Self-injurious behavior and factors related to suicidal intent among adolescents: a documentary study

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Abstract
It is a type of quantitative documentary research of descriptive and exploratory content in which studied the profile of adolescents with self-injurious behavior and the variables of risk and protection regarding the suicidal intent, reported in a Children and Youth Psychosocial Care Center (CAPS IJ) from a metropolitan region in the south of Brazil. Data from 139 assisted adolescents, admitted for self-injury, reported that self-injuries occurred predominantly at home (M=14,36 years; SD=1,63), with multiple episodes, using sharp objects with suicidal intent. The hierarchical binary logistic regression results point out that experiencing abuse in the present -using non-sharps objects- having severe injuries and practicing them in different places are risk variables. Whereas the existence of community and school social support networks are protective factors. There is a necessity of investment in the studies that explore the etiology of self-injuries and that provide support for cases of prevention, detection, and treatment.
Keywords: Self-injury; Suicidal intent; Youth

Comportamento Autolesivo e Fatores Relacionados à Intenção Suicida entre Adolescentes: Estudo Documental

Resumo
Esta pesquisa documental quantitativa, de caráter descritivo e exploratório, investigou o perfil de adolescentes com comportamento autolesivo e variáveis de risco e proteção relacionadas à intenção suicida relatada em um Centro de Atenção Psicossocial Infantojuvenil (CAPS IJ) de uma região metropolitana do sul do país. Dados de 139 adolescentes (*M* = 14,36 anos; *DP* = 1,63), atendidos por autolesão, indicaram que estas ocorriam predominantemente em ambiente doméstico, com episódios múltiplos, utilização de objetos perfurocortantes e com intenção suicida. Os resultados da regressão logística binária hierárquica indicaram que sofrer violência no presente, utilizar outros objetos que não os perfurocortantes, apresentar lesões graves e praticá-las em locais diferentes são variáveis de risco, enquanto possuir redes de apoio comunitária e escolar são fatores de proteção. É necessário investir em estudos que investiguem a etiologia da autolesão e subsidiem ações de prevenção, detecção e tratamento.
Palavras-chave: autolesão, intenção suicida, adolescência

Comportamiento autolesivo y factores relacionados con la intención suicida entre los adolescentes: estudio documental

Resumen
Esta investigación documental cuantitativa, de carácter descriptivo y exploratorio, investigó el perfil de los adolescentes con conductas autolesivas y variables de riesgo y protección relacionadas con la intención suicida reportada, en un Centro de Atención Psicosocial Infantil y Juvenil (CAPS IJ) de una región metropolitana al sur de Brasil. Los datos de 139 adolescentes (*M*=14,36 años; *DS*=1,63), atendidos por autolesión, indicaron que las autolesiones se produjeron en un entorno doméstico, con múltiples episodios, uso de objetos punzantes y con intención suicida. Resultados de la regresión logística binaria jerárquica indicaron que sufrir violencia en el presente, utilizar objetos distintos de los punzantes, presentar lesiones graves y practicarlas en diferentes lugares son variables de riesgo, mientras que tener una red de apoyo comunitario y escolar son factores de protección. Es necesario invertir en estudios que investiguen la etiología de la autolesión y subvencionar acciones de prevención, detección y tratamiento.
Palabras clave: Autolesión, Intento de suicidio, Adolescencia

Introduction

Self-injury is a complex and multi-faceted phenomenon, presenting itself as emerging risk behavior among adolescents and, therefore, widely studied by the scientific community. Even though risky behaviors might qualify as typical in adolescence, they can constitute a threat to healthy development and, based on the level of damage. It can indicate the existence of psychopathology, which requires a careful assessment by health care professionals. (Guerreiro & Sampaio, 2013).

