JCOMS

http://journalofcoms.com

Journal of

Current Oncology and Medical Sciences

Vol. 1, No.1

Short communication Free Access

Investigation of self-harm cases and related factors

Morteza Rahbar Taramsari [1*], Ardeshir Sheikh-Azadi [2]

[1] Department of Forensic Medicine, School of Medicine, Guilan University of Medical Sciences, Rasht, Iran

[2] Department of Anatomy, School of Medicine, Alborz University of Medical Sciences, Karaj, Iran

Abstract

Introduction: Self-harm is a deliberate and non-lethal act in which a person intentionally injures himself or consumes a substance in excess of the prescribed amount. Self-harm injuries are also seen in forensic clients. Self-mutilation in these people is done in order to achieve a goal and is accompanied by claims of delusion of others. The importance of this issue is the necessary urgency in differentiating it from suicide, malice, mock disease and conversion diseases. In this study, we have examined self-harm and some related factors.

Materials and Methods: In a retrospective cross-sectional descriptive study, a checklist including two sections of demographic information and self-harm information was prepared to collect the necessary information based on a review of the texts and was completed by the researcher for each case. The obtained data were analyzed using descriptive tests of SPSS statistical software.

Results: Out of 783 cases, 467 (59.6%) were men and the mean age of 783 patients was 28.25 ± 8.38 years. A higher percentage of clients had more lesions on the left side of their body (61.4%), referred with a scratch lesion (46.0%), referred to a lesion in the arm area (25.7%) and of hard-edged objects used for self-harm.

Conclusion: In the face of someone who self-harms, two things should be considered, one is to achieve an appropriate treatment path considering the possibility of a mental illness that is more relevant to hospital physicians and the second is a legal view of this. From the perspective of forensic science to differentiate the damage caused by conflict and self-harm.

Keywords: Self-harm, Forensics, Aggression

[*]**Corresponding Author:** Morteza Rahbar Taramsari

✉ Email: rahbar_m46@yahoo.com

Received: 2021.05.10, Accepted: 2021.06.13

Introduction

Aggression is defined as behavior that aims to harm oneself or another. Aggression in humans represents the instinct of death as opposed to the instinct of life in action. This instinct destroys others if it can, and if it fails to target others aggressively, it will turn to itself and manifest itself as self-harm and suicide (1). Compared to suicide, self-harm is done to change current emotions, but suicide is done to end current emotions. People who self-harm are usually considered unpopular and problematic, difficult to tolerate, and many of whom have severe social and personal problems and need care (2). Self-harm is a deliberate and non-lethal act in which a person intentionally injures himself or herself in various forms such as poisoning (drugs, alcohol, etc.), interfering with wound healing, jumping from a height, interfering with wound healing, or shooting himself (3). Self-harmers cite a wide range of causes for self-harm, including energy gain, addiction, body control, sexual pleasure, and uniqueness (4).

Self-harm injuries are also seen in forensic clients. Self-mutilation in these people is done to achieve a goal and is accompanied by claims of delusion of others. On the other hand, motivations in self-harming people were classified into 4 groups, which were in the form of involuntary negative reinforcement (stopping bad feelings), involuntary positive reinforcement (self-punishment), negative social reinforcement (not going to work) and positive social reinforcement (Draw attention) (5). The prevalence of self-harm is higher in early adulthood and can be the first manifestation of a mental illness. It is also more common in people with a history of child sexual abuse (6). Alcohol and substance abuse are more common in these people, and a higher percentage of these people have long-term mental health problems. The younger the age of onset of self-harm, the more unfavorable the prognosis and the longer and longer periods and the variety of self-harm methods (7). Today, with the advancement of genetics, theories have been proposed to indicate the relationship between specific genetic patterns and psychiatric disorders (8). In this study, we have examined self-harm and some related factors.

Materials and Methods

In a retrospective cross-sectional descriptive study, 783 patients were examined for self-harm. To collect the necessary information based on the review of the texts, the checklist includes two sections of demographic information (age, sex, marital status, occupation, education, history of alcohol and smoking, history of suicide and previous self-mutilation, presence of tattoos) and information related to Self-harm (location of injury, side of injury, number of injuries, impact device and number of lesions) was prepared and completed by the researcher for each case. The data were analyzed using descriptive tests of SPSS statistical software. Continuous variables were presented as mean ± SD and discrete data as frequency percentage.

Results

Out of 783 clients due to self-harm, 467 (59.6%) were men and the mean age of 783 patients was 28.25 ± 8.38 years, while the youngest was 16 years old and the oldest was 60 years old.

