## RESEARCH

# SUICIDE ATTEMPTS BY PEOPLE WITH SUBSTANCES USE DISORDERS UNDERGOING TREATMENT

TENTATIVA DE SUICÍDIO POR PESSOAS COM TRANSTORNOS RELACIONADOS AO USO DE SUBSTÂNCIAS EM TRATAMENTO

INTENTO DE SUICIDIO DE PERSONAS CON TRASTORNOS RELACIONADOS CON EL USO DE SUSTANCIAS EN TRATAMIENTO

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#### ABSTR ACT

Objective: to identify the factors associated with suicide attempts by people with substance use disorders undergoing treatment at the Psychosocial Care Centers for Alcohol and Other Drugs. Method: observational and cross-sectional study carried out with 137 people with substance use disorders undergoing treatment at Psychosocial Care Centers for Alcohol and Other Drugs in a capital city in the southern region of Brazil. Data were collected between April and November 2018 by structured interview and subjected to descriptive, univariate, and multiple quantitative analysis. Results: 51.8% of participants had at least one suicide attempt at some point in their lives. Active suicidal thoughts with intent and planning remained independently associated with the history of attempted suicide (PR: 2.87; CI: 1.04-7.91; p: 0.041). In the univariate analysis, there was an association between suicide attempt and days of physical problems, intensity of suicidal ideation, preparatory acts, depressive feelings, family history of mental disorder, hospitalization in a psychiatric hospital, importance of mental health treatment and medication prescription. Conclusion: more severity of suicidal ideation was identified as a factor associated with a history of suicide attempt. It emphasizes the importance of active listening in professional health practice, the therapeutic bond and reception in health care services.

**Keywords:** Suicide, Attempted; Substance-Related Disorders; Mental Disorders; Mental Health; Mental Health Services.

#### **RESUMO**

Objetivo: identificar os fatores associados à tentativa de suicídio por pessoas com transtornos relacionados ao uso de substâncias em tratamento nos Centros de Atenção Psicossocial de Álcool e outras Drogas. Método: estudo observacional e transversal realizado com 137 pessoas com transtornos relacionados ao uso de substâncias em tratamento em Centros de Atenção Psicossocial de Álcool e outras Drogas de uma capital da região Sul do Brasil. Os dados foram coletados entre abril e novembro de 2018 por entrevista estruturada e submetidos à análise quantitativa descritiva, univariada e múltipla. Resultados: 51,8% dos participantes apresentaram ao menos uma tentativa de suicídio alguma vez na vida. Pensamentos suicidas ativos com intenção e com planejamento permaneceram associadas de modo independente ao histórico de tentativa de suicídio (RP: 2,87; IC: 1,04-7,91; p: 0,041). Na análise univariada houve associação entre tentativa de suicídio e dias de problema físico, intensidade dos pensamentos suicidas, comportamento preparatório, sentimentos depressivos, histórico familiar de transtorno mental, internamento em hospital psiquiátrico, importância de tratamento em saúde mental e prescrição de medicamentos. Conclusão: mais gravidade de pensamentos suicidas foi identificada como fator associado ao histórico de tentativa de suicídio. Enfatiza-se a importância da escuta ativa na prática profissional em saúde, do vínculo terapêutico e do acolhimento nos serviços de atenção à saúde.

Palavras-chave: Tentativa de Suicídio; Transtornos Relacionados ao Uso de Substâncias; Transtornos Mentais; Saúde Mental; Serviços de Saúde Mental.

