

## Original Article

# Self-inflicted Cut Injury as Common Method of Deliberate Self Harm: A Retrospective Study from Nepal

Shakya Rabi, Joshi Sulochana, Sharma Pawan

### ABSTRACT

**Context:** Deliberate self-injury, a fairly common condition is present across all culture. It is defined as intentional, direct injuring of body tissue without suicidal intent. We continue to lack a sufficient understanding of this behavior in the context of South East Asian region. **Aims:** This study aims to explore the characteristics of self-cutting, and gender differences in homologous group of youth applying for foreign employment in Nepal. **Settings and Design:** Cross-sectional, single interview method in an out-patient setting. **Subjects and Methods:** The youths applying for foreign employment were screened for self-harm attempt using single question. Screen positive individuals were applied with inclusion and exclusion criteria. The data were collected in a single interview by consultant psychiatrist. **Results:** Males were more than females and the mean age (standard deviation) at the time of act and current presentation were 16.52 (3.13) and 24.70 (5.54) years, respectively. Various methods were used in self-inflicting cut, and certain amount of stress was present in the majority of the participants. There was no significant difference between male and female in all descriptive characteristics except for mean age at the time of presentation. **Conclusions:** The descriptive results from Nepal are keeping with most of the published literature. The study is the first one from Nepal, and we expect that this will help in laying a good foundation for further studies with stronger methodologies.

**Key words:** *Deliberate self-harm, Nepal, suicide attempt*

### INTRODUCTION


Deliberate self-injury can be defined as the intentional and direct injuring of one's body part without suicidal intent.<sup>[1]</sup> This behavior has also been referred by different other names such as moderate self-mutilation,<sup>[2]</sup> deliberate self-harm,<sup>[3]</sup> self-wounding,<sup>[4]</sup> and parasuicide<sup>[5]</sup> by different authors. It is different from the stereotypic self-injurious behaviors seen in individuals with mental retardation, and self-mutilation

seen in psychotic individuals. Current research suggests that self-injury is common not only in psychiatric populations but also in nonclinical populations. It has a number of features that set it apart from suicidal behavior and other mental disorders, like a prominent symptom pattern and a relatively clear presentation of biological and associated features (e.g., age of onset, precipitants, and course). Hence, some authors have suggested it to be an independent diagnostic category.<sup>[6]</sup>

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Skin-cutting appears to be the most common type of self-injury, but other forms include burning, scratching, banging or hitting body parts, and interfering with wound healing.<sup>[1,7]</sup> The report by Offer and Barglow in 1960<sup>[8]</sup> was the first one to recognize wrist cutting as a widespread phenomenon in hospitalized psychiatric patients. After that in 1967, Graff and Mallin tried to define this as a syndrome for the first time and related it to early maternal deprivation and inability to give and receive meaningful verbal communications.<sup>[9]</sup> Rosenthal *et al.* in 1972 further gave evidence to this as a syndrome and related this behavior to genital conflict, reaction to helplessness and inability to handle aggression<sup>[10]</sup> whereas, Simpson suggested that self-cutting could be an act of “anti suicide” to recover from a depersonalized state.<sup>[11]</sup>

The coexistence of self-cutting, abnormal eating behavior, and other impulsive problematic behavior was put forward in the 1980s, and many researchers reported and discussed an association among these behavioral disorders. Some authors were of a view that habitual self-cutting is an independent clinical entity and occurs in the context of an eating disorder.<sup>[3,12,13]</sup> Other researchers were of the view that self-cutting and abnormal eating behavior are only partial symptoms in patients with borderline personality disorder.<sup>[12,14]</sup> However, since 1990, many studies have identified histories of sexual/physical abuse as a risk factor for self-cutting, and they have proposed that self-cutting predicts the existence of posttraumatic stress and dissociation.<sup>[7,15]</sup>

In the recent decades, research on self-injury has increased, and much is now known about the prevalence and risk factors for self-injury in various populations.<sup>[16]</sup> However, we continue to lack a sufficient understanding in the context of South East Asian region. Apart from this, none of the studies till date have tried to look into the self-cutting behavior in a separate homologous group in developing nation like Nepal, unlike in the West. The present study aims to examine different characteristics of self-cutting, and gender differences among the youth of Nepal applying for foreign employment.

