Characteristics and functions of Self-injury in a sample of adolescents attending Child and Adolescent Psychiatry Clinic in Tirana

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Abstract

Self-injury in the 12 to 18 years old age group is of public concern and the majority of self-injurious behaviors do not reach professional attention. The frequency of nonsuicidal self-injury (NSSI) among adolescents is increasing and it often presents as a long history of self-injury, in absence of physical pain and associated with a higher rate of lifetime suicide attempts compared to the general population. Admission to a psychiatric ward often occurs to prevent further self-injury or attempted suicide.
Objectives. The purposes of this study were to examine the socio demographic/clinical characteristics, to evaluate the functions and the trend of self-injury among adolescents aged 10-20 years, attending the Child and Adolescent Psychiatry Clinic (CAPC) in Tirana, Albania.
Material and methods. The period of the study was from March to June 2014. All adolescents admitted to CAPC were interviewed by a psychiatrist and completed the Ottawa Self-Injury Inventory. Descriptive data are reported, using different tables and graphics. SPSS v17 was used for statistical analysis.
Results. The mean age of the study participants was 16.5 years old (SD = ± 1.571), 83 % of them being female. The most common method of self-injury was cutting / scratching of the skin, in 84.2% of all cases. The most frequently reported function of NSSI was external emotional regulation.
Conclusions. This is a first attempt to study NSSI as a new phenomenon among Albanian adolescents. Further research is needed to examine outpatient and community samples of adolescents.

Key words: nonsuicidal self-injury, suicidal behavior, adolescents, and NSSI functions.

Introduction

Self-injury as a direct, intentional harm of body tissue with no intention of suicide is a behavior that has become the focus of a lot of studies during the last few decades. The frequency of such behavior has been increasing, and, unlike in the past, it is no longer considered a sign of serious mental disability. Self-injurious behavior typically begins during the second decade of life, and this is a noticeably increasing trend in adolescents. In order to better understand the nature of self-

injurious behavior and the reasons of such increasing tendency, and in order to identify and to better help these individuals, elaborate efforts and studies are required. This mini survey, which aims to identify the characteristics of self-harm, as well as the reasons for engagement in such behavior, in adolescents who sought care in Child and Adolescent Psychiatric Service (CAP) in Tirana, is simply a modest beginning contribution to this issue.

Definitions and Terminology Self-injury is defined as intentional, direct injury of body tissue without suicidal intent, for purposes not socially sanctioned (Favazza, 1998; Nock & Kessler, 2006). In the American literature, defined as stated above, it is commonly referred to as non-suicidal self-injury (NSSI). Previously, authors differed widely in terminology, naming the behavior as wrist-cutting syndrome, (Rosenthal et al., 1972), parasuicide (Schmidtke, Bille-Brahe, DeLeo et al., 1996), self-mutilation (Favazza, 1998), self-harm, regardless of intent, (Hawton et al., 2003). However, the more they study this behavior, the less scientists tend to adopt an intimidating terminology. There has not yet been a consensus about the right definition and approach on self-injury. Based on studies on this phenomenon, there seems to be a tendency to define self-harm separately from suicide attempts, preferring for this reason the term of "self-injury"; on the other hand, there is also a tendency to include in the term "self-harm" every violent act on the body, whether it is suicidal or not (Hawton et al., 2003). The latter use the term "self-harm" to mean all self-harming attempts. NSSI is included in DSM-V (APA, 2013), in the category of conditions that need further research.

The subject of self-injury has only recently become the focus of the scientific community attention. Most researchers think that the occurrence of such behavior in adolescents has been increasing only in the last few decades. The causes seem to be very different. "Specific adolescent subpopulations such as ethnic or sexual minorities, and more controversially, those who identify as 'Alternative' (Goth, Emo) have been proposed as being more likely to self-harm, while other groups such as 'Jocks' are linked with protective coping behaviours (for example exercise)" (Young, et al., 2014). key finding in their article is the confirmation of the 'Alternative-identity' effect, with around half of Alternative adolescents engaging in self-injury (NSSI) and around a 1 in 5 attempting suicide. They found a moderate sized correlation between (Alternative) identity and self-harm, with Alternative teenagers between four to eight times more likely to engage in some form of self-harm than their peers. Nixon and Cloutier (2008) have found a prevalence of about 17% of self-injury among adolescents in the community. In a clinical population, however, this prevalence is reported to be higher, at about 40% (Klonsky et al., 2013). According Hawton et al., (2002), approximately only one in eight adolescents who inflict self-harm (no matter what their intention) actually seek professional help. After reassessing the studies on the prevalence of self-injury in adolescents made during 2005-2006 period, the researchers have found an average of lifetime prevalence of NSSI in adolescents of about 18%, although rates differ substantially depending on the types of assessments used and population (Muehlenkamp et al., 2012). In Albania, the issue of self-injury in children and adolescents has not yet been studied. There is only one study on suicidal attempts in children and adolescents (Kola et al., 2013), who have sought help at the emergency department of the "Mother Teresa" University Hospital Center (UHC) in Tirana. This study revealed a significant dominance of suicide attempts among adolescents between fifteen to nineteen years of age. However, considering that 97% of these adolescents had actually used overdosing as a method of suicidal attempts, these cases cannot indeed be related to self-injury behavior. There are data that suggest that NSSI can serve as a pathway to suicide (Whitlock et al., 2013).

