

Epidemiology and clinical characteristics of self-harm in adolescents attending a children's psychiatric hospital

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Original article

SUMMARY

Introduction

Although studies of self-harm in adolescents have pointed to psychopathology as a risk factor, information on the phenomenon in clinical populations of Mexican adolescents is scarce.

Methods

This study examined demographic and clinical characteristics, as well as types, frequency, and reasons for self-harm through record review of 556 adolescents attending a children's psychiatric hospital from 2005 through 2011.

Results

High frequencies of female gender, low socioeconomic status, family violence, and sexual abuse history were found. The most common diagnoses were affective disorders, behavioral disorders, and substance abuse. Self-cutting was the most used method and the main reasons for self-harm included low frustration tolerance, attention seeking, and symptoms of anxiety and mood disorders. An increase in cases was observed over time, particularly in patients with mood disorders and/or substance abuse.

Conclusions

Self-harm in adolescents with psychopathology has increased and is frequently associated with depressive and conduct disorders. It is important to determine the presence of self-harm in the assessment of these patients.

Key words: Self-harm, adolescents, psychopathology, prevalence, self-cutting, Mexican.

RESUMEN

Introducción

Aunque los estudios de autolesiones en adolescentes han señalado a la psicopatología como un factor de riesgo, existe poca información del fenómeno en población clínica en México.

Método

El presente estudio examinó las características demográficas y clínicas, así como los tipos, frecuencia y motivos para autolesionarse de 556 adolescentes que acudieron a un hospital psiquiátrico infantil de 2005 a 2011 por medio de la revisión de su expediente.

Resultados

Dentro de las características que se encontraron con mayor frecuencia fueron el sexo femenino, el nivel socioeconómico bajo, la violencia intrafamiliar y el antecedente de abuso sexual. Los diagnósticos más frecuentes fueron los trastornos afectivos, los trastornos de conducta y el abuso de sustancias. El corte fue el método más empleado y los principales motivos para autolesionarse incluían la baja tolerancia a la frustración, el llamar la atención de otros, los síntomas afectivos y ansiosos. Se observó un incremento de casos a lo largo del tiempo, en particular aquellos asociados a trastornos afectivos y abuso de sustancias.

Conclusiones

Las autolesiones en adolescentes con psicopatología se han incrementado y están frecuentemente asociadas a trastornos depresivos y de conducta. Es importante determinar la presencia de autolesiones durante la evaluación inicial de estos pacientes.

Palabras clave: Autolesiones, adolescentes, psicopatología, prevalencia, cortes, mexicanos.

INTRODUCTION

Self-harm is defined as an intentional and self-directed act that causes low-mortality bodily damage, carried out to re-

duce stress.¹ In studies carried out in countries such as Australia, it has been reported that 8.1% of the general population has self-harmed at some point in their life.² Specifically, some revision studies demonstrate that in adolescents, the

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prevalence ranges from 13% to 23.2%³ and in the population that attend hospital to receive care, an increase in this phenomenon has been reported over time.⁴

The most frequent forms of self-harm are cutting, hitting, and burning; less frequent is the insertion of objects under the skin, excessive scratching, biting, pulling out of hair, or ingestion of foreign bodies or liquids.⁵

Subjects self-harm for various reasons, such as seeking to regulate emotions, control impulses,^{6,8} or gain attention from others.⁹ Numerous factors have been associated with this behavior in adolescents, among which are the presence of psychopathology in the subjects or their families, family dysfunction, the presence of social adversity,¹⁰ or stressful events.¹¹ The relationship between psychopathology and self-harming behavior has been shown in studies on adults, where some 90% of subjects with self-harm were reported to have had at least one psychiatric disorder.¹² One of the most important studies on self-harm in adolescents is the study based on a school-age population known as CASE (*Child and Adolescent Self-harm in Europe*), in which nearly 30,000 adolescents of 15 and 16 years of age completed an anonymous questionnaire about self-harming, a report of stressful events, and scales to assess depression, anxiety, and impulsivity. The results of this study showed that self-harm was related to symptoms of depression, anxiety, and impulsivity as well as stressful events.¹³

The results of studies on adolescents from clinical samples in various countries has replicated these findings, once again showing an association with externalized disorders.¹⁴⁻¹⁶

Until now, there were no reports on the frequency of self-harm in a clinical population of Mexican adolescents. Studies in Europe and the United States have shown that individuals with said behavior are a heterogeneous group, meaning that information is required around the frequency and characteristics associated with self-harm in that population.

