# Characteristics of Nonsuicidal Self-Injury Behaviors in a Clinical and Community Sample in Albanian Adolescents

**Besmira Zenelaj[1], Valbona Alikaj[2]**

[1]Child and Adolescent Psychiatrist, National Center for Children Treatment and Rehabilitation Center Tirana, Albania

[2]Associate Professor, Child and Adolescent Psychiatrist, University Hospital Center "Mother Teresa" Tirana, Albania
Lecturer at Medical University Albania

**Abstract:** ***Objective**: This study aims to describe characteristics in nonsuicidal self-injury (NSSI) behaviors in Albanian adolescentsin two different settings, community, and inpatient. **Methods**: The Brief Nonsucidal Self-injury Assessment Tool (BNSSI-AT) was administered to 328th- 9th grade students in a randomly selected public school in Tirana and to 28 patients hospitalized in the Child and Adolescent Psychiatry Pavilion at "Mother Teresa" University Hospital Center during January-June 2018. Statistical analysis of the data was carried out using SPSS 21. **Results**: 15.9% adolescents in the community sample reported engaging in self-injury behaviors at least one time in their life.Females were more likely than males to self-injure. NSSI disclosure is low among both sexes.Cutting and scratching were the most common method used to self-harm. **Conclusion**: Excessive epidemiological studies should be made in order to get data related to the prevalence, incidence, and clinical characteristics of NSSI in various sociodemographic groups of adolescents.*

**Keywords:** nonsuicidal, self-injury, adolescents, community sample, clinical sample, sociodemographic, Albania

## 1. Introduction

In thesepast years, the attention towards self-injury behaviors has increased with an increasing number of empirical studies on this topic. Today, it is widely accepted that self-injury is defined by the International Society for the Study of Self-Injury, as the deliberate, self-directed damage of body tissue without suicidal intent and for purposes not socially or culturally sanctioned.

The term "not socially and culturally sanctioned" is very important because it implies that behaviors such as tattoos or piercings are not technically considered self-harm, although sometimes too many tattoos and piercings can be harmful and done with the intention of the individual to self-harm. Self-injury, by definition, is a set of behaviors that do not have suicidal intent, and yet may be associated with suicidal behavior in several important ways. (International Society for the Study of Self-injury. 2018, May).

Self-injury usually results in some type of immediate physical injury, including cuts, bruises, or marks on the skin. Behavior that does not result in immediate harm is excluded, although it may be harmful and dangerous. For example, food restriction is not considered a typical form of self-harm since the physical damage associated with it occurs over time and does not occur immediately after the act is committed. (International Society for the Study of Self-injury. 2018, May).

Self-harm is distinguished from suicidal behaviors or suicidal thoughts, in which individuals intend to end their lives. People usually report that they have no expectation or intention to cause death when they self-harm. In fact, in some cases, self-harm can be used to control the overwhelming stress that can be associated with suicidal thoughts. (Klonsky, E. D. 2007).

The prevalence of self-harm among adolescents in the community according to various literature review and meta-analysis appears to be about 17.2% (Sarah V. Swannel, 2014).

Families of adolescents who self-harm seem to be significantly affected by this behavior. Initially, after parents find out that their children self-harm, they experience confusion, anger and disbelief, followed by feelings of stress, anxiety, guilt, social isolation, and in some cases it can cause depression. Despite that, they showed a willingness to stay close to their children, often quitting their jobs, thus impacting the family's finances (Ferrey, Anne E, 2016).

From the Albanian literature research on self-harm, only one article was found regarding self-harm in the clinical population (Alikaj et al, 2016), while there are no publications or data on the community population.

## 2. Material and Methods

***General objective***
The main objective of this study is to investigate similarities and differences of nonsuicidal self-injury (NSSI) behaviors in Albanian adolescents in two different settings, community and inpatient.

***Research questions***
1) What are the characteristics of self-injury behaviors of the adolescents in the community sample?
2) What are the characteristics of self-injury behaviors of the adolescents in the clinical sample?

