

# Non-suicidal self-injury: Demographics, self-harm events, characteristics, and reasons

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## ABSTRACT

**Background:** Suicide and suicide attempt rates for children and adolescents have been increasing overtime. **Objectives:** Our objectives were to study the characteristics of adolescents who practice non-suicidal self-injury (NSSI) with respect to the self-harm events and motives. **Materials and Methods:** The cases consisted of 25 adolescents referred to the School Health Psychiatric Clinic with NSSI. Diagnoses were made according to the Diagnostic and Statistical Manual of Mental Disorders – 5<sup>th</sup> edition. A collection sheet was designed to obtain information regarding case demographics, type of injury, injury characters, and reasons for self-harm events. **Results:** The majority of cases were young female adolescents (84%) whose parents had received a good education; most had used cuts with sharp objects (92%). The cuts were carried out alone (92%) and within 1 h of thought acquisition. All cases were exposed to maltreatment during childhood. Half of the cases had obtained the idea from friends and one-third from social media. The stated reasons were controlling stress in 60%, coping with loneliness in 32%, and experiencing in 32%. **Conclusion:** NSSI is common among young adolescent girls, and practitioners should routinely inquire about its presence in clinical interviews and during periodic health surveys. The management of negative emotions is an essential step toward prevention.

**KEY WORDS:** Adolescents; Bahrain; Non-suicidal Self-injury; Suicidal Thoughts; Self-harm


## INTRODUCTION

Non-suicidal self-injury (NSSI) is defined as the direct, deliberate destruction of one's own body tissue with the absence of the intent to die.<sup>[1]</sup>

NSSI is very common in adolescent girls and is considered to be the strongest indicator for predicting future suicide.<sup>[2-4]</sup> The features of NSSI have been described as including both difficulties controlling the behavior and negative emotional

activity.<sup>[5]</sup> Most of the studies in the NSSI literature have been cross sectional in design; therefore, the casual relationship has still not been identified. Longitudinal studies have focused on the present behavior and not on identifying risk factors.

Many clinicians agree that there is a need to identify persons at risk for NSSI.<sup>[6]</sup> One of the known risk factors is the presence of suicidal thoughts in early childhood, which might have persisted longer than suicidal thoughts or suicidal attempts in adulthood.<sup>[7,8]</sup> Information on NSSI and suicide, particularly in the younger age group under 12 years, are lacking. Furthermore, there is a need to focus on aspects such as risk factors, prevention, and intervention.<sup>[9]</sup> In a study by King *et al.*, five profiles of adolescents at elevated risk for suicide attempts are described, including profiles of repeated NSSI, aggression, impulsive behavior, and sexual and physical abuse.<sup>[10]</sup>

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To the best of our knowledge, NSSI as a separate clinical entity has not been studied in the Arabic Gulf Region; however, suicide attempts have been extensively reported both internationally and in the region.<sup>[11]</sup> In Bahrain, the prevalence of suicide and suicide attempts has been reported in several studies.<sup>[11,12]</sup> In these studies, the prevalence of suicide was low (three cases per 100,000), and the incidence of suicide attempts by overdose was at a moderate level (105/100,000). Moreover, risk factors for suicide attempts among youth included interpersonal relationships with the opposite sex, unemployment, and poor school performance.<sup>[12]</sup>

In this report, we discuss the characteristics of 25 cases of Bahraini adolescents with NSSI, focusing on event characteristics and reasons to address the gap in the existing literature on this clinical condition in this particular geographical area.

## MATERIALS AND METHODS

### Design

This was a cross-sectional design.

### Sample

Children and adolescents referred to a School Health Psychiatric Clinic located in the Primary Health Care Center, Ministry of Health, Bahrain, with a history of NSSI ( $n = 25$ ). The diagnoses were made according to the Diagnostic and Statistical Manual of Mental Disorders – 5<sup>th</sup> edition criteria.<sup>[13]</sup> Cases with clear suicide attempts were excluded from the study. The period of study was from January 1, 2019, to December 31, 2019. Case recruitment was discontinued at the beginning of the coronavirus disease 2019 pandemic due to operational reasons.