This study was designed with the aim of describing the demographic, clinical, and family functioning characteristics of adolescents with self-harm and psychopathology cared for by the Child Psychiatric Hospital "Dr Juan N Navarro" (HPIJNN). It also aims to determine if changes have been recorded in the frequency or type of self-harm, or in the psychiatric co-morbidity of this population over time.

METHOD

The present study consists of a review of all reports on adolescents aged between 12 and 17 years receiving care for self-harm in the period between the years 2005 - 2011 at the Child Psychiatric Hospital "Dr Juan N Navarro" in Mexico City.

During said review, an examination was made of the clinical history, description of the illness, and admission notes for the service required by the patient, in order to

identify cases of interest. Once these cases had been found, the following information was obtained: a) self-harming behavior: frequency, type, motives for self-harming, time of development; b) demographic and clinical data: age, sex, religion, socio-economic level, reason for consultation and diagnosis; c) family composition and functioning, and d) history of sexual abuse.

The information was analyzed with the statistical program PASW Statistics 18, using descriptive statistics.

RESULTS

The sample was made up of clinical reports on the 556 patients who presented with self-harm and this corresponded to 9.8% of the adolescents seen during the indicated period. The demographic and diagnostic characteristics of the group are shown in table 1. Affective disorders were most frequently assigned to the patients (major depressive disorder, dysthymic disorder, bipolar disorder, and adaptive disorder with depressive state), followed by behavioral disorders (including attention deficit hyperactivity disorder, oppositional defiant disorder, antisocial personality disorder) and substance abuse.

Table 1. Demographic and clinical characteristics of the sample

Characteristic	%	N = 556
Female sex	76.30	424
Occupation:	77.20	429
• Student	3.40	18
• Employed	19.20	106
• None		
Low socio-economic level	71.20	396
Catholic religion	80.00	445
Family construct:		
• Both parents	47.30	263
• Mother only	38.70	215
• Other relatives/family home	14.00	78
Family dysfunction or violence	83.50	464
	49.50	275
Sexual abuse	29.70	165
Average age	14.46 ± 1.50 years	
Average schooling	7.70 ± 1.65 years	
Diagnoses:		
• Affective disorder	67.10	373
• Behavioral disorder	23.00	128
• Substance abuse	21.80	121
• Anxiety disorder	13.10	73
• Personality	9.20	51
• Eating disorder	6.70	37
• Intellectual disability	5.80	32
• Schizophrenia	3.10	17
• Epilepsy	2.50	14
• Elimination disorder	1.80	10
• Trichotillomania	1.30	7

The patients studied had various reasons for consultation. Most frequent was behavioral problems (27%), suicidal behavior (23.9%) and self-harm (22.5%). Other reasons for consultation were depressive symptoms (12.4%), anxiety symptoms (7.7%) and substance use (5.2%). Some 43.3% attended on their parents' initiative, 41.7% were referred by other health institutions, schools (9.2%), or the Attorney General (5.9%).

Figure 1 shows the different types of self-inflicted harm, the most frequent of which were superficial cuts to the wrists and forearms, hits, and scratches.

With regards to reasons for self-harm, in 42.1% of cases it was associated with a low tolerance for frustration and manipulation; the reports note that the injuries occurred impulsively after an argument with parents or relationship partners, with the aim of reducing their frustration and/or causing guilt in the person with whom they were arguing. In 30.6% of cases, this behavior was associated with affective symptoms such as sadness or irritability, or in order to "feel something and feel alive". In 19.1% it was associated with symptoms of anxiety, and in 4.5% with psychotic symptoms, generally imperative auditory hallucinations. In 1.6% of cases, self-harm was carried out in order to belong to a group. At the time of clinical assessment, it was reported that the self-harming behavior had been present for 18.48 (± 16.8) months, frequently (four or more times per month) in 43% of cases.

A notable increase was observed in cases of adolescents with self-harm cared for in hospital: in 2005, this behavior was recorded in 0.4% of the population seen, and in 2011, this had increased to 5.7%, in particular the frequency of cuts and hits in the past three years. Changes were observed in the frequency of diagnoses associated with self-harm: affective disorders and substance abuse increased from 50% to 73% and from 0% to 18% respectively; on the other hand, self-harm associated with intellectual disability reduced from 14% in 2005 to 3% in 2011 (Figure 2).