This is a descriptive, cross-sectional study that aims to describe the characteristics of the phenomena and not its causes.


Licensed Under Creative Commons Attribution CC BY

The duration of the study was 6 months and included two samples, a sample from the community (8th and 9th grade students from public schools) and the other sample from a tertiary mental health clinic for children and adolescents, both located in Tirana.

*Sample selection*

**Community sample**

Considering that at the time speaking there is no study on self-harm in the community population in Albania, we thought that it would be appropriate to conduct our study in a secondary public school located in the capital of Albania, Tirana, which has the largest density of population though would enable a better representation.

**Clinical sample**

The study was carried out at the Child and Adolescent Psychiatry Clinic (CAP), in the University Hospital Center, "Mother Teresa", Tirana. CAP was chosen because it is the only specialized service for the assessment, diagnosis and treatment of young people with mental health problems children with mental health problems, including self-harm. It also provides a large range of sociodemographic variations of adolescents.

Exclusion criteria from the study were determined based on the diagnostic criteria proposed in DSM V (APA, 2013)

***Instrument***

We chose the Brief Non-suicidal self-injury- Assessment Tool, BNSSI-AT to investigate the characteristics, functions, frequency of self-injury behaviors in adolescents including modules that assess the initial reasons for the initiation of self-injury behaviors, the context in which they develop, variability in the severity of self-injury behaviors.

***Statistical analysis methods***

Data analysis was carried out through SPSS 21. To determine correlations between variables the $\chi 2$ test and Pearson and Spearman correlation coefficients were used. The statistical significance was set at a $p<0.05$.

## 3. Results

In order to make a comprehensiverepresentation from the two samples we have divided the results in three modules. The first one comprises the results of the characteristics of self-injury behaviors in the community sample. The second module describes the characteristics of self-injury behaviors in the clinical sample and through the discussions sectionwe will reflect on the similarities and differences between these two samples.

***Community sample***

Major part of the of the participants were females (almost 6.7%) and 32.2% were males. 6.5% of the participants lived with only one of the parents because of divorce, while the other part lived with both parents and siblings.

15.4% of the adolescents reported engaging in self-injury behaviors at least once in their life. Meanwhile,10.4% of them reported engaging in self-injury behaviors during the last 12 months.

The average age of the first time self-injury was reported to be around 12 years old, with a minimum of 11 years old and a maximum of 15 years old.

A slight positive statistical significance was carried out through the Spearman and Pearson correlation test between gender and engaging in self-injury behaviors, implying that females are slightly more likely to self-injure (**r = 0,13** and **p=0,073**).

**Table 1:** Prevalence and age of onset (community sample)

| | Participants (N=201) | Female (N=113) | Male (N=88) |
|---|---|---|---|
| Lifetime prevalence | 15.4% | 10.9% | 4.5% |
| 12 month prevalence | 10.4% | 7.9% | 2.5% |
| Age of onset | 12.68 years old (SD=1,32) | 12.86 years old | 12.2 years old |

Various methods of self-injury were used with the domination of skin-scratching using glass or other hard objects such as needles or syringesbeing reported by 77.4% of adolescents. This method was followed by pinching with fingernails or other objects to the point that bleeding occurs or marks remain on the skin and cutting the wrists, arms, legs, chest, or other parts of the body (58.1%). 41.9% of the participants used punching, hitting or kicking themselves to the point of bleeding or bruising. 19.3% of teenagers self-harmed by biting themselves to the point where bleeding occurs or remaines marked on their skin. A few (12.9%) reported being self-injured by burning different parts of the body and only 6.5% engaged in fighting or other aggressive activities only to be hurt.

The participants reported using more than one method to self-injure and that they involved and damaged different parts of the body and that was also proved by the statistical analysis which carried out a strong positive relationship between these two variables (**r =0,56; p=0.001).**

Another aspect of these self-injury behaviors we wanted to investigate was the reason why these adolescents felt the need to self-harm. We found that most of the participants used self-harm as a way to release tension or to deal with frustration and anger. What was interesting is that almost with the same responses the participants reported using self-harm as a way of feeling something, regardless if it was pain, or a surge of energy, or because it simply made them feel good.