## SUBJECTS AND METHODS

The study is a cross-sectional study conducted between the periods of 2013–2016 in patients referred to psychiatry outpatient department of tertiary care center (Patan Academy of Health Sciences) in Nepal by medical officers, after initial assessment for the clients aspiring to go for foreign employment. Purposive sampling method was employed. A total of sixty patients were recruited in the study. Ethical approval was taken from the Institute’s Ethical Committee.

The first assessment was done by medical officer as general health check-up. As a part of the clinical workup of psychological well-being a question “Have you ever attempted to injure yourself or end your life?” was asked. If they provided an affirmative response to this initial question, he/she was enrolled for further workup by psychiatrists. The psychiatrist then asked to describe the circumstances surrounding one such attempt, thereby enabling confirmation by him that the behavior did, in fact, qualify as a deliberate self-harm as opposed to direct suicide attempt. The operational definition of deliberate self-harm was taken from the definition of “parasuicide” used in the WHO/Euro Multi-Centre Study on Parasuicide, namely, “an act with nonfatal outcome in which an individual deliberately initiates a nonhabitual behavior, that without intervention from others will cause self-harm, or deliberately ingests a substance in excess of the prescribed or generally recognized dosage, and which is aimed at realizing changes that the person desires through the actual or expected physical consequences.”<sup>[17]</sup> The inclusion and exclusion criteria were then applied. Patients having a history of only self-inflicted cut injury as a part of deliberate self-harm, of any age and gender were included. Patients having a present or history of axis I diagnosis, as screened by the interview of psychiatrist; patients who were unable to understand or otherwise participate in the study (e.g. medically unfit, severe learning disabilities, severe disturbance of mental state, organic brain syndrome) were excluded. Patient with history of other self-inflicted injuries such as burn, poisoning, and hanging was also excluded. Valid consent was taken from the patients for enrolment in the study. Anonymity and confidentiality were assured by interviewers.

Recording of the sociodemographic profile was done using a semi-structured pro forma which elicited the basic demographic information from the participants such as age, gender, occupation, ethnicity, religion, education (years of schooling), and marital status. After that a detailed evaluation was done by the principal investigator (consultant psychiatrist) and the descriptions were noted.

## RESULTS

### Sociodemographic profile

A total of sixty samples were enrolled in the study. The sociodemographic data [Table 1] shows that the male subjects (56.7%) were more than the female (43.3%). In the ethnicity wise distribution, it was seen that maximum numbers were from Brahmin and Janajati groups followed by Chhetri, Dalit and Madhesi. The majority were of Hindu religion. Mean age of years of education at the time of the event was  $16 \pm 3.13$  years

**Table 1: Sociodemographic profile of the study sample**

Demographic characteristics	n (%)
Sex	
Male	34 (56.7)
Female	26 (43.3)
Ethnicity	
Brahmin	16 (26.7)
Chhetri	12 (20.0)
Janajati	14 (40.0)
Madhesi	1 (1.7)
Dalit	7 (11.7)
Religion	
Hindu	53 (88.3)
Buddhist	1 (1.7)
Muslim	1 (1.7)
Christian	1 (1.7)
Prakrit	4 (6.7)
Marital status	
During the act	
Unmarried	54 (90.0)
Married	6 (10.0)
Now	
Unmarried	35 (58.3)
Married	25 (41.7)
Mean age during the act (SD)	16.52 (3.13)
Mean age current (SD)	24.70 (5.54)
Mean years of education	
During the act (SD)	9.40 (2.16)
Now (SD)	12.83 (2.36)

SD – Standard deviation

and mean years of education in the current assessment were  $9.40 \pm 2.16$  years. At the time of the act, maximum individuals (90%) were unmarried, whereas at the point of current assessment it was seen that 58.3% ( $n = 35$ ) were unmarried and 41.7% ( $n = 25$ ) were married.

### Before the act

In the detailed evaluation of the different qualitative aspects [Table 2], the history about the precipitating factor was taken and it was seen that majority of the participants reported criticism or scolding by family members (25%), quarrel with spouse or romantic partner (21.7%), impress someone (18.3%), and rejection or humiliation (18.3%) as major precipitating factor. Similarly, some of the participants reported, failure in examinations and hiding previous scars as precipitating factors. 26.6% had substance use before the act.