Most forensic clients who had self-harmed were unemployed (45.5%), with a diploma-postgraduate degree (37.2%), married (50.6%), right-handed, with more lesions on the left side of their body. (61.4%), no previous history of self-harm (65.4%), no history of mental illness (76.4%), no history of suicide (0.93%), no tattoos on body surfaces (81.5%) 3), no alcohol consumption (75.7%), no smoking (65.3%). The frequency of scratch lesions (46%) was higher than bruises, abrasions, scratches, cuts, tears and burns. The highest frequency distribution of lesions with lesions was in the arm area (25.7%), followed by lesions in the forearm area (19.9%) and then lesions in the neck area (15.3%) (Table 1). A higher percentage of clients presented with a lesion (64.7%) (Figure 1).

Table 1. Frequency distribution of the lesions area created by self-harming individuals.

The location of the lesion	face	Neck	Arm	Forearm	Front of the body	Back of the body	Thigh	Leg	Total
Number	35	120	201	156	125	70	41	35	783
Percent	4.5	15.3	25.7	19.9	16.	8.9	5.2	4.5	100

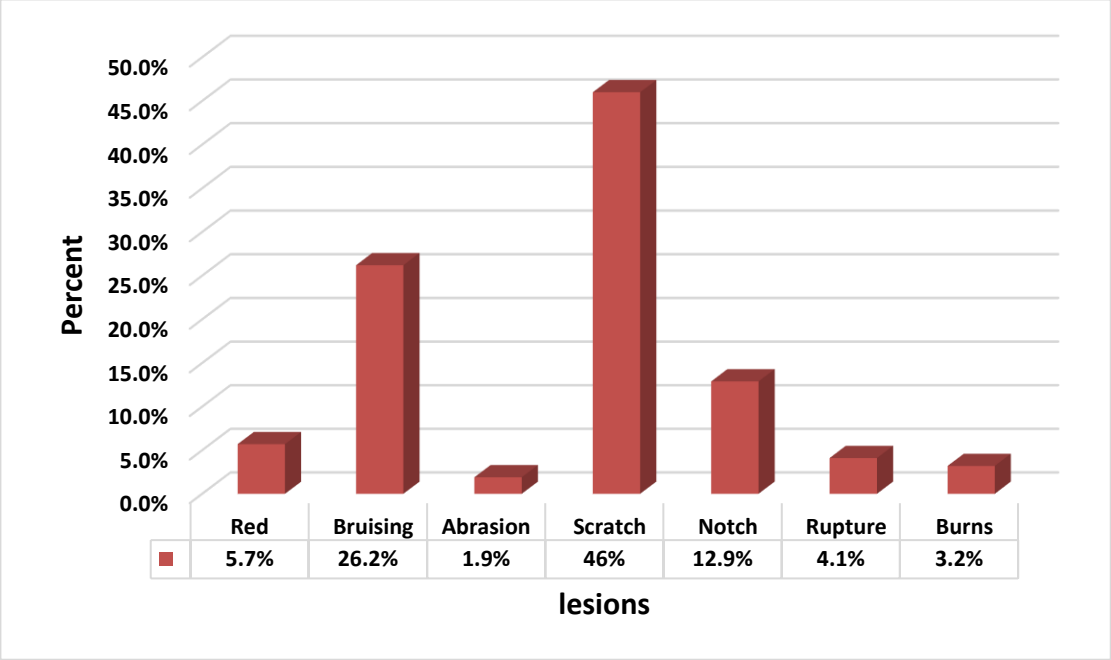

Figure 1. Frequency distribution of lesions generated by self-harmers.

The mean number of lesions was 1.52 82 0.82, while the lowest number of lesions in individuals was 1 and the highest number of lesions in subjects was 4. Also, a higher percentage of people had used hard-edged objects for self-harm (38.4%) (Table 2).

Table 2. Frequency distribution of the number of lesions created by self-harming individuals.

Number of lesions	One lesion	Two lesions	Three lesions	More than Three lesions	Total
Number	507	170	75	31	783
Percent	64.7	21.7	9.6	4	100

Discussion

In 2004, the Institute for Healthcare Improvement defined self-harm as "the expression of a personal stress that is usually in the private environment and in the form of self-harm" and divided it into three types: self-harm (including behaviors such as cutting, burning, and swallowing). Substances, hanging, jumping from heights or in front of vehicles, shooting

oneself and plunging objects into the body), poisoning (drug overdose or ingestion of toxic substances) and risky behaviors (smoking), Overeating or excessive hunger, etc.) has been divided (9).

In the present study, which examined self-harm and some related factors in patients referred to the medical organization, 783 people were diagnosed with self-harm, 59.6% of whom were men. The mean age of the subjects was 28.25 ± 8.38. Most of the subjects were in the age range of 21 to 40 years. These results were similar to the Diggins study and different from the Lee study in South Korea with a mean of 41.29 ± 17.61 (8, 10).