In general, delineating the self-injurious behavior as a direct and intentional act of provoking damage to

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oneself which may or may have not a suicidal intent through a wide range of behaviors such as destruction or injury of body tissue -cuts, burns, or scratches- medicine ingestion over to the prescribed dosage or recognized by the therapeutic dosage of licit or illicit drugs to injure the body itself and use non-ingestible objects or substances, like poison (Madge *et al.*, 2008). The most recurrent self-injury method is through sharp objects –knife, scissors, blades– followed by other equally self-destructive methods, such as ingesting high-dose medicine, scratching, burning, or hitting oneself (Nock, 2010).

Besides the wide variety of terms found in the national and international literature to classify self-injurious behavior, there are also diverging theories on the subject of the suicidal intent of such conduct. As some theoretical perspectives assign the self-injury only when it has not the intent to die (Nock, 2010), others approach this phenomenon from both possibilities due to the difficulty of distinguishing the presence or absence of suicidal intent (Fox, Millner, & Franklin, 2016). According to Mars *et al.* (2014), it is necessary to pay attention to the overlapping of self-injury and suicide attempt since individuals tend to experience both behaviors over time. Thus, some authors emphasize the importance of understanding them, theoretically, over a continuum (Kapur, Cooper, O'connor, & Hawton, 2013). Such evidence suggests that the relationship between both behaviors and the risk factors that seem to be associated with each of them is still uncertain, indicating the need for investigations on the epidemiological and etiological aspects involved.

The literature points to different risk factors that can increase adolescent's vulnerability to become involved in self-injurious situations. The Borderline Personality Disorder (BPD) symptoms presence, i.e., is highly prevalent in adolescents who self-injure. Yet, there might also be other psychopathological conditions associated, such as bipolar disorder and major depressive disorder (Andrewes, Hulbert, Cotton, Betts, & Chanen, 2017).

Furthermore, there are studies in development regarding the self-injurious behavior field that can prove that there is a relationship between mistreatment experienced in childhood and self-injurious behavior in adolescence or adult age (Raby, Labella, Martin, Carlson, & Roisman, 2017; Wan, Chen, Sun, & Tao, 2015). However, there are differences in the role that abuse has in self-injurious behavior. For most authors, the neurobiological alterations caused by experiencing stress may result in lower inhibitory capability of impulsivity, more emotional reactivity, and an inability to manage the emotions during development (Auerbach *et al.*, 2014; Nock, 2009).

Other authors, meanwhile, discuss the intra- and interpersonal impacts that childhood victims of abuse may experience in adolescence as well as in adult life, such as experiencing more often negative emotions 'anxiety, depression, and aggressiveness,' low self-esteem, a need for self-punishment, regularly feelings of guilt, a tendency to dissociate, an inability to solve problems, and difficulties in communication and emotional expression (Fliege, Lee, Grimm, & Klapp, 2009).

While physical and sexual violence is the most related to self-injury in some studies (Baiden, Stewart, & Fallo, 2017), there is evidence that all types of violence are risk factors for adolescents' involvement in self-injurious conduct (Liu, Scopelliti, Pittman, & Zamora, 2018; Wan *et al.*, 2015). Suffering from bullying, in person or cyberbullying (Wang, Salle, Wu, Do, & Sullivan, 2018), date abuse (Kiekens *et al.*, 2019), and mistreatment (Liu *et al.*, 2018), appear to be associated with self-injury.

Family functioning also appears to have a significant impact on the performance of self-injurious conduct. According to Walrath (2017), a range of family characteristics can be positively related to adolescent involvement in risky behavior, such as high parental criticism, lack of parental support, and non-supportive family environments. Realizing oneself as being emotionally invalidated in a context of low cohesiveness, supervision, and low affection support can foster in the adolescent feelings of loneliness, lower perception of competence, and low self-esteem, and ultimately can drive them to self-destructive thoughts (Tome, Camacho, Matos, & Simoes, 2015).

In parallel, along with the emotional, family, and biological components involved, there is an influential role in the friendship context, especially in adolescence. Whether through support and modeling provided by peers or the prior weakness of family bonds, being exposed to suicidal or risky behaviors in the context of friendships can increase an adolescent's odds of committing the same acts (Tomé *et al.*, 2015).

