

Psychiatric comorbidities and suicide risk among users of psychoactive substances

Comorbidades psiquiátricas e risco de suicídio em usuários de substâncias psicoativas


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ABSTRACT | OBJECTIVE: to identify the presence of psychiatric comorbidities and risk of suicide in users of psychoactive substances treated at health services. **METHODS AND MATERIALS:** descriptive exploratory study carried out with 56 users of psychoactive substances (SPA) in a municipality in the Northwest Mesoregion of the state of Ceará. The data collection instruments were: Self-Reporting Questionnaire (SRQ-20), Depression Assessment Questionnaire (PHQ-9) and the Suicide Rich Index (IRIS). Analysis using descriptive statistics. **RESULTS:** 78.6% (n = 44) were male, 69.6% (n = 39) single and 66% (n = 39) of the users had children. Of these, 80.4% (n = 45) had positive screening for non-psychotic disorders, 82.1% (n = 46) with depression, 69.7% (n = 39) had a high risk of suicide, with emphasis on presence of a marked recent loss (n = 41; 73.2%) and absent religiosity (n = 29; 51.8%). **CONCLUSION:** there is a high frequency of psychiatric comorbidities in SPA users, especially non-psychotic disorders and depression. As for the aspects related to the risk of suicide, most were at high risk for such behavior.

DESCRIPTORS: Suicide. Drug users. Disorders related to substance use. Mental health.

RESUMO | OBJETIVO: identificar a presença de comorbidades psiquiátricas e risco de suicídio em usuários de substâncias psicoativas atendidos em serviços de saúde. **MÉTODOS E MATERIAIS:** estudo exploratório descritivo realizado com 56 usuários de substâncias psicoativas (SPA) de um município da Mesorregião Noroeste do estado do Ceará. Os instrumentos de coleta de dados foram: *Self-Reporting Questionnaire* (SRQ-20), questionário de avaliação de depressão (PHQ-9) e o Índice de Rico de Suicídio (IRIS). A análise por meio de estatística descritiva. **RESULTADOS:** 78,6% (n=44) eram do sexo masculino, 69,6% (n=39) solteiros e 66% (n=39) dos usuários tinham filhos. Destes 80,4% (n=45) apresentaram rastreamento positivo para transtorno não psicóticos, 82,1% (n=46) com presença de depressão, 69,7% (n=39) apresentaram elevado risco de suicídio, com ênfase na presença de perda recente marcante (n=41; 73,2%) e religiosidade ausente (n=29; 51,8%). **CONCLUSÃO:** observa-se alta frequência de comorbidades psiquiátricas nos usuários de SPA, sobretudo transtornos não psicóticos e depressão. Quanto aos aspectos referentes ao risco de suicídio, a maioria apresentou elevado risco para tal comportamento.

DESCRITORES: Suicídio. Usuários de drogas. Transtornos relacionados ao uso de substâncias. Saúde mental.

Introduction

The abusive consumption of psychoactive substances (PAS) and its dependence can be considered a serious public health problem. In 2016, about 271 million individuals used PAS, which corresponds to 5.5% of the world population, and of these, 35 million suffer from disorders resulting from the abusive use of PAS, requiring treatment¹.

In this context, Brazil is responsible for 20% of the world consumption of cocaine and constitutes the largest crack market. A study also shows that around 67 million people consume alcohol regularly, of which 17% have abuse or dependence. As for marijuana, the results reveal that 3% of the adult population uses it frequently, in which 1% of the male individuals are dependent².

In addition to causing chemical dependency, the abusive consumption of PAS has a decisive influence on the health and mental illness process of users and their families. This problem is directly related to suicidal behavior, constituting a risk factor for such action, as it is possible to observe in some studies³⁻⁵.

In view of this, the public health problem that has become suicide is also perceived, progressively affecting the population. According to the World Health Organization (WHO), in 2016, every 40 seconds a suicide occurred in the world, with a global rate of 10.5 deaths by suicide for every 100,000 people, without considering the unreported cases and the estimated attempts, which would increase to a proportion ten times higher⁶. In Brazil, in the year 2018, 12,733 deaths from intentional self-harm were reported, equivalent to more than 30 deaths per day⁷.

The main factors associated with the practice of suicide are: previous attempts that predispose the progressive lethality of the method; having mental disorders; abuse / dependence on alcohol and other PAS; absence of social support; history of suicide in the family; strong suicidal intention; stressful events and unfavorable sociodemographic characteristics, such as poverty and unemployment⁸.

Furthermore, it is highlighted that the abusive use of PAS causes behavioral changes that can contribute to the manifestation of psychiatric comorbidities, and when associated, they increase the risk of suicide, with emphasis on depression, bipolar disorder and anxiety⁹. Therefore, there is a need to know the factors involved in this context, to outline the groups at risk for suicide, in order to direct psychosocial interventions and the appropriate therapy for these people, with strategies that can prevent suicide in this group, in health services.