#### **RESUMEN**

Objetivo: identificar los factores asociados al intento de suicidio de personas con trastornos relacionados con el consumo de sustancias en tratamiento en los Centros de Atención Psicosocial por Alcohol y otras Drogas. Método: estudio observacional y transversal realizado con 137 personas con trastornos relacionados con el consumo de sustancias en tratamiento en los Centros de Atención Psicosocial por Alcohol y otras Drogas de una capital del sur de Brasil. Los datos fueron recolectados entre abril y noviembre de 2018 a través de entrevistas estructuradas y sometidos a análisis cuantitativo descriptivo, univariado y múltiple. **Resultados:** el 51,8% de los participantes tuvo al menos un intento de suicidio en algún momento de su vida. Los pensamientos suicidas activos con intención y planificación permanecieron asociados de forma independiente con la historia de un intento de suicidio (RP: 2,87; IC: 1,04-7,91; p: 0,041). En el análisis univariado, hubo asociación entre intento de suicidio y días de problema físico, intensidad de pensamientos suicidas, comportamiento preparatorio, sentimientos depresivos, antecedentes familiares de trastorno mental, ingreso en un hospital psiquiátrico, importancia del tratamiento de salud mental y prescripción de medicamentos. Conclusión: la mayor gravedad de los pensamientos suicidas se identificó como un factor asociado a la historia de intento de suicidio. Enfatiza la importancia de la escucha activa en la práctica profesional de la salud, el vínculo terapéutico y la aceptación en los servicios de salud.

Palabras clave: Intento de Suicidio; Trastornos Relacionados con Sustancias; Trastornos Mentales; Salud Mental; Servicios de Salud Mental.

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#### INTRODUCTION

The suicide attempt corresponds to a potentially self-injurious behavior, associated with some intention of death. Statistics from the World Health Organization report approximately 800 thousand deaths by suicide in the world each year, with more than 20 people who attempt suicide for each suicide. Against life itself, causing a significant socioeconomic impact as a result of the use of health services, short- and long-term disabilities, as well as the psychological burden involved in this act.<sup>2</sup>

It is understood that having a history of suicide attempt during life is a substantial risk factor for the development of a subsequent attempt and for the consummation of suicide.<sup>2</sup> Furthermore, it is consensual in the literature that the intense use of psychoactive substances is also configured as a risk factor for committing suicide attempts.<sup>2</sup> It is estimated that 60% of people undergoing treatment in health services who present disorders related to the use of illicit substances promote at least one suicide attempt during the period of 10 years, while half of the individuals with disorders related to alcohol also perform this act.<sup>3</sup>

Substance use disorders are characterized by the continuous consumption of psychoactive substances such as alcohol, cocaine derivatives and hallucinogens, which favors the emergence of physiological, behavioral, and cognitive changes. This consumption causes impacts to the person related to the low control of the use of these substances, social problems, and psychic and physical changes, especially the craving, which corresponds to the intense desire to consume the substance.<sup>4</sup>

The experience of substance use disorders is often permeated by depressive feelings, stressful life events due to consumption, disruption of family and affective ties, unemployment, impulsivity, aggressive behavior, legal and health problems, facts related to suicidal ideation and suicidal behavior in this population.<sup>5</sup>

Considering the life history of the person with substance use disorders, the daily coexistence with the substance, the moments of craving and conflicting interpersonal and family relationships, the person experiences intense feelings, which favor the development of a suicide attempt.<sup>6</sup> Also, the literature shows that social vulnerability and substance abuse were considered aspects that intensify depressive feelings and lack of desire to live in people who used crack, with the suicide attempt being a way to alleviate suffering.<sup>7</sup>

Scientific evidence reveals that suicidal behaviors differ across cultures, sociodemographic groups and over time, therefore, updated data on the frequency of suicide attempts, associated factors and methods used are essential components for planning strategies to prevent deaths from suicide.<sup>2</sup>

Research on suicide attempts is relevant due to the scarcity of national and South American data on suicidal behavior in people with substance use disorders. Thus, in developing this study, we intend to contribute to the construction of knowledge about the theme and provide scientific support to healthcare professionals to help identify people with substance use disorders, who are more prone to suicide attempts and, consequently, promote more effective preventive strategies focused on reality.

Thus, this study aimed to identify the factors associated with suicide attempts by people with substance use disorders undergoing treatment at the Psychosocial Care Centers for Alcohol and Other Drugs.

#### **METHOD**

Observational and cross-sectional study carried out between April and November 2018 in three Care Centers Psychosocial of Alcohol and Other Drugs III (*Centros de Atenção Psicossocial de Álcool e outras Drogas III* - CAPS AD III) of a capital in the southern region of Brazil.