To understand the variety of factors that are impacted and contribute to the self-injury phenomenon. It becomes essential to understand it using integrative and interactionist theories. The bioecological theory of human development (Bronfenbrenner, 2005/2011; Bronfenbrenner; Morris, 1998) enables

the assessment of the processes existing between the developing adolescent and all the systems to which they belong. Therefore, comprehending self-injury through bioecological theory provides an integrated analysis regarding the related risk and protection factors, considering personal, contextual, procedural, and temporal aspects (Bronfenbrenner, 2005/2011).

Because of the exposed scientific contributions regarding epidemiological and etiological constituents of self-injury, this study aimed to conduct a survey on the profile of adolescents with a record of self-injurious behavior and investigate personal, family, and social variables associated with self-reported suicidal intent s, based on data from medical records of a Children and Youth Psychosocial Care Center (CAPS IJ) in a city in the south of Brazil. The interrelationships between the investigated variables are based on a bioecological and contextual perspective (Bronfenbrenner, 2005/2011; Bronfenbrenner & Morris, 1998; Senna & Dessen, 2012).

Method

This paper is the result of a cross-sectional quantitative documentary study of a descriptive and exploratory nature. The documentary study is a classification of a source of data collection focused on documents called primary sources. These data collection can be conducted at the moment of the event or phenomenon or later (Lakatos & Marconi, 1991).

In a CAPS for children and adolescents, occurred the data collection, the CAPS is part of the National Public Health System (SUS) for the treatment of children and adolescents up to 18 years who suffer from severe and persistent mental disorders. Those services work through a territorial logic and are constituted by a multidisciplinary team, building a safe environment to embrace, treat, and integrate socially and familiarly children and adolescents (Brazil, 2014). The clinical setting selected for this study is a field in which self-injurious behavior has already occurred. Also, it is the place where the adolescent has already received appropriate mental health care.

Sample

A total of 139 adolescent medical reports makes up the sample. It was considered the data of all adolescents with self-injury records who received care by the service from January 2016 to June 2019. In this study, the inclusion criteria for the records that made up the sample consisted of age ranging from 13 to 18 years "incomplete"; presenting intent behavior of self-injury and or suicide attempt as a reason for assistance. To the planned analyses occurred a dismissal of twenty-four medical records not containing the minimum required information.

Instruments

From individual medical records of the adolescents assisted, which remain stored at the service, the following data were analyzed as descriptive variables: socio-demographic aspects 'age, gender, education, self-reported sexual orientation' family structure 'people who live in the house, reference caregiver in the treatment' family mental health background 'family members with mental disorders'; therapeutic flow of the children and youth care program 'referral services to CAPS IJ' the diagnostic hypothesis of the adolescent. Also, the following dichotomous variables used were a previous or current record of abuse in childhood 'types of abuse' single or multiple episodes, the method used, which part of the body the injury occurred, and the intent of the self-injury 'self-reported internet use 'searching for information, sharing information, or participating in groups on self-injury' support networks 'educational, communitarian and friends' and other risk behaviors 'behavioral, sexual or drug abuse.' Also, occurred the consideration of the injury severity 'ordinal variable.'

Procedures and ethical considerations

This study followed guidelines for research with human beings according to the Brazilian National Health Council resolution Nº 510 (2016) and Statute of the Child and Adolescent (1990). Approval for the project came from the respective Ethics Committee.

First occurred the introduction of the CAPS IJ professionals to the research; later, there was a request for access to the user's embracement data in order to collect all the information needed about all the adolescents embraced during the research period. It is important to highlight that in the National Public Health System (SUS) the term 'user embracement' as one of the processes that constitute health promotion and production practices. The user embracement implies a humanized and civil relationship consisting of qualified listening in THE CAPS IJ.