From all the adolescents we interviewed the majority, 45.2% refered to have tried self-injury only 2-3 in total during their life, while 12.9 refered to have performed it from 11 to 20 times in total. They reported that the areas of the body they most frequently used to self-harm were hands and arms (51.6% of the adolescents) and 19.4% of them also intentionally hurt themselves in the head or thighs.

About half of the participants that were engaged in these self-injury behaviors reported that they would never start intentionally hurting themselves again and a third of the


Licensed Under Creative Commons Attribution CC BY

participants reported that this was not very likely. Only 6,5% reported that it was very likely that they would self-injure again.

After the statistical analysis, a strongpositive relationship was found between the likelihood of intentionally hurting themselves again and the last time that the adolescent was self-harmed suggesting that the more recent the time they self-harmed, the greater the possibility of self-harming again, r =0.5; p = 0.011.

We was also found a strong negative relationship between the likelihood of intentionally hurting themselves again and the total number of occasions that they engaged in self-harm behaviors suggesting that the higher the number of occasions the more likelythe adolescents start to intentionally harm themselves.

The main reason why they started to intentionally hurt themselves in the first place was that at that time they were upset and decided to try it. Some of the participants reported they started to self-harm because they were angry at themselves. A few reported that at first they had friends who were doing it and they felt the need to fit in.

**Table 2:** Reasons why they started to intentionally hurt themselves (community sample)

| Reason | No. of participants | Percentage |
|---|---|---|
| I was upset and decided to try it | 16 | 51.6% |
| I wanted someone to notice me | 3 | 9.7% |
| I was angry at someone else | 4 | 12.9% |
| I was angry at myself | 5 | 16.1% |
| I cannot remember | 1 | 3.2% |
| I accidentally discovered it | 1 | 3.2% |
| I wanted to fit in | 1 | 3.2% |

***Clinical sample***

The sample was mainly composed of females, in larger percentagesthan males, 85.7% females to 14.3% males. The average group age was 15 years old, with a minimum of 13 years old and a maximum of 19 years old.

During the 6-month period that the study was conducted we found that 6% of the adolescents presented at the child and adolescent psychiatry service had engaged in self-harm behaviors without intention to suicide. The average age of onset of these behaviors was reported to be around 13 years old, but 10% of them reported to have started intentionally hurting themselves at age 11.

As for the methods teenagers used to self-harm, it was found that most of them (92.9%) scratched theirskin using glass or other hard objects such as needles and syringes. The second most used method (89.3%) was pinching themselves with fingernails or other objects to the point that bleeding occurs or marks remain on the skin or cutting the wrists, arms, legs, chest or other parts of the body. 53.6% of adolescents self-harmed by biting themselves to the point that bleeding occurs or marks remain on the skin or by burning various parts of the body. Some others, 39.3% of participants self-harmed by punching or hitting themselves or kicking objects up to the point of causing bruising, 32.9% of teenagers pulled out their hair, eyelashes, eyebrows with the intention of harming themselves, 28.6% of them did not allow the wounds to heal, 17.9% got involved in fights only with the intention to harm themselves and only in 14.2% of cases was chosen as a way to self-harm the engraving of words or symbols on the skin (not included here tattooing, body piercing).

