

Self-Mutilation Among Patients With Psychiatric Disorders Referred to Lavasani Hospital, 2013 - 2014

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Abstract

Background: Self-injury is defined as the intentional injuring of one's own body without apparent suicidal intent. Self-harm is encountered frequently in psychiatric hospitals. Deliberate self-harm may be found in patients with a variety of diagnoses, including substance abuse, major depression, schizophrenia and especially borderline personality disorder.

Objectives: This study aimed to investigate the prevalence of self-injury and possible relating factors in patients with psychiatric diseases.

Patients and Methods: In this cross-sectional study, 42 patients with self-injury referred to Lavasani hospital in Tehran, Iran, were selected by random sampling during 2013 - 2014. The prevalence of self-injury, site and tools of self-injury and also possible contributing factors were evaluated. T-test and Fisher's exact test were used to analyze data.

Results: Mean distribution of self-injury in patients was 12.5%. Sharp object was the tool of injury in 90.5% of the patients, 4.8% by fire, 2.4% by stone and 2.4% by other attempted to self-injury. In 76.2% of the patients extremities were the site of injury. In 19%, 2.4% and 2.4% head and neck, trunk and abdomen were the sites of injury, respectively. There was a significant association between type of disorder and tool and body site of self-injury ($P < 0.001$).

Conclusions: It can be concluded that schizophrenia and drug-induced psychotic disorder were the most common types of disorders that are at risk of self-injury.

Keywords: Mental Disorders, Self-Mutilation, Prevalence

1. Background

Self-injury is defined as the intentional injuring of one's own body without apparent suicidal intent (1, 2). Self-harm is encountered frequently in psychiatric hospitals (3). Deliberate self-harm may be found in patients with a variety of diagnoses, including substance abuse, major depression, schizophrenia (4, 5), and especially borderline personality disorder (5-9). Self-harm occurs in nonclinical populations as well. Approximately 4% of the general population have reported a history of self-harm (10). This rate is 12.6% in samples of forensic referrals in Iran (11).

It is unclear whether self-harm is more common in women than in men, although some researchers appear to take for granted that self-harm is more common in women (12). Whereas Zlotnick et al. (5) found higher rates of deliberate self-harm in women, several other studies found self-

harm to be equally prevalent in men and women (13, 14). Two studies of nonclinical subjects also did not find gender differences (10, 15).

2. Objectives

The aim of this study was to evaluate the prevalence of self-injury according to gender distribution, site and tools of self-injury and also possible contributing factors. Knowing these data can help in taking necessary steps to prevent damage.

3. Patients and Methods

In this cross-sectional study, 42 patients with self-injury referred to Lavasani hospital in Tehran, Iran, in 2014

were selected by convenience sampling. The prevalence of self-injury, site and tools of self-injury and also possible contributing factors including age of patients, gender, family history of psychiatric diseases, type of possible underlying psychiatric disorder, addiction, and smoking were evaluated using history taking after admission. Underlying psychiatric disorder was diagnosed by a psychiatrist with 10 years of experience.

We considered lack of physical ailments along with self-mutilation as inclusion criteria. Cases with simultaneous physical illnesses were excluded from the study.

Individuals were asked to sign an informed consent form before answering the questionnaire. All the personal information remained anonymous.

3.1. Ethical Considerations

This study was approved in ethics committee of Baqiyatallah University of Medical Sciences and health services. Individuals were asked to sign an informed consent form before answering the questionnaire. All the terms of Helsinki declaration were considered and the personal information remained anonymous.

3.2. Statistical Analysis

Data were analyzed using statistical package for social sciences (SPSS) version 16 (SPSS Inc. Chicago, Illinois, USA) for windows. Normal distribution variables (approved by one-sample Kolmogorov-Smirnov test) were compared using an independent sample t-test between the subgroups. The Fisher's exact test was also used to compare categorical variables in the subgroups. A P value of less than 0.05 was considered statistically significant.

4. Results

Eventually, 42 cases (30 males and 12 females) with the mean age of 35.5 ± 12.2 years and average duration of disease of 10.07 ± 8.45 years underwent analysis. Table 1 shows demographic data of the patients. The average frequency of hospitalization was 4.26 ± 3.5 times. Also, 57.1% of the patients had a positive family history of psychiatric diseases. Thirty-one percent of the cases were substance abusers and 45.2% had a criminal history.