The population consisted of 1,013 people with substance use disorders, who were being treated at CAPS AD III between April and November 2018. The sample was established for convenience, and those users who attended the study sites during the period were recruited. The choice of the non-probabilistic approach was based, after a pilot test, on the specificity of the study population, which has a high rate of absenteeism in the service, and on the construction of a unique therapeutic project that occurs in an individualized way, consequently, the presence of the user in the service occurs in a heterogeneous way.

Users with substance use disorders and aged 18 years or older were eligible to participate in the study. Those intoxicated by substances who were unable to answer the questions and those with cognitive impairment, identified by the multi-professional team or registered in medical records, were excluded.

Of the 1,013 registered users, 174 were invited to participate. Of these, 24 refused after two approaches, three started the interview and declined to participate, and 10 were excluded – one for substance intoxication and nine for cognitive impairment. Thus, the sample included 137 users, 43 from CAPS (A), 47 from CAPS (B) and 47 from CAPS (C).

Data collection took place between April and November 2018, with two months being allotted to carry out the collection in each of the services, through structured interviews and consultation of the medical records. The interviews were carried out individually, after the participants' formal consent by signing the Free and Informed Consent Term, in reserved rooms provided by the service coordinators, with an average duration of one hour.

For this stage, a collection team of seven previously trained interviewers was formed, ensuring the permanence of at least one interviewer during the period of operation of the service. Before starting data collection, a pilot test was carried out in January 2018 with 15 people with substance use disorders undergoing treatment at a CAPS AD in the metropolitan region, a population similar to the sample of this study.

For the recruitment of CAPS users, two approaches were taken. The first, based on a group meeting, at each service, with users undergoing treatment to provide detailed information about the study, such as theme, objective, expected benefits, consent, confidentiality and anonymity, and duration of the interview. The second, in the following days, when users were individually invited to participate in the interview when they attended CAPS AD III and did not present therapeutic activities scheduled at the time. In cases of impossibility of participation at the time of the approach, interviews were scheduled.

For the assessment of suicidal ideation and behaviors, the Columbia-Suicide Severity Rating Scale (C-SSRS) instrument was used, composed of four subscales that assess the severity of suicidal ideation using an ordinal scale from zero to five points, the intensity of the suicidal ideation by an ordinal scale of two to 25 points, suicidal behaviors (suicide attempt, aborted attempt, interrupted attempt, and preparatory acts) by nominal yes or no scale and the lethality of the suicide attempt.<sup>8</sup>

The application of the C-SRRS in this study was used to identify suicidal ideation and behaviors at some point in life in relation to a lifetime suicide attempt, the number of attempts, the history of a suicide attempt interrupted by external causes, the preparatory acts, suicidal ideation in life and the severity and intensity of the ideation.

The C-SSRS was submitted by its own creators to linguistic validation for different languages and nationalities. Thus, in this study, the Brazilian Portuguese version, made available and authorized by the authors, was used.

The data collection team carried out an online training for the application of the instrument, granted by the creators, based on the visualization of instructional video and resolution of case studies.

The second instrument was the Addiction Severity Index version 6 (ASI-6), composed of questions that identify the characteristics, frequency, intensity and duration of symptoms and problems experienced by people with substance use disorders in the medical field, employment, alcohol use, use of other drugs, family/social and psychiatric. The ASI-6 was validated for the Brazilian culture by showing relevant psychometric properties in the subscales, with Cronbach's alpha between 0.64 and 0.93, by applying the instrument to 740 Brazilians who used substances.

The ASI-6 was used in this study to identify sociodemographic, economic, clinical and therapeutic aspects of people with substance use disorders, specifically gender, age group, schooling, financial dependence, family support, number of close friends, participation in religious activities, days of physical problems, depressive feelings in life and hospital admission history.

The last instrument was developed by the authors to collect information from people about the methods perpetrated in the suicide attempt, planning of the attempt, substance use in the period before the attempt and family history of mental disorder. Still, it included questions of data collection from the medical records regarding the diagnosis of disorders related to substance, mental comorbidity, and prescription of medications.

The dependent variable corresponded to a suicide attempt at some point in life. Among the independent variables, the sociodemographic and economic, clinical and therapeutic aspects stand out.