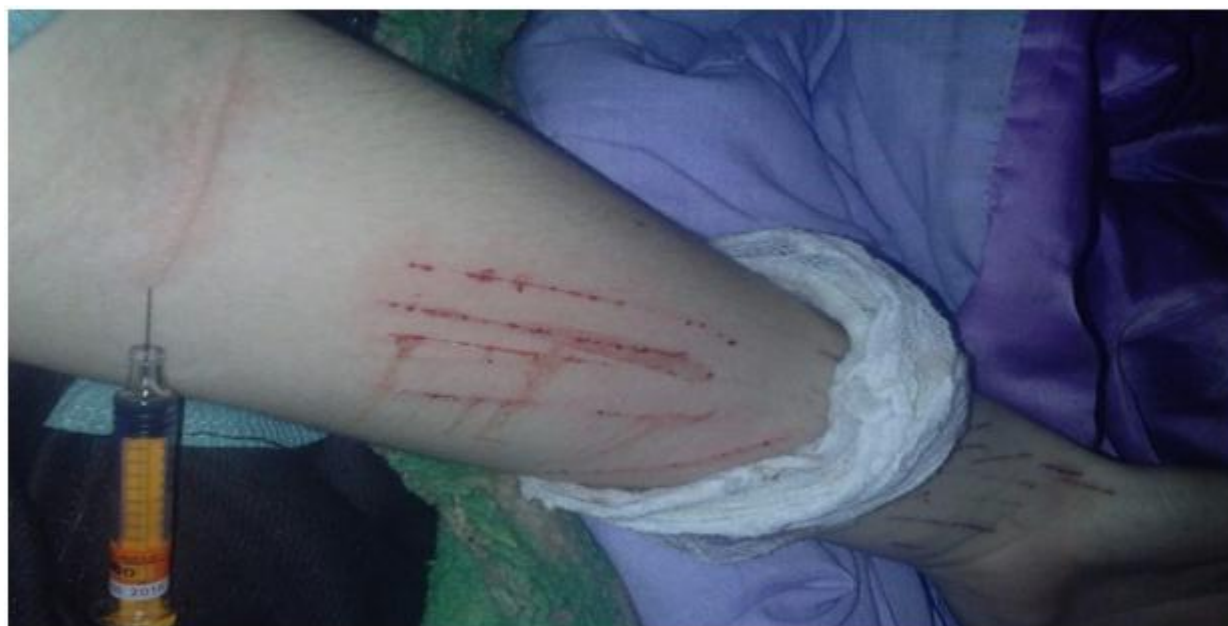

**Figure 3:** Picture taken during self-harming using a syringe. This photograph was taken by one of the patients at her home and then she shared it with the psychiatrist with her consent to be used in this study.


Licensed Under Creative Commons Attribution CC BY

**Figure 4:** Scars of self-injuries on the forearm made by a patient presented to the clinic. The patient then painted the scars to highlight them

From the extracted data we found that participants in the study used a minimum of two different ways to self-harm and a maximum of seven different ways. On average they reported using five different ways to intentionally hurt themselves. After the analysis it was carried out a slight positive statistically significant relationship between a total number of different ways to self-harm and gender suggesting that females used more methods to self-harm than males, **r =0,38; p=0.045.**

The reason behind intentionally hurting themselves was linked to the need to release tension or to deal with frustration and anger. While some of the adolescents reported that they felt good or felt alive when they were self-harmed because it made them at least feel something and not empty inside, others reported that they engage in self-injury behaviors to punish themselves, to atone for sins or to prevent hurting themselves in other ways.

At least half of the participants reported that it was likely that they would restart intentionally hurting themselves in the future and none of them reported no intention to start engaging in self-injury behaviors. However, 17.9% of them were not very sure if they would in the future start hurting themselves. Through the investigation of the two variables, the number of different parts of the body being hurt and the likelihood to restart engaging in self-injury behaviors it was found that the more body parts hurt, the higher the likelihood to intentionally hurt themselves.

Half of the adolescents reported intentionally hurting themselves between 21-50 times and 29% of these reported being hurt more than 50 times. Only 25% of the participants reported being intentionally hurt only 6 to 10 times. The body parts they mostly chose to hurt were arms, followed by legs, hands, chest, thighs, face, tongue, lips and head with neck and shoulders preferred less.

The main reason why they at first tried to intentionally hurt themselves was because they were upset and decided to try it. The second most frequent reason was reported to that they were angry to someone else or because they thought that hurting themselves would simply made them feel good.