Finally, the variables to be analyzed were organized in a spreadsheet and filled out for each of the medical records belonging to the sample. For posterior analysis,

occurred the creation of an electronic spreadsheet with all data from the medical records.

Data analysis

Based on the information in the medical records, occurred a descriptive statistical analysis of the individual variables such as (age, gender, sexual orientation, school-related variables, self-injury characteristics, diagnosis hypothesis, previous psychiatric hospitalization, other high-risk behaviors), family members (family background; previous mental health incidents in the family, reference caregiver in treatment) and contextual variables (childhood and or current context of abuse; the therapeutic flow of treatment; support networks; use of social networks on the Internet). It is noteworthy that, in some of the variables, the defined categories were not considered as excluding (for example, suffering more than one type of abuse, using more than one type of self-injury method, and others.), as follows: types of abuse in childhood (physical, sexual, psychological, neglect and abandonment), current types of abuse (physical, sexual, psychological, neglect and abandonment), support networks (friends, school, community), risk behaviors (sexual, transgressive, and drug use), Internet use (joining in groups about self-injury, sharing information about self-injury, searching for information about self-injury), place of self-injury practices (home, school, other), and methods used (sharps object, medicine ingestion, hitting oneself, scratching oneself, other).

Given the divergences found in the literature regarding the suicidal intent aspect related to self-injury, such variable collection was possible through the self-report on adolescents' medical records. Based on the data collected, to assess the association with environmental and individual variables previously identified in the literature as risk factors for self-injury, was necessary a hierarchical binary logistic regression analysis using the binary dependent variable "self-report of suicidal intent "in two groups: with no intent to die (n = 62) x with the intent to die (n = 77) and the endpoint variable (1) is with the intent to die. The distribution of the variables in the sample was observed and based on that, some were excluded from this analysis, and others were recategorized. For the analyses, the Enter method and the addition of three blocks of variables were applied, ranging from more distal risk factors for self-injurious behavior to closer risk factors, by controlling for the variables related to childhood and current exposure to abuse. The first group comprised the variables of childhood and recurrent abuse. The second group concerned support networks. And the last one included the variables related to self-injurious behavior (the method used, affected body parts, the severity of injuries, and circumstances in which the self-injury occurred). All the performed analyses were possible by the use of the statistical software package IBM SPSS version 20.

Results

The medical records analysis indicated that the adolescents ranged in age from 13 to 17 years (M = 14.36; SD = 1.63), predominantly females (79.9%), and the majority of them were students (87.8%) during the moment of user's embracement on CAPS IJ. According to the sample, most of the adolescents were between the 5th grade of elementary school and in the 3rd grade of high school. The majority (60.4%) were between the 7th and 9th grade, and just over half of them (56.1%) have already failed school. Out of the total sample, 76.3% (n = 106) had no previous record of mental health treatment and were. Therefore, new users of the service.

Regarding the family data of the study sample, 53.2% of the adolescents had the mother registered as the reference caregiver for treatment in CAPS IJ, followed by both parents (23%), others (9.4%), father (7.9%), and grandmother(s) (6.5%). Out of 139 participants, 97 of them (69.7%) had someone in the family with some mental disorder. Table 1 displays aspects related to the families and the mental disorders in the adolescents' families participating in the study sample.

Concerning the contextual aspects, 52.5% of the adolescents reported abuse during childhood, the most frequent being sexual abuse (21.6%) and physical abuse (21.6%). Also investigated the presence of current abuse situations, they were embraced in CAPS IJ. the identified current abuse situations were psychological abuse being the most frequent (18%), with bullying situations reported in 43.8% of the cases.

In terms of support networks, the most mentioned was the support of friends (79.9%), followed by the community (24.5%) and school (20.9%), with 97% mentioned having at least one support network besides the family. The online support networks were also investigated, with 13.7% of the sample stating that they joined in some group in social networks related to self-injury, 22.3% shared information, and 39.6% searched for information about self-injurious behavior through

Table 1.
Types of family and family mental illnesses features.