The data from the C-SSRS and self-developed instruments were coded and sent into an Excel® spreadsheet using double entry, while the ASI-6 data were entered and managed on the Electronic Research Electronic Data Capture® platform. For statistical analysis, the data were exported to the computer programs Stata® v. 12 and SPSS v. 20.

In the descriptive analysis, the categorical variables were expressed as absolute and relative frequency, mean, standard deviation and minimum and maximum values. Continuous variables were categorized according to the linearity of the quantitative gradient and grouped according to frequencies presented after initial descriptive analysis. It is noteworthy that for all the variables of the categorization, the distribution of data and the current literature were considered.

<sup>&</sup>lt;sup>1</sup>To access the C-SSRS instrument and to authorize its use in professional and scientific practice, contact the creators of the instrument.

For inferential analysis, measurements of associations between dependent and independent variables were performed, with a parametric statistical test using Pearson's chi-square test for proportions and non-parametric using Fisher's exact test and U-Mann Whitney test. In all tests, a confidence interval of 95% (95%CI) was considered. We used the calculation of the prevalence ratio (PR) to measure the effect by Poisson regression for those variables that made associations with a p-value <0.2, with those whose p-value <0.05 being considered significant differences.

The multiple analysis was of the 'step wise forward' type, using Poisson regression, with 95%CI, and p<0.05 was considered significant. For the selection of independent variables for the final model, the frequency of the outcome in the sample of this study, statistical significance, model adjustment, value of the effect measure and saturation of the coefficients during the modeling process were mainly considered.

This article was extracted from a doctoral thesis entitled 'Suicide attempt by people with substance-related disorders undergoing treatment at the Psychosocial Care Centers for Alcohol and Other Drugs'; presented to the Graduate Program in Nursing at the Universidade Federal do Paraná (UFPR). The study was approved by the Research Ethics Committee of the Universidade Federal do Paraná, under registration CAAE 66929617.0.0000.0102 and Opinion Report No. 2.033.006. Ethical precepts for the development of research with human beings were respected in accordance with Resolution No. 466/2012.

#### RESULTS

Of the 137 study participants, 73.3% were men, 34.4% were between 18 and 29 years old, 82.5% had no stable marital relationship, 46% were white, 44.5% had completed elementary school and 78, 1% unemployed. Regarding substance use, 39.4% had a diagnosis of disorders related to the use of alcohol, 38.7% to the use of multiple substances and 21.2% to cocaine. In the sample, 81.8% verbalized thoughts of death at some point in their lives, which could range from the wish to be dead to active thoughts with suicidal planning and intentionality.

It is noteworthy that, in the sample, 51.8% made a suicide attempt at some point in their lives, with a mean of 2.5 (SD±3.04) attempts and a minimum value of one and a maximum of 20. The predominant methods used

were self-intoxication by medication in 26.6% and injury by hanging, strangulation and/or suffocation in 21.5%. In addition, 60.6% externalized the lack of planning of the attempt and 67.6% were under the influence of substances at the time of the most lethal suicide attempt.

When correlating lifetime suicide attempts with sociodemographic and economic variables (Table 1), none showed an association. Descriptively, it is noteworthy that people aged between 18 and 29 years, financially dependent on friends and/or family members, with no close friends and lack of participation in religious activities showed a predominance of a history of suicide attempt.

In Table 2, it can be seen that participants with physical or medical symptoms for 10 days or more attempted suicide during their lifetime 1.78 times more when compared to those who did not have physical or medical symptoms at any day.

As for the severity of suicidal ideation at some point in life, those with more severe ideation expressed by active thoughts with intention to act and without planning the act and those with active thoughts with intention and with planning presented, respectively, 5.41 and 6.40 times more likely to have a history of attempt compared to those who only expressed a wish to die.

Those with higher suicidal intensity scores - control, frequency and duration of thoughts, reasons for committing and not committing suicide - were more likely to have a history of suicide attempt, when compared to users with lower scores.

People who performed preparatory acts and who had a history of interrupted suicide attempts both had 0.48 times more history of attempted suicide than those without these behaviors. Furthermore, participants who reported experiencing depressive symptoms in their lifetime were more likely to exhibit a history of trying than those without this symptom. On the other hand, people with a family history of mental disorder attempted suicide during their lifetime 1.52 times more when compared to those without this family history.