**Table 3:** Reasons why they started to intentionally hurt themselves (clinical sample)

| Reason | | Number of participants | Percentage |
|---|---|---|---|
| | I was upset and decided to try it | 8 | 28.6% |
| | It felt good | 5 | 17.9% |
| | I was angry at someone else | 6 | 21.4% |
| | I was angry at myself | 3 | 10.7% |
| | I read about on the internet and decided to try it | 4 | 14.3% |
| | I saw it in an movie/TV or read it on a book and decided to try it | 2 | 7.1% |
| | | | |

## 4. Discussions

Our study aims to describe the characteristics of nonsuicidal self-injury behaviors at the same period in two different settings, in a community and in a clinical one. The age range of the community sample was 13-15 years old while in the clinical sample was 13-19 years old. In both samples, females were dominant.


Licensed Under Creative Commons Attribution CC BY

Regarding the prevalence, we found that in thecommunity sample 15.4% of the adolescents reported to have intentionally hurt themselves at least once in their life, as well as 10.% of them reported doingself-harm during the last 12 months. These data seem to be coherent with other studies found in the literature, for instance in the 2006 study (Whitlock, Eckenrode, & Silverman, 2006) in a study conducted on university students it was carried out that the lifetime prevalence of self-injury was 17% and 7.3% of the participants in the study had engaged in self-injury behaviors in the last 12 months.

As for the clinical sample we found that during the 6-month time period only 6% of the adolescents presented at the child and adolescent psychiatry service had engaged in self-harm behaviors without suicide intention. Opposed to this, other studies reported higher prevaleces in clinical settings, for instance Klonsky et al in 2013 reporting that around 40% of the adolescent presented in psychiatry clinics reported engaging in self-harm behaviors.

The mean age of onset of self-harm behaviors was around 13 years old with no difference between females and males. The early age of onset of self-injury behaviors seems to be supported by studies that show the age of onset of self-injury behaviors ranges between adolescents of 6th and 9th graders (Nixon et al., 2008) as well as in the previous study conducted in Albania where the mean age of onset was 13 years old (Alikaj et al, 2016).
Among the methods that adolescents most frequently used to self-harm were scratching and cutting the skin using different tools. Through literature review we found that this result was consistent with what was found in other study confirming that teenagers mostly used cutting, scratching or carving symbols into the skin as a way to intentionally self-harm (Withlock 2006).

Adolescents that were part of the community sample reported using an average of 2.35 different methods to self-harm. We also found that the literature supported this finding as we can see in the results of a study conducted by J Sornberger et al in 2012 where adolescents reported to have used an average of 2.18 methods to self-harm. Whilst in the clinical sample the adolescents reported using an average of 4.6 methods to self-harm indicating that the adolescents who seek help have engaged in more severe self-harm behaviors.

As we were exploring the functions of nonsuicidal self-injury behaviors we found that the affect-regulation function scored the highest but with a difference between the two samples.

Almost half of the adolescents in the community sample reported being intentionally self-harmed on average 2 or 3 times. The highest number of times being self-harmed was 11-20 times reported by 12.9% of the subjects. The view looks completely different for adolescents in the clinical sample where 1/3 of them were injured more than 50 times and the minimum number of times they were self-harmed was 6-10 times.

Arms were the most frequent body partharmed in the clinical sample with 96.4% of adolescents reporting it followed by legs reported in 82.1% of the cases, while in the community sample about half of the adolescents chose the hands as the most preferred body part to harm, followed by arms reported in 45.2% of cases. This finding again seems to be coherent with those found in other studies with arms, wrists and hands as the most frequently injured body parts (Whitlock et al, 2011).

Regarding the reason that initially led them to self-injure, adolescents in both samples reported feeling upset and thought they would try it out to see how they would feel.

## 5. Conclusion

The prevalence of nonsuicidal self-injury behaviors among adolescents in the community seems to be high and the need for early identification and intervention for these teenagers is an emergency, as well as the designing of policies for intervention and prevention plans in schools.