Variable		n	f	%
Family member with mental illnesses	father	97	30	21.6
	mother	97	24	17.3
	extended family	97	14	10.1
	both parents	97	11	7.9
	father and brother(s)	97	9	6.5
	brother(s)	97	9	6.5
Type family mental illnesses [a]	drug addiction	95	46	33.1
	mood disorders	95	40	28.8
	schizophrenia spectrum	95	6	4.3
	intellectual disability	95	3	1.4

Note[a] Two records had no information on the family member's type of mental illness.

digital media - but this was not a piece of information found in all the investigated medical records.

Although, concerning the aspects associated with the context, an investigation on the participants' main referral channels for their embracement to CAPS IJ. The service that most referred to treatment was the school (30.27%), followed by the Municipal Care Unit (23.85%) and the Guardianship Council (16.51%). Due to the lack of data in the medical records, it was impossible to calculate the average time between the self-injuries' identification and the adolescents' embracement at the unit service.

On the personal variables, 35.3% of the adolescents declared to be heterosexual, 23.7% declared to have a non-heterosexual sexual orientation, and 41% did not declare their sexual orientation. Additionally, roughly half of the sample surveyed (49%) had other risk behaviors besides self-injury, the most frequent being the use of alcohol or other drugs (30.9%) and risky sexual behavior (30.2%).

As to the characteristics of mental health treatment, most of the sample (72.7%) was using some psychiatric medication during treatment in CAPS IJ, and the most common diagnostic hypotheses brought up by the service team were Mood Disorders (27.3%) and Borderline Personality Disorder (19.4%). Moreover, 7.9% of the adolescents had already needed a psychiatric hospitalization as a result of self-injury.

Specific to self-injuries, there was evidence that the adolescents used to practice self-injuries all by themselves (87.05%), and, in most cases, the self-injuries occurred in multiple episodes (70.1%). According to the data, the injuries mainly affected only one part of the body (42.4%) and, many times, no homemade care was performed (38.1%). However, a significant group of adolescents needed medical care as a result of the injuries (32.4%). Table 2 shows the methods used and the places where the self-injuries occurred.

At last, the investigation of the suicidal intent as previously reported by the adolescents in the sample. Almost more than half of the medical records (55.4%) reported an intent to die when committing self-injury. Out of the total number of medical records investigated that there were two cases of adolescents who committed suicide during the period that they were in treatment.

To assess the variables associated with the issue of suicidal intent and to evaluate the predictive value for the endpoint, a hierarchical binary logistic regression was performed using the Enter method, based on three blocks of independent variables. The selection criteria for the variables included in the analysis concerned those previously described in the literature as having the most significant contribution to the occurrence of self-injury.

The abuse in childhood and current abuse variables were controlled, being placed in the first group, since they are significant risk factors reported in the literature as predictors of self-injurious behavior. Those variables were considered as binary for logistic regression purposes, not considering the types of abuse. There is a rejection of the existence of multicollinearity

among the variables, once the highest correlation evidenced was 0.568 between the variables "body parts injured" and "method used." Table 3 describes the results obtained from the analysis with the independent variables, indicating the odds ratios (Odds Ratio, OR) and including the confidence intervals (C.I.), unstandardized regression coefficients (B), and the significance (p).

The model correctly classified, on balance, 77.7% of the sample. Out of the nine variables inserted, six of them were significant and explained about 50% of the adjusted variance of suicidal intent ($R^2 = 0.499$; $p < 0.001$). Among the variables that appeared to function as a risk to the suicidal intent present in self-injurious behavior, the one with the most predictive power was the "other methods only" category in the "method" variable. For regression analysis purposes, this last one was recategorized and classified into "only cuts oneself" "cuts oneself and uses other methods" "only other methods" with the first category as the reference. The variable "other methods only" for this analysis grouped all methods other than sharp objects as follows: ingesting medication, scratching oneself, hitting oneself, hanging/suffocating, throwing oneself from a height, breaking glass with the hands, burn injury, ingestion poison, pulling hair, and induce vomit. The use of another self-injury method, not including sharp objects, was highly significant in predicting outcome,

Table 2.
Self-injury methods and places in which they happened.