When analyzing the association between suicide attempt and the therapeutic profile, it is highlighted that participants who were hospitalized at least once in a psychiatric hospital had approximately twice as many histories of attempted suicide in relation to those who were never hospitalized. In addition, those who considered mental health treatment extremely important were more likely to have attempted

Table 1 - Distribution of sociodemographic and economic variables of people with substance use disorders associated with attempted suicide during their lifetime, *Curitiba*, PR, Brazil, 2018 (n=137)

Variable	Suicidal Attempt		p-value	Prevalence	Confidence
	Yes n (%)	No n (%)		Ration	Interval (95%)
Gender			0.102		
Female	11(73.3)	4(26.7)			
Male	60(49.2)	62(50.8)			
Age Range					
18 to 29 years*	30(63.8)	17(36.2)		[1]	
30 to 49 years	21(46.7)	24(53.3)	0.271	0.73	[0.41; 1.27]
>50 years	20(44.4)	25(55.6)	0.210	0.69	[0.39; 1.22]
Education			0.647		
Complete Primary Education	34(55.7)	27(44.3)			
Complete High School	25(53.2)	22(46.8)			
Complete Higher Education	2(40.0)	3(60.0)			
None	10(41.7)	14(58.3)			
Financially Dependence on friends and/or family members					
No*	42(46.2)	49(53.8)		[1]	
Yes	29(63.0)	17(37.0)	0.196	1.36	[0.85; 2.19]
Family Support			0.211		
No	28(59.6)	19(40.4)			
Yes	43(47.8)	47(52.2)			
Number of Close Friends					
None*	44(62)	27(38)		[1]	
1	5(31.2)	11(68.8)	0.147	0.50	[0.19; 1.27]
2 to 5	14(45.2)	17(54.8)	0.302	0.72	[0.39; 1.32]
6 or more	8(42.1)	11(57.9)	0.315	0.67	[0.31; 1.44]
Participation in Religious Activities					
No	29(64.4)	16(35.6)	0.153	0.70	[0.44; 1.13]
Yes	42(45.7)	50(54.3)		[1]	

<sup>\*</sup>Reference category.

Table 2 - Distribution of clinical variables of people with substance use disorders associated with attempted suicide during their lifetime, *Curitiba*, PR, Brazil, 2018 (n=137)

VARIABLE	Suicide attempt			Prevalence	Confidence
	Yes n (%)	No n (%)	p-value	ratio	interval (95%)
Days of physical problems in the last month					
None*	43(46.2)	50(53.8)		[1]	
From 1 to 7 days	9(42.9)	12(57.1)	0.836	0.92	[0.45;1.90]
≥ 10 days	19(82.6)	4(17.4)	0.035†	1.78	[1.04;3.06]
Diagnosis of substance use disorders			0.472		
Disorders related to cocaine	18(62.1)	11(37.9)			
Disorders related to the use of opioids	1(100)	0(0)			
Disorders related to the use of multiple substances	26(49.1)	27(50.9)			

Continue...

#### ...Continuation

Table 2 - Distribution of clinical variables of people with substance use disorders associated with attempted suicide during their lifetime, *Curitiba*, PR, Brazil, 2018 (n=137)