Every person that seeks help to a specialist is unique. In order to accurately evaluate and treat the patient clinically, it is crucial to study the functions of self-injury in each individual. In a review of the literature on self-injury, Klonsky (2007) identifies seven functions of self-injury:

affect-regulation, anti-dissociation, anti-suicide, interpersonal boundaries, interpersonal-influence, self-punishment and *sensation-seeking*. Nock (2010), proposes a model with two categories of the functions of self-injury, *intrapersonal* and *interpersonal* functions. Both categories are composed of motives of positive and negative reinforcement, a phenomenon through which this behavior is conserved.

Objectives

This is the first study on this issue in our country. It aims to provide some demographic data of a clinical sample of adolescents presented at the Child and Adolescent Psychiatric Service (CAPS), UHC "Mother Teresa" with self-injury and to evaluate the reasons of this behavior. The study was done during the time period March 1st – June 31st of 2014.

Material and methods

In this study we focused on the types of self-injurious behaviors in children and adolescents who seeked help at the CAP in Tirana. All the participants underwent a clinical interview with an experienced clinical psychiatrist and they were required to fill out the Ottawa Self-Injury Inventory (OSI; Cloutier & Nixon, 2003). During the study period, 194 patients aged 10 to 20 years sought care at CAP. From the total group of 194 patients, only seventy of them were presented with self-injury behavior. Based on the inclusion criteria for the study, only twenty-one of them fulfilled the criteria to participate. The final study sample was comprised from 19 patients, because two patients didn't agree to participate. The mean age of the group was 16.37 (M = 16.37, SD = ±1.571). The statistical analysis of the data was done using the SPSS for windows 7. The study was approved by the ethical committee of UHC "Mother Teresa" and the Department of Neuroscience, Faculty of Medicine in Tirana, Albania.

Results

As the data show, more than half (62%) of the patients were 15, 16, and 17 years old. Age data were presented in table 1, divided in three categories to facilitate statistical analysis. The value of standard deviation shows that we had a compact group, and it make it easy to compare the cases.

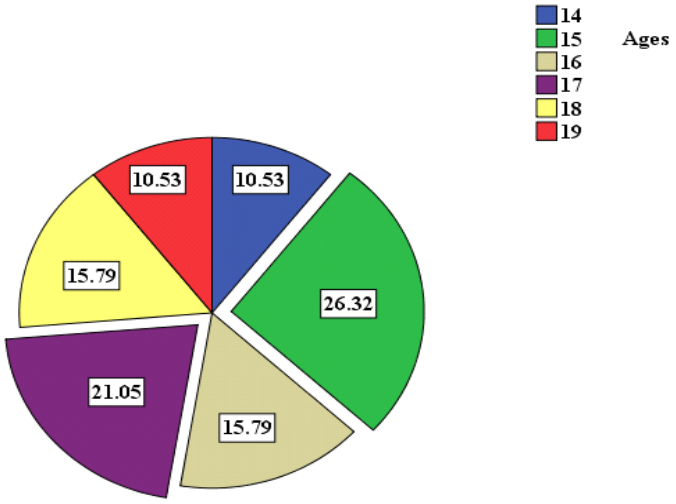
Table 1. Distribution according to age group

Variable	N	Percentage
Age group years old/ (mean ± SD)	16,37 ± 1,571	
14 - 15	7	36.8
16 - 17	7	36.8
18 - 19	5	26.3
Total	19	100.0

