and non-hospitalized group. *BMC Psychiatry.* 2010 Jan 12;10:4.
13. Kumar PNS, George B. Life events, social support, coping strategies, and quality of life in attempted suicide: A case-control study. *Indian J Psychiatry.* 2013;55(1):46–51.
14. Das PP, Grover S, Avasthi A, Chakrabarti S, Malhotra S, Kumar S. Intentional self-harm seen in psychiatric referrals in a tertiary care hospital. *Indian J Psychiatry.* 2008;50(3):187–91.
15. Sarkar P, Sattar FA, Gode N, Basannar DR. Failed suicide and deliberate self-harm: A need for specific nomenclature. *Indian J Psychiatry.* 2006 Apr 1;48(2):78.
16. Chandrasekaran R, Gnanaseelan J, Sahai A, Swaminathan RP, Perme B. Psychiatric and

- personality disorders in survivors following their first suicide attempt. *Indian J Psychiatry*. 2003;45(2):45–8.
17. Narang RL, Mishra BP, Nitesh M. ATTEMPTED SUICIDE IN LUDHIANA. *Indian J Psychiatry*. 2000;42(1):83–7.
 18. Kumar PNS. AGE AND GENDER RELATED ANALYSIS OF PSYCHOSOCIAL FACTORS IN ATTEMPTED SUICIDE. *Indian J Psychiatry*. 1998;40(4):338–45.
 19. Gupta SC, Singh H. PSYCHIATRIC ILLNESS IN SUICIDE ATTEMPTERS. *Indian J Psychiatry*. 1981;23(1):69–74.
 20. Profile of risk factors associated with suicide attempts: A study from Orissa, India. *Indian J Psychiatry*. 2010;52(1):48–56.
 21. Singh P, Shah R, Midha P, Soni A, Bagotia S, Gaur KL. Revisiting profile of deliberate self-harm at a tertiary care hospital after an interval of 10 years. *Indian J Psychiatry*. 2016;58(3):301–6.
 22. Haw C, Hawton K, Houston K, Townsend E. Psychiatric and personality disorders in deliberate self-harm patients. *Br J Psychiatry*. 2001 Jan;178(1):48–54.
 23. al SK et. Mental disorders and comorbidity in attempted suicide. - PubMed - NCBI [Internet]. [cited 2018 Jun 22]. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/8911558>
 24. Chapman AL, Specht MW, Cellucci T. Borderline personality disorder and deliberate self-harm: does experiential avoidance play a role? *Suicide Life Threat Behav*. 2005 Aug;35(4):388–99.