Therefore, this article aimed to identify the presence of psychiatric comorbidities and risk of suicide in users of psychoactive substances treated in health services.

Method

This is an exploratory-descriptive research with a quantitative approach, carried out in a general Psychosocial Care Center (CAPS general) and in three basic health units within the scope of the Family Health Strategy (FHS) of a municipality in the Mesoregion Northwest of the state of Ceará that makes up the 11th Health Region of the state of Ceará. It is noteworthy that in the municipality there is no CAPS Alcohol and drugs (CAPS ad), so the choice by CAPS General.

For the sample calculation, the monthly average of attendance to PAS users in the aforementioned services was used through data obtained from the Informatics Department of the Unified Health System (DATASUS), in which three units were used that presented more services to this public, as well as the CAPS, for being a reference in serving the PAS user in the city. Thus, it obtained a population of an average of 61 users monitored monthly by these services, which when applying the formula for qualitative outcome variable assuming finite population, totaled 56 users in the sample.

Therefore, the participants were the PAS users monitored in the aforementioned services, being excluded those who had some severe cognitive impairment or who were not able to be interviewed due to lack of verbal communication or because they were under the PAS effect at the time of the interview. Data collection was carried out from February to April 2019, in which the service professionals contributed to the identification of these users, who were then referred to the structured interview with the researchers. It is noteworthy that in the data collection process, most users were invited to participate, with the exception of some who had difficulties to be located by professionals and researchers.

Participants guaranteed consent by signing the Free and Informed Consent Term (FICT) and later, data collection was carried out with a structured interview subsidized by three instruments with an average time of application in 30 minutes, held in a reserved room on the premises of service to ensure privacy.

To assess the presence of psychiatric comorbidities, two validated instruments were used: the Self-Reporting Questionnaire (SRQ-20) and a questionnaire for the assessment of depression (PHQ-9), and to identify the risk of suicide, it was used the the Suicide Risk Index (SRI). The SRQ-20 and PHQ-9 scales were filled out by the users, while the SRI was applied in the interview by the researcher, however, it is noteworthy that in some cases all instruments were registered by the researcher, due to incomprehension on the part of some users or for not having schooling.

The Self-Reporting Questionnaire (SRQ) is a 20-question instrument for tracking non-psychotic disorders (SRQ-20), and is even recommended by WHO for its ease of handling and reduced cost. Its functionality for screening and non-diagnosis stands out, with sensitivity of 86.33%, specificity of 89.31%, positive and negative predictive values of 76.43% and 94.25%, respectively¹⁰.

The PHQ-9 assesses the nine symptoms for depression, which consist of depressed mood, anhedonia, problems with sleep, tiredness or lack

of energy, change in appetite or weight, feeling of worthlessness, disturbed concentration, slowness or excessive restlessness and thoughts. In addition, the questionnaire also contains a tenth question that assesses the influence of these symptoms on the performance of daily activities¹¹. The choice for PHQ-9 was due to the fact that depressive episodes are closely related to the risk of suicide.

The Suicide Risk Index (SRI), seen as quick and simple to investigate the risk of suicide. It consists of 12 items referring to sociodemographic aspects, the context involved and the suicide sphere, in which the maximum total score is 20, namely: $(3 \times 1) + (7 \times 2) + 3 = 20$, or with the presence of a suicidal plan already gets the total allowed score. For this, cutoff points were estimated, divided into three groups, such as: reduced risk with a score less than 5, intermediate risk with a total score between 5 and 9 and high risk with a total value greater than or equal to 10¹².

The data were analyzed with descriptive statistics. It is worth mentioning that the data presented in this article is an excerpt from the study entitled "Mental Health and Suicide Risk in Drug Users", which was approved by the Ethics and Research Committee of the Vale do Acaraú State University (UVA), with opinion n ° 2,739,560 (CAAE 89744918.5.0000.5053).

Results

56 PAS users participated in the research, in which 31 (55.3%) were within the scope of the FHS without seeking specialized care for the disorder related to the use of PAS and 25 (44.7%) were identified and addressed in the CAPS. In total, 44 (78.6%) were male, 20 (35.7%) were unemployed and 20 (35.7%) occupied informal jobs, 39 (69.6%) were single and 39 (66%) of users had children.

From this perspective, the presence of psychiatric comorbidities was assessed, with regard to the presence of non-psychotic disorders, as noted in the table below.