Variable	Category	n	Frequency	%
Method used [a]	Sharps objects	139	120	86.3
	medicine ingestion	139	42	30.2
	others [b]	139	31	22.3
	beating yourself up	139	15	10.8
	Scratching yourself up	139	14	10.1
Place where the practiced self-injury occurred	only at home	134	96	69.1
	at home and elsewhere	134	38	27.3

Note. [a] *Participants who used more than one method were included in more than one category;* [b] *The variable "other methods" included: hanging (9.1%), throwing oneself from a height (4.2%), breaking glass with one's hands (3.4%), burning (1.4%), ingesting poison (1.4%), pulling hair (1.4%), and induce vomiting (1.4%).*

Table 3.
Hierarchical Binary Logistic Regression between suicidal intent and independent variables.

Variable	n	B	*SE* B	p	OR (odds ratio)	I.C. Lower and Upper OR
childhood abuse	139	0.437	0.461	0.343	1.548	[0,627 3,823]
current abuse	139	1.450	0.512	0.005	4.263	[1,564 11,624]
peer support network	139	-1.238	0.640	0.053	0.290	[0,083 1,016]
support network in the community	139	-1.182	0.544	0.030	0.307	[0,106 0,891]
the support network at school	139	-1.145	0.574	0.046	0.318	[0,100 0,951]
injury severity	139	1.506	0.367	0.000	4.510	[2,140 8,275]
Injured body parts	139	-0.268	0.421	0.765	0.765	[0,336 1,745]
part of the body where the self-injury happened	139	1.138	0.512	0.023	3.121	[1,167 8,344]
method ("only cut yourself")	66			0.033		
method (cut yourself and use another method)	55	0.115	0.607	0.066	3.049	[0,928 10,024]
method ("only use another method")	18	2.220	0.930	0.017	9.210	[1,488 56,996]

with a nine times greater chance of intent to die (OR = 9.210; p <0.05).

Other identified risk variables were "severity of injury" (OR = 4.510; p < 0.05) "current abuse" (OR = 4.263; p < 0.05) and "place where self-injury occurred" (OR = 3.121; p < 0.05). Those three variables raise the chance of intent to die between 3 and 4 times. The variable 'severity of injury' was ordinally classified into 'did not need care,' 'did need home care,' and 'did need medical care,' and the variable 'place where self-injury occurred' was classified into 'only at home' and 'at home and elsewhere,' with the first category as the reference. Also identified in the model were variables that seem to function as protection to the adolescents' intent to die: "school support networks" and "community support networks," which reduce the intent to die by 68.2% and 69.3%, respectively.

The items that did not prove significant for the final model were "abuse in childhood" and "injured body parts." However, one variable presented borderline results in its significance and predictive value for the model, being the "friends support network," reducing the intent to die by 71% (p = 0.053).

Discussion

In this study, the purpose was to characterize the profile of adolescents with a previous record of self-injury embraced at a CAPS IJ in a metropolitan city in southern Brazil, as well as to explore the individual, family, and contextual variables associated with self-reported suicidal intent, considering the bioecological perspective. According to the results concerning family aspects, these are the most significant relationships during this development stage. Since it is the microsystem in which the adolescent develops the first social relationship models (Bronfenbrenner, 2011). In this study sample, most of the adolescents (70.5%) had reported a known history of family mental illness, being the parents the most frequently mentioned family members, with chemical dependency and mood disorders as the most frequent psychopathologies. Emphasized in the literature (Simioni *et al.*, 2018.), such a significant relationship between family mental disorder and self-injury has suggested that such conditions reduce parental capability to self-regulate and offer support (Gromatsky *et al.*, 2017).