Nonsuicidal self-injury behaviors are a reality faced by today's adolescents, still not recognized by our society, especially by older generations. Therefore, it is necessary to raise awareness and inform parents about the presence of this condition, to train them to recognize early signs or self-harming behaviors in children, as well as to train them on how to communicate in the event of encountering such a problem.

## References

[1] Briere, J. and Gil, E. (1998) Self Mutilation in a clinical and general population samples: Prevalence, correlates and functions. American Journal of Orthopsychiatry, 68, 609-620.
[2] Nock M.K., Joiner Jr. T.E., Gordon K.H., Lloyd-Richardson E., Prinstein M.J. (2006), Non-suicidal self-injury among adolescents: Diagnostic correlates and relation to suicide attempts. Psychiatry Research, 144 (1) pp. 65-72.
[3] Turner, B. J., Austin, S. B., & Chapman, A. L. (2014). Treating nonsuicidal self-injury: a systematic review of psychological and pharmacological interventions. Canadian journal of psychiatry. Revue canadienne de psychiatrie, 59(11), 576-85.
[4] Rudd MD, Bryan CJ, Wertenberger EG, Peterson AL, Young-McCaughan S, Mintz J, Williams SR, Arne KA, Breitbach J, Delano K, Wilkinson E, Bruce TO (2015), Brief cognitive-behavioral therapy effects on post-treatment suicide attempts in a military sample: results of a randomized clinical trial with 2-year follow-up. American Journal of Psychiatry, 172(5):441-9.
[5] Wilkinson P, Kelvin R, Roberts C, Dubicka B, Goodyer I.(2011), Clinical and psychosocial predictors of suicide attempts and nonsuicidal self-injury in the Adolescent Depression Antidepressants and Psychotherapy Trial (ADAPT). American Journal of Psychiatry, 168(5):495-501.
[6] Ferrey, A. E., Hughes, N. D., Simkin, S., Locock, L., Stewart, A., Kapur, N., Gunnell, D. Hawton, K. (2016). Changes in parenting strategies after a young person's self-harm: a qualitative study. Child and


Licensed Under Creative Commons Attribution CC BY

adolescent psychiatry and mental health, 10, 20. doi:10.1186/s13034-016-0110-y

[7] Valbona Alikaj, Isid Xhura, Elga Spaho, Anila Hashorva, Valmira Skendi (2016), Characteristics and Functions of Self-Injury In A Sample Of Adolescents Attending Child and Adolescent Psychiatry Clinic In Tirana, Antropological Research And Studies, 55-62, 6.

[8] Natalia Jaworska and Glenda MacQueen (2015), Adolescence as a unique developmental period. J Psychiatry Neurosci., 40(5): 291–293.

[9] Remschmidt H, (1994) Psychosocial milestones in normal puberty and adolescence, Horm Res, 41 Suppl 2:19-29.

[10] International Society for the Study of Self-injury. (2017, May). What is self-injury? Retrieved from: https://itriples.org/about-self-injury/what-is-self-injury.

[11] World health statistics 2018: monitoring health for the SDGs, sustainable development goals. Geneva: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO.

[12] Muehlenkamp JJ (2005), Self-injurious behavior as a separate clinical syndrome, Am J Orthopsychiatry; 75(2):324-33.

[13] Klonsky, E. D., Victor, S. E., & Saffer, B. Y. (2014). Nonsuicidal self-injury: what we know, and What We need to knoW. Canadian journal of psychiatry. Revue canadienne de psychiatrie, 59(11), 565-8.

[14] Sarah Verroken et al, Starting from scratch: prevalence, methods, and functions of non-suicidal self-injury among refugee minors in Belgium, Child Adolesc Psychiatry Ment Health, 2018.

[15] The World Health Organization quality of life assessment (WHOQOL): position paper from the World Health Organization. Social science & medicine, 41(10), 1403-1409.)

[16] Bresin K et al, Gender differences in the prevalence of nonsuicidal self-injury: A meta-analysis, Clin Psychol Rev. 2015 Jun;38:55-64


Licensed Under Creative Commons Attribution CC BY