Table 2 shows the frequency distribution of type of disorders in patients. According to table 2, mean distribution of self-injury in patients was 12.5%. Schizophrenia and drug-induced psychotic disorder were the most common type of disorders in the patients. There was a significant association between the type of disorder and tool and body site of self-injury ($P = 0.001$).

Table 3 shows self-injury data including tools and site of self-injury in the patients. According to this table, stab and extremities were the most common tool and site of self-injury, respectively.

There was no significant relation between the self-injury tool and body site of self-injury with age and gender of the patients ($P > 0.05$).

5. Discussion

We found that most of the psychiatric patients with self-injury history used sharp objects for self-injury and extremities were the most common site of injury. Age and gender had no effect on the site and tools of self-mutilation but type of disorder showed a significant relationship.

Zanarini et al. (United States of America-2011) (16) and Konrad Bresin et al. (17) demonstrated that factors such as female gender, the simultaneous presence of major depressive disorder (MDD) and dissociative symptoms were effective on the possibility of self-mutilation. In our study, only the type of psychiatric disease showed a significant relationship with self-mutilation and age and gender of the patients had no effect on this area.

Andover et al. (United States of America-2005) (18) showed that there was no difference in the prevalence of various psychiatric disorders in patients with no self-mutilation. In the current study, schizophrenia and drug-induced psychotic disorder were the most common types of disorders.

According to Klonsky et al. study (9), the prevalence of self-mutilation in patients with personality disorders is the highest. However, in our study 10% of the patients were with personality disorders.

Wilhelm et al. (19) reported that OCD and body-dysmorphic were the most common psychiatric disorders in patients with self-mutilation. None of these two diseases were found in our study.

Maloney et al. (Australia-2010) (20) showed that 25% of addicts and 23% of the control group had self-injury attempts with no statistically significant difference. In our study, addiction did not show a significant association with self-injury, but drug-induced psychotic disorder showed a significant correlation.

Fizan Abdullah et al. (21) concluded that most of their patients used knife for self-injury that confirm our results.

5.1. Conclusion

In conclusion, self-injury in patients with psychiatric diseases is mostly with use of sharp objects and in extremities. We also concluded that there was a significant association between the type of disorder and tool and body site

Table 1. Demographic Data

Patients Value	Data (%)
Marital Status	
Single	57.1
Married	42.9
Education Level	
< Diploma	71.4
Diploma	19
> Diploma	9.5
Employment Status	
Employed	40.5
Unemployed	59.5
Smoking	64.3

Table 2. The Frequency Distribution of Type of Disorders in Patients^a

Type	Schizophrenia	Schizoaffective	DIPD	Depression	MR	MDD	BPD	BD
Frequency	26.2	9.5	26.2	2.4	2.4	9.5	9.5	14.3
Tools								
Stab	90.9	75	100	100	0	100	100	83.3
Stone	0	0	0	0	100	0	0	0
Fire	9.1	25	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	16.7
Body Sites								
Extremities	72.7	50	72.7	0	100	100	100	83.3
H&N	27.3	50	18.2	0	0	0	0	16.7
Trunk	0	0	9.1	0	0	0	0	0
Abdomen	0	0	0	100	0	0	0	0

Abbreviations: DIPD, drug-induced psychotic disorder; MR, mental retardation; MDD, major depression; BPD, borderline personality disorder; BD, bipolar disorder.
^aValues are expressed as (%).

Table 3. Self-Injury Data

Data	Tools				Body Sites			
	Stab	Stone	Fire	Others	Extremities	H&N	Trunk	Abdomen
Frequency, (%)	90.5	2.4	4.8	2.4	76.2	19	2.4	2.4
Mean age, (mean ± SD)	34.4 ± 11.4	68	40.5 ± 12.02	34	34.2 ± 12.8	37.5 ± 9.4	46	50
Male, (%)	93.3	3.3	3.3	0	73.3	23.3	3.3	0
Female, (%)	83.3	0	8.3	8.3	83.3	8.3	0	8.3

of self-injury. Knowing these data can help in taking necessary steps to prevent damage. There were no limitations in this study. Finally, further studies with larger sample sizes

are suggested to confirm the results of this study.

Footnotes

Authors' Contribution: All authors contributed equally in this project.

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