Absolute number and percentage in columns

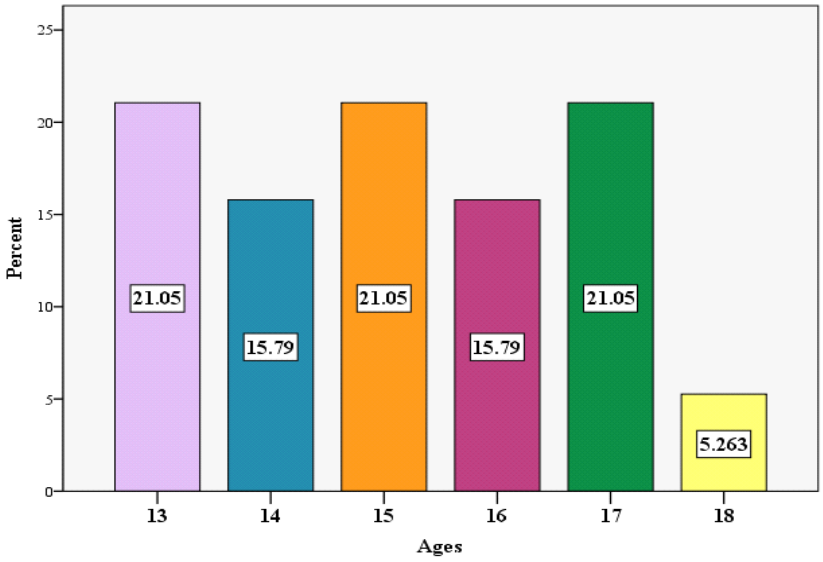
The youngest patients included in the study are fourteen years old, and the oldest are nineteen years old. More than 4/5 of the study group (83%) were females and only 17% of them were male, with a ratio of male to female population 1 to 6 (figure 1).

Figure 1. Study subjects distributed by age (%)



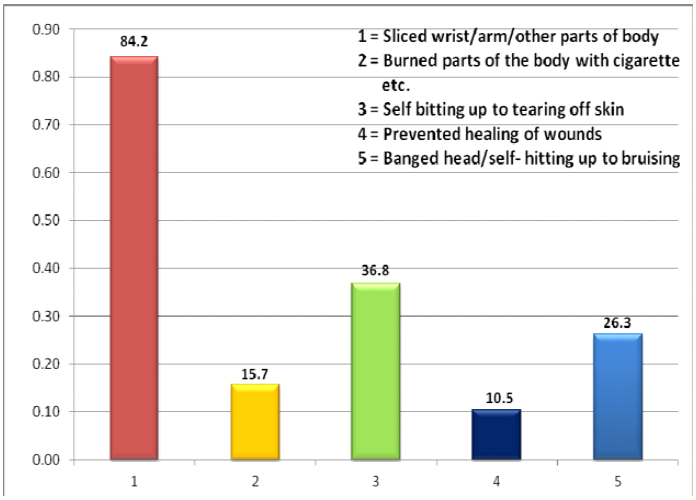
13 years old was referred to be as the youngest age when the patients started the self-injury behavior and the oldest was referred to be 18 years old. Forty-three percent of the patients in the study reported to have started self-injuring less than a year ago, whereas more than half of them (57%) have been inflicting self-injury for more than a year.

Figure 2.When did you started self-injury behavior?



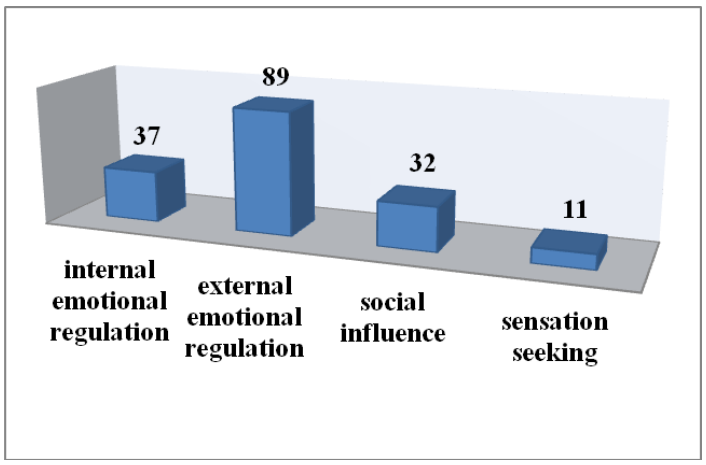
About the whole group (94%) of the patients shared that they communicate to 'others' the idea of inflicting self-injury. 63% out of them referred that their communication about self-injury idea was only confident to the doctor. About 20% of them communicate it to their family members, and 16% of them share it with their friends.

Figure 3. Methods used for self-injury (%)



Based on the categorization of methods proposed by Rodav et al., (2014), there were five different methods used in self-injury reported by our patients: sliced wrist, arm or other party of body, burned parts of the body with cigarette, self bitting up to tearing off skin, prevented healing of wounds and banged head/self-hitting up to bruising (Figure 3).

