

CLINICAL AND DEMOGRAPHIC CHARACTERISTICS OF PATIENTS PRESENTING WITH DELIBERATE SELF HARM IN A TERTIARY CARE HOSPITAL-PAKISTAN

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ABSTRACT

Objective: To study the characteristics of deliberate self-harm in a tertiary care hospital population.

Material and Methods: One hundred and twelve cases admitted to the Combined Military Hospital, Gilgit, between September 2010 and June 2012 were studied by analyzing the medical records. Information was collected regarding demographics, family history, personal history, suicidal ideation, current stressors, the act of deliberate self harm (DSH) and its management.

Results: The commonest age group was 21–25 years of age. The majority were females (60.3%). More than 95% of patients used self-poisoning as a method of deliberate self-harm. Nearly 47% used benzodiazepines for self-poisoning. Precipitating factors included conflict with family, marital problems, chronic illnesses, and unemployment. Diagnosable psychiatric disorders were present in about two third of patient population.

Conclusion: Young age, female gender, psychosocial stressors, and conflictual relationship with family members were prominent factors for deliberate self harm in sampled population

Keywords: deliberate, self-harm, self-poisoning, self-injury, suicide.

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INTRODUCTION

Deliberate Self Harm (DSH) refers to the act of hurting oneself including intentional self-injury or self poisoning and is not dependent on the severity or intention of the act. Self poisoning is the most common method of deliberate self-harm followed by cutting with more female preponderance¹. Various psychiatric disorders like substance abuse, depression, anxiety and personality disorders among others have been known to contribute to DSH^{2,3,4}. The prevalence of DSH has been on the rise since last two decades assuming the status of a public health issue⁵. There is abundant of literature pointing towards the fact that previous history of DSH

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makes the person vulnerable to have further episodes in future and more chances of committing suicide. DSH is among the top ten reasons for admission worldwide^{6,7}. There is dearth of research looking at DSH in Pakistan. However, the available studies show that DSH is on the rise with risk factors being age less than 35 years, female gender, low socio-economic background and having conflictual relationship⁸. Similarly, there are various studies conducted previously describing the method used for DSH. For example a study by Zakiullah N carried out Karachi Pakistan, concluded that 95.1% of patients with DSH presenting to a tertiary care hospital used self poisoning by overdosing on medication. The commonest medicine was benzodiazepine with more than two-third had co morbid psychiatric disorders. The most frequent diagnosis was depressive disorder particularly in young age group⁹. Another study from Pakistan looking at the motivation of DSH victims' shows, that 76.8% victims had the volition to end their life¹⁰. In addition to psychosocial repercussion the economic cost associated with treatment of deliberate self harm is

considerably high depending on the length of hospital stay¹¹. The current study comprised of hospital based data describing the clinical and demographic characteristics of patients admitted to a tertiary care hospital with primary diagnosis of DSH. This study is first of its kind carried out in northern parts of Pakistan.

MATERIAL AND METHODS

This is a retrospective (chart review), cross sectional study which was carried out to study characteristics of deliberate self-harm in a hospital based population. Patients studied were admitted in Combined Military Hospital (CMH), Gilgit Pakistan. The Combined Military Hospital (CMH) is a 200 bed tertiary care hospital located in Gilgit (current population approximately 3 lacs). It has facilities for almost all medical specialties, including an 8-bed inpatient male psychiatry unit. The hospital has a defined catchment areas i.e. districts Gizer, Hunza, Astor and Gupus. Majority of the patients seeking treatment at the hospital belong to the lower, lower-middle and middle socioeconomic classes, from within Gilgit and other parts of Northern areas. Subjects selected for this study were all patients admitted to the Combined Military Hospital, Gilgit with DSH during a 2-year period from September 2010 to 2012. Only those cases with a definite diagnosis of DSH were selected. The patients presenting with DSH during the said time period were identified using the CMH hospital database. Data was collected after reviewing the patients' files from the hospital medical record room. These files record the history of physical examination, investigations and related details of all visits to the hospital, and the management received thereof. A data extraction form was developed to record various variables and to determine their association with DSH. Data was collected regarding demographics, family history, personal history, suicidal ideation, current stressors, the act of DSH and its management. The study was approved by ethics committee CMH Gilgit.

RESULTS

The demographic and social characteristics of the participants are shown in table 1. Female contribution its 65(58%) of the study population. The commonest age group was 21–25 years of age. Maximum number of female participants was married housewives (58%) and had no formal education. The male participants were primarily single (78%) and students. The average education level of the study participants was secondary school matriculation. Nearly 58% of the participants the district Ghizer. The most frequent (67%) drug used was Bromezapam (Lexotnal) while the second frequently (22.3%) used drug was Lorazepam (Ativan). About 39.3% of the individuals used methods and means

available in household while 36.6% bought the means from the market. Approximately 37.5% of the DSH cases had previous psychiatric history. Diagnosable psychiatric disorders were present in about two third of patient population. The most frequently identified psychiatric disorders were Depressive disorders (53%) and the Psychosis (21%). About 64.3% had the intention to die. Family conflict (75%), interpersonal stress (25%) followed by diagnosable psychiatric disorders the major contributor to the act of DSH. Benzodiazepines ingestion was the most commonly for DSH (80.3%). Majority of the participants were from Gilgit district followed by Ghizar as shown in figure 1

DISCUSSION

The official data on suicidal behavior is not available, since Pakistan does not compile the data nor report the statistics to World Health Organization (WHO). Despite the scarcity of literature, the available literature shows marked variation in modes of DSH in different regions of Pakistan. In addition to self injuries, overdose on medication and ingestion of bleach/bathroom cleaner organ phosphorous compounds, rat pills, lice powder, dettol and varnish have been reported by various studies conducted previously¹²⁻¹⁴. Our findings also pointed toward the same pattern of deliberate harm as majority of the study participants had overdosed on benzodiazepine.