### Procedures

Cases were interviewed face to face by team members. Information was collected using a separate data collection sheet designed for the study in the Arabic language. The sheet included basic demographic data, type of injury inflicted, circumstances of self-harm, and reasons for attempting the injuries.

The study form was pilot tested on six adolescents before its implementation for training and clarification purposes. The interviews lasted 15–20 min. None of the participants refused to take part in the study. Consent forms were signed by each participant with the approval of the guardians. In the consent form, it was stated that participation was voluntary, and participants could withdraw from the study at any time without consequences. It was also stated that the information would be treated with the utmost confidentiality, and the results would be discussed collectively as a group.

Ethical approval was obtained from the research committee at the Primary Care Directorate of the Ministry of Health.

Social class was determined with a modified Redlich and Rahae 5-point Likert scale.<sup>[14]</sup>

One is the highest class and 5 is the lowest class.

### Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences version 25. Descriptive statistics were summarized for demographic characteristics and outcome measures. The means and standard deviations were reported for the continuous variables, and applicable count and percentages were reported for the categorical variables.

## RESULTS

Table 1 shows the demographic characteristics of the cases. The mean age was  $15.3 \pm 1.75$  years, and the majority of the cases were female (84%). The majority of the mothers had received a good education (44% had university or above education). The majority of cases belonged to a good social class (classes 1, 2, and 3), and only 16% were from the working classes (classes 4 and 5).

**Table 1:** Demography of NSSI cases ( $n=25$ )

Variables	<i>n</i>	%
Gender		
Male	4	16.00
Female	21	84.00
Father's education		
Primary education	3	12.00
Secondary education	10	40.00
University education	10	40.00
Graduate education	2	8.00
Mother's education		
Primary education	3	12.00
Secondary education	11	44.00
University education	10	40.00
Graduate education	1	4.00
Father's employment		
Unemployed	1	4.00
Employed	18	72.00
Retired	6	24.00
Mothers employment		
Unemployed	4	16.00
Employed	6	24.00
Retired	1	4.00
Housemaker	13	52.00

NSSI: Non-suicidal self-injury

Table 2 presents the details of the NSSI cases by type of injury. The vast majority of cases used cuts with sharp instruments (92%), followed by hard hits (16%), scratches (8.0%), and biting and swallowing dangerous liquids (4% each).

Table 3 provides information on the characteristics of the NSSI events. About 92% of cases did the act alone, one-third only felt pain while doing it, and 84% initiated the act within 1 h of entertaining the idea. Almost half of cases got the idea from friends, and one-third got the idea from social media. All cases were exposed to maltreatment during childhood in different forms, including physical, emotional, and sexual abuse in 32%, 44%, and 24%, respectively.

Table 4 shows the reasons for NSSI as reported by the cases. The following motives were disclosed: Negative emotion and controlling stress in 60%, experimenting and self-control in 32%, coping with loneliness in 32%, confirming feeling in 16%, escaping from reality in 16%, confirming memories in 12%, and protecting others and feeling belonging in 4%.

**DISCUSSION**

NSSI was encountered mostly among young female adolescents whose parents had received a good education and whose fathers were employed. They cut their skin with sharp objects as a method, had negative emotions, and acted