### During the act

As seen in Table 2, 80% of the participants used blade or knife for the harm, while some of them used pointed objects or needle (11.7%) and broken glass or ceramic (8.3%). The use of these instruments leads to a linear superficial cut in 68.3% individuals and deep cut in 3.3% individuals. Interestingly, 11.7% and 5% individuals inscribed the initials of their loved ones and

**Table 2: Descriptive variables of study sample**

Descriptive variables	n (%)
Precipitating factor	
Quarrel with spouse/romantic partner	13 (21.7)
Peer pressure/impress someone	11 (18.3)
Rejection humiliation	11 (18.3)
Failure in exams	3 (5.0)
Quarrel/criticism/scolding by family	15 (25)
Hiding previous scar	3 (5)
Forceful marriage	4 (6.7)
Instrument used	
Blade knife	48 (80)
Pointed object/needle/nib	7 (11.7)
Broken glass/ceramic	5 (8.3)
Nature of harm	
Linear cut	41 (68.3)
Deep cut	2 (3.3)
Inscribing of initials	7 (11.7)
Tattoo	3 (5.0)
Simple scratch	7 (11.7)
Site of injury	
Left forearm	57 (95.0)
Right forearm	2 (3.3)
Both arms	1 (1.7)
Intention	
Alleviate psychological distress	12 (21.6)
Revenge	7 (11.7)
Gain attention	27 (45.0)
Hide previous scar	3 (5.0)
Curiosity/commemoration	7 (11.7)
Multiple reasons	3 (5.0)
Display of wound	
Never	21 (35)
Accidental	4 (6.7)
Some time in life	35 (58.3)
Final perceived out come	
Success	20 (33.3)
Failure	40 (66.7)

made a tattoo, respectively. Similarly, 11.7% individuals made simple scratch. These harm were made in the left forearm in the majority of the participants (95%) and minority of individuals 3.3% made harm on the right forearm. When we looked at the intention behind the act, it was seen that maximum individuals (45%) reported that they performed the act to gain attention. There were other reason such as alleviating the psychological distress, revenge, hiding previous scar, curiosity, and self-punishment. Some had multiple intentions among the above-mentioned ones. We also looked at the location where the participants performed the act of self-harm. It was seen that majority performed in bedroom of home 73.3% and rest in the places other than home like class, hostel, or outdoors. In 12 (20%) cases, there was the presence of other individual during the time of act. The mean number of cuts were 15 (11.5) with the single cut being minimum and 72 cuts being maximum. The mean wound size was 3.08 cm (1.43 cm).

### After the act

35% individuals did not display their wound, whereas the majority (58.3%) of the participants displayed the wound to family or friends later in their life; some (6.7%) had an accidental display [Table 2]. 95% had guilt or regret after the act, whereas two individuals had a sense of triumph and one individual reported no feelings. When further inquired the major reasons for the guilt were an ugly scar, distress to family members and friends, pain, failure to achieve an intentional outcome, counseling by family members and friends. Among the participants in the study, 66.7% reported that the act was a failure and they did not achieve the desired outcome. Only 11 individuals, i.e., 18.3% repeated the act.

We analyzed the different variables for any significant characteristics differences between male and female, and in the study sample, there were no significant differences except in the mean age (Mann–Whitney U-test,  $P = 0.03$ ) at the time of presentation.

## DISCUSSION

Skin cutting appears to be the most common form of deliberate self-harm, occurring in at least 70% of individuals who deliberately harm themselves. The present study examined the descriptive aspects of deliberate self-harm in a small group of individuals going for foreign employment. The sample can be considered the representative sample as the participants represent all three geographical regions of Nepal. The studies are not very clear whether self-harm is more common in women or men, some researchers state that self-harm is more common in women than in male population.<sup>[18]</sup> However, studies found self-harm to be equally prevalent in men and women,<sup>[7,19,20]</sup> unlike the findings in our study where male were more in number. The reason for this could be more males go for foreign employment and thus underwent the medical examination. The social dynamics of employment would also affect the sample we got for examination. The age consideration at present cannot be commented on because the sample is a homogeneous group of individuals seeking foreign employment. However, the age at which the sample did the act of deliberate harm is keeping with the literature published, i.e. common in the adolescent age group.<sup>[21]</sup> Among the sample collected, it was seen that all the participants reported one or the other reason for the act. All the acts seem to fall in some stress-related acts, except for a handful of individuals who did it on purpose to hide the scars and to impress their loved ones. As we only took the sample for deliberate self-harm in the form of cut injury only, it is evident that the participants used the most easily available instruments like blade and knife. Several