Considering the family's main microsystem in which adolescents interact and self-develop, when the family fails to engage in reciprocal, regular, and progressively more complex proximal processes, its members may present dysfunctional outcomes (Bronfenbrenner & Morris, 1998). Such characteristics seem to generate more emotional vulnerability and, as a result, increase the chances of the adolescent becoming involved in risky behaviors in this and other systems.

Also, the abuse suffered during childhood and adolescence is considered one of the main risk factors for the manifestation of psychopathologies and problems in child and adolescent development in general (Busso *et al.*, 2017). From the 139 medical records analyzed in this study, 73 had reference to some type of abuse in childhood and 48 had reference to some type of current abuse, and in 28 cases both cases of abuse (current and childhood) occurred. Even the mediation between violent background and self-injury is not yet acquitting in the literature. There is evidence that these traumatic events can have an impact at the physiological (Dahlgren *et al.*,2018), intrapersonal (Hoyos *et al.*, 2019), and social (Lagdon *et al.*, 2018) levels. The most commonly related types of abuse to self-injury are physical and sexual abuse (Baiden, Stewart, & Fallo, 2017.) also, they are the subtypes most frequently identified in the childhood of the participants in this study. But, mistreatment, in general, is associated with self-aggression (Wan *et al.*, 2015): more than the subtype of abuse experienced, it is necessary to consider the risk and protection factors involved, which may be related to the processes of resilience or vulnerability suffered (Poletto & Koller, 2008).

In the hierarchical regression analysis, abuse in childhood has no association with self-reported intent to die. Therefore, only current abuse was significant in the model, increasing by four times the chance of suicidal intent. Such findings explain oneself according to the understanding of self-injury as an acute reaction to intense negative emotion, often associated with more recent stressors (Nielsen, Sayal, & Townsend, 2017). Besides, abuse suffered during childhood may hit its peak during adolescence, contributing to an adolescent's higher predisposition to become involved in situations and relationships of higher risk to their physical and mental health (Patias, Silva, & Dell'Aglio, 2016). Also, there is evidence that the cumulative nature of suffered abuse can increase the vulnerability to developmental psychopathologies (Day, Ji, DuBois, Silverthorn, & Flay, 2016). Hence, considering the fact that over half of the adolescents who were experiencing some current form of abuse also had a previous childhood record of abuse, there is a suggestion that

the higher impact on suicidal intent is due to the accumulation of abuse suffered and not necessarily to the type or moment of abuse.

In addition to the abuse suffered, variables related to self-injurious behavior appeared independently associated in the final model. There are, in the literature, four dimensions that outline the nature of self-injury, which are the method, the lethality, the outcome, and the intentionality (Guerreiro & Sampaio, 2013). Accordingly, in this study, aside from experiencing current abuse, the adolescents who had the intent to die when they committed self-injury also did so more severely than the others, requiring medical care, the attempt is not only at home but also in another location, they used other not sharp objects as a method such as rope, poison, medicines, burns, and throwing oneself from a high altitude.

In light of this, suicidal intents seem to be a dimension determined by a complexity of factors and not always are defined with clarity. One example is the study by Madge *et al.* (2008), in which the adolescents studied did not know how to differentiate suicidal behavior from only self-injury. It may occur by the intrinsic ambivalence to suicidal behaviors and also by the fact that as well as methods vary, the severity and motivations for self-injury change over time (Kapur *et al.*, 2013). In this way, the differentiation between suicidal intent or non-intent should not be seen statically, even it needs consideration for clinical care and purpose assessment of potential damages for the individual involved.