Most of the cases were unemployed (356 people equal to 45.5%), without higher education (57.1% less than diploma education) and married (50.6%). Most of the subjects were unemployed (356 people equal to 45.5%), without higher education (57.1% less than diploma education) and married (50.6%). In a Mars et al. Study, it was reported that the rate of self-harm was higher in people with low levels of education (11). 185 subjects (23.6%) reported a history of mental illness. In Lee's study, 10% of patients reported a history of psychiatric counseling (10). In another study, 4.7% had a previous history of self-harm. This was also reported in the study by Lee et al. With a previous history of self-harm is 85.1%. On the other hand, studies have shown that a history of self-harm is a risk factor for suicide in these people (10, 12). The majority (67.3%) of the subjects were right-handed and the frequency of self-inflicted lesions on the left side of the body (61.4%) was higher. This case is predictable due to the natural pattern in society and the dominance of the right hand as the dominant hand of individuals and on the other hand, the natural use of the dominant hand to perform various tasks.

The most common types of lesions diagnosed were scratches (46%) followed by bruises (26.2%), cuts (12.9%) and the rest. Regarding the distribution of self-inflicted lesions in the present study, the arm was in the next position with 25.7% of the most injured area and the forearm (19.9%). 64.7% had only one self-inflicted injury. The sharp and winning body (20/1) had the most wounds after the hard-edged body (38.4) and the hard body (20/4). In another related study, abrasions followed by bruising, redness, cuts, and abrasions were self-inflicted lesions, respectively, and the hard-edged body accounted for 50% of the penis used. In this case, the arm was the most injured and the forearm and neck were next.

Superficial cuts and scratches are the most common lesions of self-injury and were mostly observed in the upper extremities of the non-dominant hand, especially the forearm and wrist. In Lee's study, after intoxication and stabbing, self-mutilation followed in the third place, followed by hanging. Suicide and self-mutilation practices vary from country to country, depending on laws, culture, and economic status. In the United States, firearms are used, in rural areas of developing countries, pesticides are used, and in countries such as Korea and Japan. Medication overdoses are the most common method (10, 13).

In conclusion, in dealing with self-harm, two things must be considered: From the perspective of forensic science to differentiate the damage caused by conflict and self-harm. Therefore, a proper history and examination of how the injury occurred is very important. On the other hand, the need for psychological examinations in suspicious cases can open the door for decision-making physicians.

Author contribution

MRT and AShA wrote and completed the manuscript.

Acknowledgments

We express our appreciation to all people who contributed us in this project.

Conflict of interest

The authors declare that they have no conflicts of interest.

References

1. Andover MS, Morris BW. Expanding and clarifying the role of emotion regulation in nonsuicidal self-injury. The Canadian Journal of Psychiatry. 2014;59(11):569-75.
2. Bresin K, Schoenleber M. Gender differences in the prevalence of nonsuicidal self-injury: A meta-analysis. Clinical psychology review. 2015;38:55-64.

3. Rabi S, Sulochana J, Pawan S. Self-inflicted cut injury as common method of deliberate self harm: A Retrospective study from Nepal. Indian journal of psychological medicine. 2017;39(5):579-83.
4. Müller A, Claes L, Smits D, Brähler E, de Zwaan M. Prevalence and correlates of self-harm in the German general population. PLoS one. 2016;11(6):e0157928.
5. Gillies D, Christou MA, Dixon AC, Featherston OJ, Rapti I, Garcia-Anguita A, et al. Prevalence and characteristics of self-harm in adolescents: meta-analyses of community-based studies 1990–2015. Journal of the American Academy of Child & Adolescent Psychiatry. 2018;57(10):733-41.
6. Karrouri R. Self-injury in hospitalized patients: Concerning 19 cases. L'encephale. 2016;43(3):212-6.
7. Gupta R, Narnoli S, Das N, Sarkar S, Balhara YPS. Patterns and predictors of self-harm in patients with substance-use disorder. Indian journal of psychiatry. 2019;61(5):431.
8. Avramopoulos D. Recent advances in the genetics of schizophrenia. Molecular neuropsychiatry. 2018;4(1):35-51.
9. Wood A. Self-harm in adolescents. Advances in Psychiatric treatment. 2009;15(6):434-41.
10. Lee CA, Choi SC, Jung KY, Cho SH, Lim KY, Pai KS, et al. Characteristics of patients who visit the emergency department with self-inflicted injury. Journal of Korean medical science. 2012;27(3):307-12.
11. Mars B, Heron J, Crane C, Hawton K, Lewis G, Macleod J, et al. Clinical and social outcomes of adolescent self harm: population based birth cohort study. Bmj. 2014;349.
12. Taghaddosinejad F, Sheikhazadi A, Yaghmaei A, Vakili V, Saberi SM, Behnoush B. A survey of self-mutilation from forensic medicine viewpoint. The American journal of forensic medicine and pathology. 2009;30(4):313-7.
13. Bachmann S. Epidemiology of suicide and the psychiatric perspective. International journal of environmental research and public health. 2018;15(7):1425.