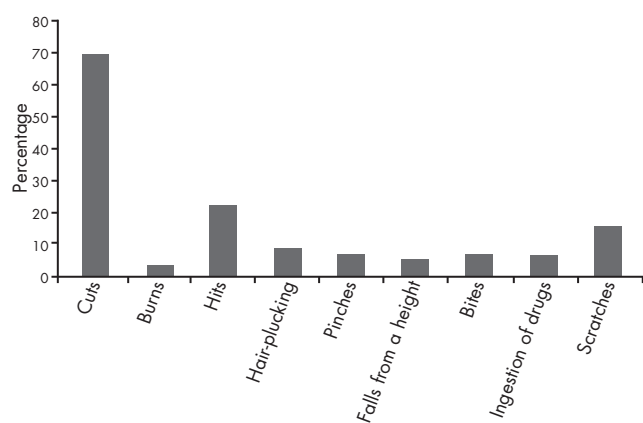


Figure 1. Frequency of different types of self-harm

DISCUSSION

The incidence of self-harm and the demographic characteristics of the clinical population studied were similar to those reported in previous studies.^{17,18} The low socio-economic level observed in the majority of these patients has been described as a risk factor.¹⁹ Furthermore, the high frequency of alterations to family functioning and a history of sexual abuse present in this sample have been reported as major factors.^{10,20-22} It is known that poor parenting and abuse can increase the risk of self-harm, given that it is associated with interpersonal difficulties during adolescence, frequently described in self-harm subjects.²³

The results showed that the patients had self-harmed for prolonged periods of time before seeking specialist help, which can be explained by the low awareness that parents and teachers have about this phenomenon and its impact on the health of adolescents.²⁴

The high frequency of affective disorders and substance use in this sample resembles that of studies in other countries. It is important to note that 23% of cases had behavioral disorders. Although these diagnoses have not been indicated as risk factors, impulsivity, one of the key symptoms, is frequently reported in self-harm patients.¹⁹ Various authors have suggested the need for an in-depth exploration of the role of externalized disorders and substance abuse in self-harm, the association of which with suicidal behavior has been reported.²⁵

The literature indicates that the most frequent forms of self-harm in adolescents are cuts, hits, burns, bites, scratches, pinches, and hair-pulling,⁵ which is in concordance with the present study, with a particularly high frequency of cuts.¹⁷ Behavioral problems and affective symptoms were the primary causes associated with self-harm in adolescents in this study, in similarity to the Shin report.²⁶ The increase of self-harm in patients with substance abuse shows the need to assess this behavior in all adolescent patients, not just those with affective disorders.

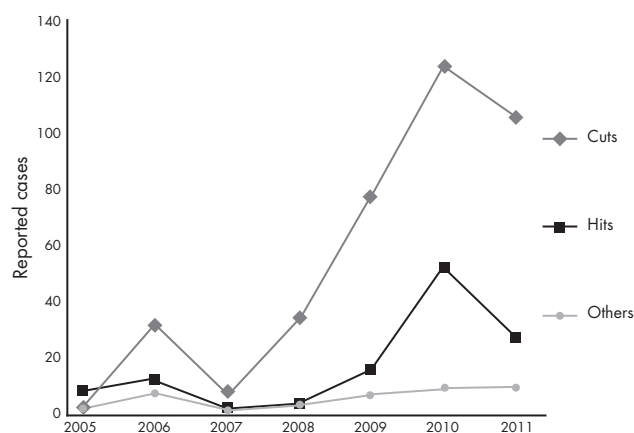


Figure 2. Frequency of self-harm per year

It is very important to note that reports of self-harm in the HPIJNN population increased by 14 times during the six years studied, which is greater than the increase reported by O'Loughlin.²⁷ This could be explained by the phenomenon being overlooked in previous years, or it could reflect a real increase in the phenomenon in adolescents with psychopathology.

The results of this study should be examined, taking into account the limitations of a study based on the review of reports, where the seriousness of symptoms and the dysfunction associated with patients' pathology are not recorded in a uniform manner.

CONCLUSIONS

The prevalence of self-harm in Mexican adolescents with psychopathology has increased considerably over time; this self-harm is primarily associated with affective and behavioral disorders. The distribution by sex and type of self-harm is similar to that reported in other countries. It is important to include an intentional search for self-harm behaviors within the routine psychiatric assessment of patients of any age, in this case adolescents, who are seen for any reason. This is especially true for behavioral problems, affective or anxiety symptoms, or even substance use, and patients who can be particularly burdened by psychosocial adversity or stressful life events.

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