As in any process that causes vulnerabilities, it is necessary to consider the multiple risks and protective factors present in different contexts. By understanding the management of stressful events and risk factors is not exclusively up to the adolescent. It is relevant to ponder the availability of support networks that is present around them. This study result suggests that the existence of community, school, and friends' support networks, regardless of whether they appeared before or after the self-injury, may reduce the chances of intent to commit suicide in self-injurious behaviors, and therefore contribute, to a certain degree, towards reducing mortality among adolescents. Understanding development in a bioecological manner allows for highlighting the importance of the environment, relationships and roles developed over time, with the systems and people around them (Senna & Dessen, 2012). So, when risk factors present themselves at a given time, in a particular system, with certain relationships, other protective factors can act to minimize, modify, or prevent non-adaptive aspects that cause damage to the person.

In this study, friends appeared to contribute as a limiting protective factor, from the statistical point of view, which seems explainable by the ambivalent effect that the relationship with peers represents in adolescent's life, as there were also reports of bullying situations. Hasking, Andrew, and Martin (2013) emphasize the contaminative nature of self-injury since there is a tendency for adolescents who commit self-injury previously to know a friend or someone who has already done the same act. While peer conflicts can function as predictors of adolescent self-injury (Reigstad & Kvernmo, 2017), on the other hand, these same relationships can also provide closer support in crises, encourage healthy behaviors, and serve as a positive developmental context (Tome *et al.*, 2015).

The community and school support networks also constitute the adolescent's mesosystem, as these are spaces in which the adolescent transits and experiences face-to-face interactions with others. According to these results, the presence of community and school support networks decreases -respectively, by 68.2% and 69.3%- the possibility of the adolescent having the suicide intent when committing self-injuries. Bronfenbrenner (2011) states that the mesosystem, that is the interaction between the microsystems. Enables adolescents to make an ecological transition, involving themselves in new activities and structures that will be part of their biopsychosocial process. It is possible, in this way, that the systems may assume new roles and characteristics in the adolescent's life, based on the changes that occur in external and internal factors, thereby demonstrating their dynamic and complementary nature (Carvalho-Barreto, 2016). Thus, the flexibility and quality of relationships established during adolescence are considered to represent new possibilities for relationships and for handling difficult situations when other systems have previously failed.

Final Considerations

Recently, in the Brazilian context, advances in terms of public policies can be observed. Federal law No. 13,819, promulgated in 2019, created a national policy for prevention measures regarding self-injury and suicide attempts, which guarantees forms of treatment in the public and private network and notification of cases nationwide. The results of this study can supply a shred of prominent evidence for detect, prevent, and

treat these patients, encouraging them the continuity of creation and implementation of public policies that enable the decrease of risk behaviors and improving the mental health of the adolescent population. Guerreiro and Sampaio (2013.) highlight that self-injury is an unarguably serious behavior and a risk factor that has been multiplying in adolescence worldwide and should, therefore, be a priority focus for interventions in the areas of education and health.

Therefore, the investigation of the self-injurious behavior in the context of a CAPS IJ enables and emphasized the study of cases in which has already identified the behavior and has provided the first health care. But it should be considered that, in this context, the most severe forms of self-injury be identified, along with severe psychological distress and, possibly, the presence of some mental disorder.

Moreover, the documental study performed at a CAPS IJ allowed access to qualified and detailed information of the assisted adolescents. Since the submission of them to the assessment by health professionals specialized in the care of this public. However, the use of a primary data source (medical records) can sometimes difficult the obtaining some information since many of them were not well recorded and were not checked out with the participants directly. Besides, the lack of precision in the measures of the results (self-reported suicidal intent) and the measurement of the associated variables may have restricted the performed analyses. Still, the data collection analysis through the researcher can be subject to a given bias since the classification of information has not been subjected to the assessment of judges. However, considering that the data obtained were extracted from a clinical context, in a specific region of the country, with a certain age and mental health conditions clipping, with a small sample, it is not possible to generalize the results to the entire population, requiring, for this purpose, epidemiological studies.

For future studies, here lies the recommendation to compare the clinical and non-clinical samples in different age groups, ethnic groups, and socioeconomic status in order to understand more accurately the variability of manifestations of this behavior and the most prevalent risk and protection factors in the general population throughout the life cycle.

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