impulsively alone. The reasons reported by the cases included coping with stress, loneliness, and self-control. All these findings were similar to those mentioned in the previous reports.<sup>[12]</sup> As this was a cross-sectional study design, it was not expected that the causative factors would be commented on. Further, the number of the studied cases was small, which did not allow for the investigation of possible risk factors. The representation of middle-class families among the cases was considered high. This could be a reflection of the clinic catchment area population. Another explanation is that middle-class adolescents were more likely to use social media than adolescents from working classes. One of the findings that caught our attention was the presence of child abuse or maltreatment in a high percentage of cases. Child abuse is a worldwide phenomenon, and it is prevalent in many countries, including the Gulf states. However, the exact prevalence rate cannot be accurately measured.<sup>[15]</sup> The prevalence rate of child abuse in Bahrain is unknown.<sup>[16,17]</sup> Hence, we could not do any comparative analysis in spite of the high prevalence of abuse in the study sample. Further, the majority of cases in our sample were NSSI repeaters (86%) who were subjected to childhood physical and emotional maltreatment. This would put them in the category of having severe personal and emotional disorders. The authors believe that adolescents who practiced NSSI once might not be emotionally disturbed and might have been under peer pressure; as a result, they were not referred to the clinic for further management. The number of cases was limited to only those who had agreed to be referred to the School Health Clinic. Many NSSI cases were dealt with in school by trained social workers, especially those who performed NSSI only once. Usually, school social workers will refer only cases who repeat NSSI or when suicidal intention is suspected; those with clear suicidal intention were excluded from the study. Many cases failed to reach the clinic for multiple reasons, including stigma, and this has been commented on in other studies.<sup>[3]</sup>

**Table 2:** NSSI cases by type of injury

Type	No.	%
Cut	23	92.0
Bite	1	4.0
Scratch	2	8.0
Hard hit	21	16.0
Dangerous	1	4.0

NSSI: Non-suicidal self-injury

**Table 3:** Characteristics of NSSI events

Item	No.	%
Do you feel pain? Yes	8	32.0
Where you alone? Yes	23	92.0
Duration between thought and action <1 h	21	84.0
Where did you get the idea?		
Friends	11	44.0
Social media	9	36.0
Have you been exposed to abuse?		
Physical	8	32.0
Emotional	11	44.0
Sexual	6	24.0

NSSI: Non-suicidal self-injury

**Table 4:** NSSI by reasons reported by cases

Reason	No.	%
Specific feeling	15	60.0
Experience	8	32.0
Protecting others	1	4.0
Self-control	8	32.0
Stress control	15	60.0
Seeking help	5	20.0
Escape from reality	4	16.0
Avoiding suicide	3	12.0
Managing loneliness	8	32.0
Confirming feeling	4	16.0
Confirming past memories	3	12.0
Feeling of belonging	1	4.0

NSSI: Non-suicidal self-injury

It is likely that NSSI among the cases was the product of interaction between specific personality constellation, high stress level, and depressive reaction.<sup>[18]</sup> Many mental health problems among adolescents, such as NSSI, may be missed by school social workers. Mental health practitioners should extend searching beyond clinics and reach those in other settings, such as schools.<sup>[19]</sup> Mental health workers dealing with the adolescent population should advocate regarding suicide attempts and suicide in their communities.<sup>[20]</sup> They should also participate in addressing the deficits in research-associated understanding of what is effective for suicide prevention. Furthermore, more practitioners working with the childhood adolescent population should familiarize themselves with policy programs and practices directed toward supporting young people at risk of suicide attempts and suicide.<sup>[21-23]</sup>

### Study Limitation

Small sample size did not allow for further analysis like comparing NSSI repeaters with non-repeaters, the reasons for performing NSSI were totally subjective. The clinicians view points of the reasons were not part of the study.

### CONCLUSION

A series of 25 cases of NSSI attending the School Health Psychiatric Clinic were evaluated using a questionnaire-guided interview designed to obtain information on injury types, self-harm events, characteristics, and reasons. The majority of NSSI cases were young female adolescents who used cuts repeatedly, were from a middle-class background, were under the influence of peer pressure or social media, acted impulsively and alone, and reported the some degree of child maltreatment. The reasons subjectively mentioned for self-injury were controlling stress, experimenting, self-control, and coping with loneliness. Negative emotion prevailed during the act. In a clinical setting, therapists dealing with adolescent populations should always inquire about NSSI, as it is unlikely that adolescents themselves will voluntarily reveal it. Early detection is an important step in limiting its harmful effect and therefore preventing further suicide attempts and suicide.

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