Another important characteristic of DSH is intent of the self harm. Our results showed that majority of the victims had the volition to kill themselves which is in conformity with similar researches research conducted elsewhere¹³. Intent is an important characteristic of suicidal behaviour which determines the intensity of the act and subsequent psychological and physical morbidity. In our sample significant majority of the participants were females with relatively less education having interpersonal stress confirms the findings of a Portuguese study where the results show that females living with one parent (whether or not with a step parent) had higher rates of deliberate self-harm and associated with abuse (sexual and physical), depression, anxiety, impulsivity, and lower self esteem¹⁴⁻¹⁵. Likewise, another research Clinical and demographic characteristics of patients

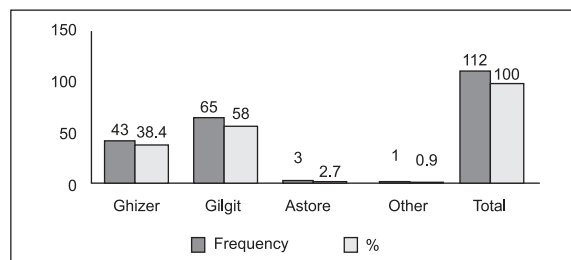


Fig 1: District wise distribution of DSH Cases

Table 1: Demographic and social characteristics of the study participants

Variables	Characteristics	Number (%)		Total
		Male	Female	
Gender		Male 47 (42%)	Female 65 (58 %)	112 (100%)
Marital Status	Single	33(58%)	23(42%)	56/112 (50%)
	Married	13(24%)	41 (76%)	54/112(48.2%)
	Widowed/ er	1 (50%)	1 (50%)	2/112 (1.8%)
	House wife	0 (0%)	38 (100%)	38/112 (33.9%)
Occupation	Student	17 (48.5%)	18 (51.4%)	35/112 (31.3%)
	Business	1 (50%)	1 (50%)	2/112 (1.8%)
	Professional	13 (68.4%)	6 (31.6%)	19/112 (17%)
	Unemployed	12 (92.3%)	1 (7.7%)	13/112 (11.6%)
	Skilled Labour	2 (100%)	0 (0%)	2/112 (1.8%)
	unskilled labour	2 (100%)	0 (0%)	2/112 (1.8%)
	Not known	0 (0%)	1 (100%)	1/112 (0.9%)
Education	Illiterate	2 (6.9%)	27 (93.1%)	29/112 (25.9%)
	Primary	3 (50%)	3 (50%)	6/112 (5.4%)
	Secondary /matric	19 (59.4%)	13 (40.6%)	32/112 (28.6%)
	Intermediate	8(40%)	12 (60%)	20/112 (17.9%)
	Graduate	8 (66.7%)	4 (33.3%)	12/112 (10.7%)
	Postgraduate	5 (55.6%)	4 (44.4%)	9/112 (8%)
	Not known	2 (50%)	2 (50%)	4/112 (3.6%)

presenting with deliberate self harm in a tertiary setup reported similar findings in an internet based survey of 329 participants who answered the demographic questions¹⁶. Of these, 91.8% (302/329) were female and the average age of the sample was 23.06 years (SD 8.62). The majority of participants reported their ethnicity as white (90.3%, 297/329). Of the remaining participants, 3.3% (11/329) reported mixed ethnicity, 1.5% (5/329) Asian, 1.5% (5/329) Chinese, 0.6% (2/329) black, and 2.7% (9/329) reported “other”. Most participants selected United Kingdom as their country of residence (69.9%, 230/329). Of the 329 participants who answered the question about prior self-harm, 98.5% (324/329) reported that they had previously self-harmed which is congruence to our report. The most common method of self-harming was cutting with 94.7% (306/323) of participants reporting this¹⁵⁻¹⁸.

Deliberate Self Harm is a major public health problem the rate is much higher in productive age group¹⁹⁻²⁰. Our findings pointing towards similar results reported previously by various researches, highlighting the risk factors for DSH like, female gender, young age and presence of psychosocial stressors and previous attempt²¹. In the same way, our results are quite substantiate the findings reported by Khan MM & colleagues who conducted a study in Gizar, the same geographical region of Gilgit Baltistan¹⁵. The study reported that

majority of the suicide victims were women (73%) and married. Methods used included jumping in river/lake (40%), ingesting poisonous substances (33%), hanging/strangulation (11%), firearms (5%), and jumping from height¹⁶. The study though has significant limitation in term of lack of generalizability & retrospective design. Further robust research is required to focus on risk factors for deliberate self harm.

CONCLUSION

Young age group, female gender and psychosocial stressors are the important determinants of suicidal behavior. Additionally, overdose on benzodiazepine has been the most frequent mode of self harm

RECOMMENDATIONS

Prescription of medications should be regulated. Further studies are suggested at the community level. Commonly available poisons (organophosphates) at home should be stored properly. DSH can be prevented by reporting emergencies about mental health awareness programs at media. Early diagnosis of different psychiatric illnesses including previous attempts and drug abuse can pre-vent further DSH and suicide.

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AUTHOR'S CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under:

Shah M: Idea, study design, acquisition of data and drafting the manuscript.

Yousafzai AW: Analysis and interpretation of data and manuscript writing.

Khan MZ: Data collection and analysis.

Khan MM: Idea of the research, & supervision.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.