Variable	Suicide attempt		n volue	Prevalence	Confidence
Variable	Yes n (%)	No n (%)	p-value	ratio	interval (95%)
Disorders related to alcohol	26(48.1)	28(51.9)			
Severity of suicidal ideation					
Wish to be dead*	68(60.7)	44(39.3)		[1]	
Non-specific active suicidal thoughts	66(68.0)	31(32.0)	0.685	1.50	[0.21; 10.64]
Active suicidal thoughts with method and no intention to act	64(73.6)	23(26.4)	0.379	2.14	[0.39; 11.69]
Active suicidal thoughts with some intention and no planning	60(82.2)	13(17.8)	0.026†	5.41	[1.22; 24]
Active suicidal thoughts with planning and intent	47(85.5)	8(14.5)	0.010†	6.40	[1.55; 26.38]
Intensity of suicidal ideation					
5 to 13*	18(40.0)	27(60.0)		[1]	
14 to 18	26(72.2)	10(27.8)	0.054	1.80	[0.98; 3.29]
19 to 25	24(77.4)	7(22.6)	0.034†	1.93	[1.05; 3.56]
Suicide preparatory behavior					
No*	47(42.7)	63(57.3)		[1]	
Yes	23(88.5)	3(11.5)	0.004†	0.48	[0.29; 0.79]
Interrupted suicide attempt					
No*	48(43.2)	63(56.8)		[1]	
Yes	23(88.5)	3(11.5)	0.005†	0.48	[0.29; 0.80]
Mental comorbidity					
No*	44(45.4)	53(54.6)		[1]	
Yes	27(67.5)	13(32.5)	0.104	0.67	[0.41; 1.08]
Mood disorders					
No*	2(28.6)	5(71.4)		[1]	
Yes	25(75.8)	8(24.2)	0.185	0.37	[0.08; 4.59]
Depressed feelings in life					
No*	5(20.0)	20(80.0)		[1]	
Yes	52(57.8)	38(42.2)	0.023†	2.88	[1.15; 7.23]
Yes, under the influence of substances	13(61.9)	8(38.1)	0.032†	3.09	[1.10; 8.68]
Family history of mental disorder					
No*	39(42.4)	53(57.6)		[1]	
Yes	32(71.1)	13(28.9)	0.030†	0.59	[0.37; 0.95]

<sup>\*</sup>Category of reference; †Pearson's chi-square test.

suicide when compared to those who declared nothing important.

Users with mental health drug therapy had a history of suicide attempt 1.83 times more than those without a prescription, and those using antidepressants made 0.42 times more attempts.

The final model of the multiple analysis found that the variable active suicidal ideation with specific plan and intent during life remained independently associated with the previous history of suicide attempt (PR: 2.87; CI: 1.04-7.91; p: 0.041), based on the application of Pearson's chi-square test.

Table 3 - Distribution of therapeutic variables of people with substance use disorders associated with attempted suicide during their lifetime, *Curitiba*, PR, Brazil, 2018 (n=137)

Variable	Suicide Attempt		p-value	Prevalence	Confidence
Variable	Yes n (%)	No n (%)	p-value	Ratio	Interval (95%)
Admission to a psychiatric hospital					
No*	47(43.1)	62(56.9)		[1]	
Yes	24(85.7)	4(14.3)	0.006†	1.98	[1.21; 3.25]
Importance of mental health treatment					
Not at all*	22(37.3)	37(62.7)		[1]	
Slightly	1(33.3)	2(66.7)	0.913	0.89	[0.12; 6.63]
Moderately	5(62.5)	3(37.5)	0.297	1.67	[0.63; 4.42]
Considerably	2(33.3)	4(66.7)	0.879	0.89	[0.21; 3.80]
Extremely	41(67.2)	20(32.8)	0.026†	1.80	[1.07; 3.02]
Drug prescription					
No*	29(60.4)	19(39.6)		[1]	
Yes	42(47.2)	47(52.8)	0.011†	1.83	[1.15; 2.92]
Anxiolytics			0.370		
No	26(44.1)	33(55.9)			
Yes	16(55.2)	13(44.8)			
Antidepressants					
No*	17(31.5)	37(68.5)		[1]	
Yes	25(73.5)	9(26.5)	0.007†	0.42	[0.23; 0.79]
Antipsychotics			0.831		
No	22(50.0)	22(50.0)			
Yes	20(45.5)	24(54.5)			
Mood stabilizers			0.641		
No	11(42.3)	15(57.7)			
Yes	31(50.0)	31(50.0)			

<sup>\*</sup>Category of reference; †Pearson's chi-square test.

### **DISCUSSION**

Undertaking a suicide attempt is influenced by multiple biopsychosocial aspects and causes harmful consequences on mental health, and on social and economic aspects, which can result in long-term disabilities as a result of the act.<sup>2</sup> With this, it is understood as significant the fact that 51.8% of the participants had at least one episode of suicide attempt during their lives, considering the individual, family, and social consequences that this act entails.