studies have reported associations between substance abuse and deliberate self-harm<sup>[22,23]</sup> but other studies have not confirmed this relationship,<sup>[24]</sup> in our sample, only 26.6% reported some substance use before the act; however, the dependence use was our exclusion criteria. Studies have suggested a clear-cut link with the psychiatric disorders and personality problems.<sup>[25]</sup> However, we had psychiatric disorders and personality disorders as exclusion criteria. In a study by Hawton *et al.*, relationship difficulties particularly problems with partners (51.3%) and other family members (41.6%), were by far the most common type of problem for deliberate self-harm as seen in our study.<sup>[26]</sup> One of the main reason for deliberate self-harm is heightened the experience of negative emotion, as self-harm may acutely alleviate emotional distress.<sup>[27]</sup> An adverse life event, especially one involving interpersonal conflict or a relationship breakdown, could trigger self-harm in a vulnerable person.<sup>[28]</sup> In our sample, one way or the other some amount of conflict can be seen as a precipitating factor. However, as our method of study is heavily based on an interview of retrospective events, the information is prone to various recall biases, which may lead to the overreporting or underreporting of events. There were no studies on socioeconomic status or level of education and self-harm in adults. In adolescents, self-harm rates were associated with a lower level of education.<sup>[29]</sup> In our sample, the mean year of education is 9.40 years for the mean age of 16.52 years indicative of the slightly lower level of education at the time of the event. Most of the deliberate self-harm act occurs at home as per literature<sup>[30]</sup> and our result is in keeping with the findings. The most common site for the injury as left forearm can be explained on the basis of the right handedness of the sample population. As per a systematic review, in a patient with one episode of self-harm nonfatal repetition rates are around 15% after 1 year, the median proportion repeating nonfatal self-harm is 16% at 1 year and 23% in studies lasting longer than 4 years.<sup>[31]</sup> Our study also has shown similar results (repetition in 18.3% of individuals). Guilt and regret are one of the common emotional states that follow self-harm<sup>[32]</sup> and the same can be seen in our study population.

The strength of the current study is that it is the first study from the setting of Nepal to look into the descriptive Characteristics of self harm in homogeneous sample that is representative of the country. We have looked into the details of the different aspects of deliberate self-harm in a qualitative manner, by taking a detailed clinical history rather than relying on self-rating scales. This can provide a way forward for developing a detailed clinical interview manual. However, we have some limitations of our study. At the very beginning, a single question “Have you ever attempted to injure

yourself or end your life” might not identify all the screened individuals. Similarly, relying only on the interviewer for the data might have some biased reports. As we had open-ended questions, so varied response was obtained which were difficult to analyze (small sample for each variable). Similarly, as the interview was taken long after the attempt, there are chances of recall bias among the participants.

## CONCLUSIONS

Deliberate self-harm is a fairly common condition, and among the methods used by patients, cutting is most common. In the context of Nepal, as there is a paucity of psychiatrists and psychologists, there is a strong challenge in terms of identifying and managing this condition. From research perspective, hospital data keeping is severely lacking. To understand and conclude about this complex condition, it is mandatory that we ensure longitudinal follow-up on the patients and further explore the phenomenology, risks and outcomes. It is equally important to develop parameters for newer studies with strong methodologies.

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## Conflicts of interest

There are no conflicts of interest.