Figure 4. Functions of self-injury behavior (%)



In the figure above (fig. 4) are presented the functions of self-injury behavior for our sample study, as proposed by Nock model (Nock, 2010). The graphic indicates the most frequent reason, intrapersonal or interpersonal, which obliged the patients committing self-injuring. According to our results, the subjects report an average of 1.57 reasons for inflicting self-injury (SD = 0.96). The figure clearly shows that major part (≈ 90%) of the subjects self-injure themselves in order to regulate their external feelings. It is clearly demonstrated that this is the most recurrent reason for self-injury in our study population.

Discussion

Our unique study on the issue of self-injury in adolescents is the first one to be implemented in Albania. The subjects involved seem to inflict self-injury after the age of twelve years old. The average age of the self-injuring subjects was 16.5 years of age. This data is close to the age of 15.2 years old, referred by sources of such literature (Whitlock et al., 2011). The self-injuring behavior in the clinical adolescent population is higher than that of the regular community. This is supported by the fact that 17% of adolescents in the community (Nixon and Cloutier, 2008) and 40% of adolescents in psychiatric clinical population have been involved in NSSI (Klonsky et al. 2013). In the meantime, other authors refer to an increasing prevalence of NSSI both in clinical populations (38%-67%) and in the regular community (4%-44%) of adolescents (Heath, et al., 2009). Considering the behaviors related to the development of mental health, these high prevalence rates of NSSI in adolescents are quite alarming. Compared to the referred studies, the percentage of such self-injuring adolescents in our study is quite low. Based on their reports, our study determined that about half of the subjects had previously attempted to commit suicide. This ratio seems to be lower than the findings of other studies. These sources report that about 70% of those with a history of non-suicidal self-injury claim to have experienced at least one suicide attempt. The studies report that NSSI is a warning sign of suicidal behavior (Whitlock et al., 2013; Hamza et al., 2012). In the meantime, a retrospective analysis of suicide attempts by children and adolescents, made by the Statistics Department in "Mother Teresa" University Hospital Center in Tirana for the 2006-2012 periods, shows a seemingly growing tendency of suicide attempts by adolescents (Kola, et al., 2013). This increasing tendency of suicide attempts among children and adolescents necessitates further studies in order to identify the reasons of such risky behavior and to effectively put in place preventive programs and to ensure the right treatment. Our study group consisted almost entirely of females supporting the data of different researches, as well as the data of the study on suicide attempts in Albania (cited above).

About 43% of our patients reported to have started exhibiting self-injurious behavior less than a year ago, whereas more than 57% of the subjects have inflicted self-injury for more than a year. These figures support the idea that this is a chronic behavior, and it also shows that there is a general tendency not to seek professional help right away, but rather delay it. The subjects of our study group are an obvious concern because when it comes to the behavior (reason and attempt), feelings and interpersonal relationships, they are definitely affected. Another aspect affecting them negatively is the social factor, such as 'stoping parents being angry with them', or 'to show others how hurt or damaged is he/she'. These factors correlate pretty highly in international studies as well (Klonsky, 2007; Nock, et al., 2006; Whitlock, et al., 2006). Adolescents in our study shared that, for the most part, their main reason for inflicting self-injury was "to regulate their external feelings", which is related to externalizing symptoms such as anger and irritation. They were characterized by impulsive behavior and low self-esteem. The fact that the trends of the cases that come to the clinic actually exhibit this type of externalizing symptoms is interesting, and presents us with the necessity of exploring other internalizing factors of self-injury in groups who do not actually seek clinical help through our services.

The right treatment of mental development disabilities begins with early detection, which in itself requires screening programs and other identifying tools. Such tools are not yet provided in Albania, and this should be the first in the list of priorities (Tomori et al., 2013). Many epidemiological studies should be carried out in order to obtain reliable data regarding the prevalence, incidence, and clinical characteristics of NSSI in various sociodemographic groups of adolescents. Our findings support the necessity for improvement in the development of educational

programs in our schools, where the promotion of children and adolescents mental health must better emphasized. Schools need to develop programs where they provide assistance lines and make use of counseling and support service for adolescents in order to prevent self-injury.

Conclusions

Self-injury is a common and increasing behavior among adolescents. Most self-injuring cases were female. Most cases reported were exposed to self-injury before beginning to self-injure. The main function of self-injury in our cases was external emotional regulation.

Many epidemiological studies should be done in order to get reliable data regarding the prevalence, incidence, and clinical characteristics of NSSI in various sociodemographic groups of adolescents.

Our findings support the necessity for improvement in the development of educational programs in our schools, where the promotion of children and adolescents mental health must better emphasized.

Limitations of the study

The small number of participants in our study group presents a challenge. We needed more participants in order to better make the connection between the different variables and in order to draw conclusions. This is the reason why a more comprehensive study with a bigger group of participants must be aimed for.

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