This data is superior when compared to national studies. A study carried out in the city of Porto Alegre-RS with people hospitalized for treatment for the use of cocaine derivatives (n=160) found that 30.6% of respondents mentioned having made at least one suicide attempt at some point in their lives. <sup>10</sup> A study analyzing the medical records of 123 people undergoing treatment at CAPS AD III in *Minas Gerais* showed a frequency of 32.5% of users with a history of suicide attempt. <sup>11</sup>

It should be considered that the higher frequency of suicide attempt history in this study may be related

to the instrument used, which makes it possible to deepen the questions about suicidal behaviors, allowing the participant to provide detailed information about the act(s) undertaken.

As for the method, there is a consensus in the literature that exogenous intoxication is the main means of perpetrating a suicide attempt. <sup>2,12</sup> The literature shows that the wide use of this method may be related to the easy access and storage of medicines and other toxic substances. <sup>12</sup> Specifically in drug intoxication, it is highlighted that limiting the scope to methods and means to undertake suicidal behavior is seen as one of the fundamental actions to prevent suicide, with the multidisciplinary health team having a decisive role in prevention and health education with the aim of promoting the safe use of medicines. <sup>2</sup>

It was observed, as a more striking result, based on the multiple analysis, that those users with more serious ideation who presented active suicidal ideation with specific plan and intent were 2.87 times more likely to have a history of suicide attempt when compared to those who wished they were dead.

The intention to act is when the user has thoughts of taking his own life and volition to perform acts regarding these thoughts, corresponding to a greater severity of the ideation and, consequently, a greater risk of developing suicidal behaviors.<sup>1</sup>

From this perspective, a study carried out with people undergoing treatment at a mental health care service in South Korea (n=110) found that suicidal thinking in its most severe form was considered an important aspect associated with a history of suicide attempt. Thus, among people who tried against their own lives, there was a greater than four times chance of having high levels of severity of these thoughts.<sup>13</sup>

A longitudinal study carried out for approximately 80 days with adolescents admitted to a health service focused on suicide prevention (n=85), in a municipality in Denmark, showed that among people who mentioned thoughts of suicide with the intention to act, there was an increase in eight times the chance of performing some suicidal behavior when contrasted with those people with ideation with no intention of acting.<sup>14</sup>

When correlating a suicide attempt during life with sociodemographic and economic aspects, no aspect showed a correlation, unlike the findings in this study, which show that scientific evidence reveals that sex, education and marital status are related to suicidal behaviors.<sup>15</sup>

In the clinical aspects, there was a correlation between those who had more days of physical problems in the last month and a suicide attempt. In this variable, the physical effects caused by the substances regarding intoxication or withdrawal were disregarded. Suicidal behaviors in people with chronic physical health conditions are frequent among people with more severe conditions.<sup>2,16</sup> A study carried out with people undergoing treatment for substance use in a health service (n=696), in Spain, showed greater severity of physical health conditions among those who attempted suicide.<sup>16</sup>

Still with reference to the clinical condition, specifically mental health, higher scores of intensities of suicidal thoughts experienced by the participants were correlated with the suicide attempt during life. A study conducted in a municipality in Sweden followed up for a semester people who accessed an emergency mental health unit for carrying out a self-harm act (n=804) and found that higher levels of intensity were significant predictors of attempt during follow-up.<sup>17</sup>

Research developed at a trauma victim care service in a city in the United States of America, with people who attempted suicide in the period from 2008 to 2012 (n=166), found that using alcoholic beverages and experiencing negative life events were related to the increase in the intensity of suicidal ideation in the 24 hours before the attempt was made.<sup>18</sup>

As for suicidal behaviors, scientific evidence shows that carrying out preparatory actions for suicide often occurs early in the development of a suicidal act, as interrupted attempts, when undertaken, are identified as close to an effective attempt.<sup>19</sup>

The interrupted attempt is understood as the interruption due to external causes, something, or someone, of the person to undertake an act of self-harm with the intention of death. Study developed with people undergoing mental health treatment in an urban region of the United States of America (n=142) reported the frequency of a history of suicide attempt at some point in life in 78 (55.0%) participants and interrupted in 58 (40.9%). Furthermore, it shows a correlation between the interrupted attempt and the suicide attempt during life. It is noteworthy that there is still little scientific evidence to support these aspects in the assessment and identification of the potential risk of suicide. 20