## REFERENCES

- Herpertz S. Self-injurious behaviour. Psychopathological and nosological characteristics in subtypes of self-injurers. *Acta Psychiatr Scand* 1995;91:57-68.
- Favazza AR, Rosenthal RJ. Diagnostic issues in self-mutilation. *Hosp Community Psychiatry* 1993;44:134-40.
- Pattison EM, Kahan J. The deliberate self-harm syndrome. *Am J Psychiatry* 1983;140:867-72.
- Tantam D, Whittaker J. Personality disorder and self-wounding. *Br J Psychiatry* 1992;161:451-64.
- Ogundipe LO. Suicide attempts v. deliberate self-harm. *Br J Psychiatry* 1999;175:90.
- Muehlenkamp JJ. Self-injurious behavior as a separate clinical syndrome. *Am J Orthopsychiatry* 2005;75:324-33.
- Briere J, Gil E. Self-mutilation in clinical and general population samples: Prevalence, correlates, and functions. *Am J Orthopsychiatry* 1998;68:609-20.
- Offer D, Barglow P. Adolescent and young adult self-mutilation incidents in a general psychiatric hospital. *Arch Gen Psychiatry* 1960;3:194-204.
- Graff H, Mallin R. The syndrome of the wrist cutter. *Am J Psychiatry* 1967;124:36-42.
- Rosenthal RJ, Rinzler C, Walsh R, Klausner E. Wrist-cutting syndrome: The meaning of a gesture. *Am J Psychiatry* 1972;128:1363-8.
- Simpson MA. The phenomenology of self-mutilation in a general hospital setting. *Can Psychiatr Assoc J* 1975;20:429-34.
- Lacey JH, Evans CD. The impulsivist: A multi-impulsive personality disorder. *Br J Addict* 1986;81:641-9.
- Favazza AR, Conterio K. Female habitual self-mutilators. *Acta Psychiatr Scand* 1989;79:283-9.
- Gunderson JG, Zanarini MC. Current overview of the borderline diagnosis. *J Clin Psychiatry* 1987;48(Suppl):5-14.
- van der Kolk BA, Perry JC, Herman JL. Childhood origins of self-destructive behavior. *Am J Psychiatry* 1991;148:1665-71.
- Skegg K. Self-harm. *Lancet* 2005;366:1471-83.
- Platt S, Bille-Brahe U, Kerkhof A, Schmidtke A, Bjerke T, Crepet P, *et al.* Parasuicide in Europe: The WHO/EURO multicentre study on parasuicide. I. Introduction and preliminary analysis for 1989. *Acta Psychiatr Scand* 1992;85:97-104.
- Suyemoto KL. The functions of self-mutilation. *Clin Psychol Rev* 1998;18:531-54.
- Stanley B, Gameroff MJ, Michalsen V, Mann JJ. Are suicide attempters who self-mutilate a unique population? *Am J Psychiatry* 2001;158:427-32.
- Gratz KL. Measurement of deliberate self-harm: Preliminary data on the deliberate self-harm inventory. *J Psychopathol Behav Assess* 2001;23:253-63.
- Portzky G, van Heeringen K. Deliberate self-harm in adolescents. *Curr Opin Psychiatry* 2007;20:337-42.
- Zlotnick C, Mattia JI, Zimmerman M. Clinical correlates of self-mutilation in a sample of general psychiatric patients. *J Nerv Ment Dis* 1999;187:296-301.
- Langbehn DR, Pfohl B. Clinical correlates of self-mutilation among psychiatric inpatients. *Ann Clin Psychiatry* 1993;5:45-51.
- Dulit RA, Fyer MR, Leon AC, Brodsky BS, Frances AJ. Clinical correlates of self-mutilation in borderline personality disorder. *Am J Psychiatry* 1994;151:1305-11.
- Haw C, Hawton K, Houston K, Townsend E. Psychiatric and personality disorders in deliberate self-harm patients. *Br J Psychiatry* 2001;178:48-54.
- Hawton K, Harriss L, Hall S, Simkin S, Bale E, Bond A. Deliberate self-harm in Oxford, 1990-2000: A time of change in patient characteristics. *Psychol Med* 2003;33:987-95.
- Fliege H, Lee JR, Grimm A, Klapp BF. Risk factors and correlates of deliberate self-harm behavior: A systematic review. *J Psychosom Res* 2009;66:477-93.
- Morgan HG, Burns-Cox CJ, Pocock H, Pottle S. Deliberate self-harm: Clinical and socio-economic characteristics of 368 patients. *Br J Psychiatry* 1975;127:564-74.
- Brunner R, Parzer P, Haffner J, Steen R, Roos J, Klett M, *et al.* Prevalence and psychological correlates of occasional and repetitive deliberate self-harm in adolescents. *Arch Pediatr Adolesc Med* 2007;161:641-9.
- Madge N, Hewitt A, Hawton K, de Wilde EJ, Corcoran P, Fekete S, *et al.* Deliberate self-harm within an international community sample of young people: Comparative findings from the Child and Adolescent Self-harm in Europe (CASE) Study. *J Child Psychol Psychiatry* 2008;49:667-77.
- Owens D, Horrocks J, House A. Fatal and non-fatal repetition of self-harm. Systematic review. *Br J Psychiatry* 2002;181:193-9.
- Gratz KL. Risk factors for and functions of deliberate self-harm: An empirical and conceptual review. *Clin Psychol Sci Pract* 2003;10:192-205.