In the literature, mental comorbidity corresponding to the coexistence of two or more mental disorders, being an expressive risk factor for the development of suicidal behavior.<sup>2</sup> Specifically in mood disorders, it is highlighted that experiencing intense feelings of anguish, suffering, demotivation, hopelessness, and depressed mood are frequent factors among people at risk of suicide.<sup>21</sup>

As for the association of family history with mental disorder and suicide attempt, it is emphasized that living with a family member with a mental disorder can cause intense suffering to family members, given the emotional, physical, and financial burden resulting from the illness of a relative and the manifestations of the disorder.<sup>22</sup>

In the therapeutic aspects, admission to a full-time hospital is seen as a therapeutic strategy for those users at imminent risk of suicide, with the aim of keeping them in a protected environment.<sup>23</sup> After hospital discharge in mental health, there may be a significant increase in the risk of suicide. the person undertakes some suicidal behavior, especially among those with more severe mental health symptoms, with severe depression and with no link to health devices in the extra-hospital environment.<sup>24</sup>

Participants who understood mental health treatment to be extremely important, excluding treatment for substance use, were more likely to have attempted suicide during their lifetime. It is considered that, possibly, these people may have experienced intense suffering and complex feelings and symptoms that culminated in a suicidal crisis, which can intensify the self-perception of the need for treatment. The experience of problems resulting from the consumption of alcohol and/or other substances can favor the individual's perception of their health condition and the need for professional help.<sup>25</sup>

Regarding drug therapy, a survey carried out with patients being followed up at psychosocial care centers in Curitiba (n=300) showed that those with a history of suicide attempt were 1.82 times more likely to not adhere to drug therapy when compared to those who adhered.<sup>15</sup>

This study has limitations regarding the cross-sectional design, making it impossible to establish a temporal relationship between the suicide attempt and the aspects of the sociodemographic, economic, clinical and therapeutic profile evaluated. The application of self-report-based instruments may underestimate, or overestimate collected data, especially concerning sensitive questions such as suicidal ideation and behaviors. Furthermore, the convenience sample does not allow making inferences and generalizations about the results, especially when considering the absence of users who started treatment at the research sites, but did not sequence and/or did not attend during the data collection period.

This study contributes to the field of Nursing, by elucidating the multiple and complex factors related to suicide attempts during life among people undergoing treatment for substance use, making it possible to subsidize professional practice and highlight the importance of welcoming and actively listening to the person in need suffering in health care services, as well as the therapeutic link and the articulation between the inter- and intra-sectoral network.

The development of educational activities in health is significant for the entire population, with the purpose of demystifying the stigmas related to people with suicidal ideation and who have performed some suicidal behavior, notably when considering that most participants with a history of suicide attempt undertook behaviors preparatory and displays active and planning thoughts of death. These can be identified by verbal and behavioral manifestations in daily life and in living with the family and in other interpersonal relationships.

In the teaching process, the importance of transversality is highlighted when approaching the topic of suicidal behavior and substance use in the training of health professionals, considering that this theme permeates different areas of professional activity in health, not limited to exclusively in mental health area.

It is recommended to develop research on suicidal behavior and use of psychoactive substances with higher levels of scientific evidence, especially longitudinal research, and directed to the specificity of each substance.

#### **CONCLUSION**

The study showed that 51.8% of the participants who were being treated in CAPS AD III had at least one episode of suicide attempt during their lifetime. The greater severity of suicidal ideation, due to active suicidal ideation with specific plan and intent at some time in life, was independently associated with the history of suicide attempt.

In addition, it was possible to identify in the univariate analysis an association between suicide attempt and days of physical problems, intensity of suicidal ideation, preparatory behavior, interrupted suicide attempt, depressive feelings, family history of mental disorder, hospitalization in a psychiatric hospital, importance of treatment in mental health and prescription of medication.

Among the population with substance use disorders, it is important for professionals to promote therapeutic strategies aimed at the assessment and monitoring of suicidal ideation and behaviors, especially for those with depressive symptoms, with a history of attempt and who verbalize active death thoughts, with death planning and intentionality.

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