Table 1. Distribution of aspects related to non-psychotic disorders in users of psychoactive substances in a municipality in the 11th Health Region, Ceará, 2019

variables	n	%
1. Non-psychotic disorders		
Absent	11	19,6
Present	45	80,4
2. Aspects related to the disorder		
Sleeps badly	44	78,6
Feels nervous, tense or worried	42	75,0
Have you been unhappy or sad lately	40	71,4
Difficulty thinking clearly	39	69,6
Hands shake	38	67,8
Difficulties in making decisions	38	67,8
Lost or have lost interest in things	38	67,8
Feels tired all the time	37	66,1
Get tired easily	36	64,3
Scares or gets scared easily	33	58,9
Work causes suffering or torment	33	58,9
Difficulties to enjoy or enjoy daily activities	30	53,6
Lack of appetite	29	51,8
Headache frequently	28	50,0
Has been crying more than usual	26	46,4
Have you ever thought about attempting suicide or ending your life	26	46,4
Poor digestion or digestive disorder	24	42,8
Feels unable to play a useful role in life	23	41,1
Has unpleasant feelings in the stomach	21	37,5
You think you're a useless person or worthless	19	33,9

It was found that 45 (80.4%) of PAS users had positive screening for non-psychotic disorders, with some characteristic physical and somatic symptoms, such as poor sleep (78.6%), as well as, related to anxious, depressive and decreased vital energy symptoms. From this perspective, the presence of depression in these users was evaluated, who present the data shown in Table 2.

Table 2. Distribution of aspects related to depression among users of psychoactive substances in a municipality in the 11th Health Region, Ceará, 2019

variables	n	%
Major depressive episode		
Absent	10	17,9
Present	46	82,1
Aspects related to depression		
Little interest or little pleasure in doing things		
No day	15	26,8
Less than a week	6	10,7
One week or more	7	12,5
Almost everyday	28	50,0
Sit down, depressed or without perspective		
No day	13	23,2
Less than a week	7	12,5
One week or more	14	25,0
Almost everyday	22	39,3
Difficulty falling asleep or staying asleep or more than usual		
No day	11	19,6
Less than a week	1	1,8
One week or more	5	8,9
Almost everyday	39	69,6
Felt tired or low on energy		
No day	19	33,9
Less than a week	2	3,6
One week or more	6	10,7
Almost everyday	29	51,8
Lack of appetite or overeat		
No day	10	17,9
Less than a week	2	3,6
One week or more	3	5,3
Almost everyday	41	73,2
Did you feel bad about yourself or think you are a failure or that you disappointed the family		
No day	24	42,8
Less than a week	8	14,3
One week or more	10	17,9
Almost everyday	14	25,0
Difficulty concentrating		
No day	15	26,8
Less than a week	1	1,8
One week or more	6	10,7
Almost everyday	34	60,7
Slowness or agitation more than usual		
No day	10	17,9
Less than a week	3	5,3
One week or more	3	5,3
Almost everyday	40	71,4
Thought about getting hurt or it would be better to be dead		
No day	41	73,2
Less than a week	6	10,7
One week or more	5	8,9
Almost everyday	4	7,2
Symptoms hampered the activities previously performed		
No day	16	28,6
Less than a week	11	19,6
One week or more	7	12,5
Almost everyday	22	39,3

The data referring to depression are similar to that found on non-psychotic disorders, in which 46 (82.1%) of the interviewees were positive for depression, demonstrating the impairment in the mental health of this public. Thus, we also investigated the risk of suicide and the aspects that are related to this behavior according to the SRI, which are shown in table 3.

Table 3. Distribution of aspects related to suicide risk among users of psychoactive substances in a municipality in the 11th Health Region, Ceará, 2019

variables	n	%
Suicide risk		
Low	4	7,1
Intermediate	13	23,2
High	39	69,7
Aspects related to suicide		
Male	41	73,2
Greater than or equal to 45 years	25	44,6
Absent religiosity	29	51,8
Isolation	27	48,2
Striking recent loss	41	73,2
Disabling physical disease	17	30,3
Drug abuse	51	91,1
Serious psychic illness	28	50,0
History of psychiatric hospitalization	21	37,5
Family history of suicide	18	32,1
Personal history of suicidal behavior	27	48,2
Suicide plan	7	12,5

When assessing the risk of suicide through the IRIS, important data were observed, in which 2 (7.1%) had a mild risk; 13 (23.2%) intermediate and 39 (69.7%) high, with worrying predictors, such as drug abuse 51 (91.1%); male gender 41 (73.2%); marked recent loss 41 (73.2%) and absent religiosity 29 (51.8%).

Discussions

When investigating psychiatric comorbidities, it was observed that the majority of SPA users presented non-psychotic disorders (80.4%), corroborating the discussion that the abusive use of PAS can negatively interfere in the individual's mental health, and consequently, be related to the presence of psychiatric comorbidities, considerably worsening the risk of suicide¹³.

In this context, some specific symptoms related to non-psychotic disorders obtained a greater number of "yes" answers, such as questions about sleeping poorly, feeling nervous, tense or worried, and feeling sadly lately, with the prevalence of symptomatology in line with another study with regard to feeling nervous and sad, highlighting the way in which users' mental health is affected, leading to psychological suffering and associated psychiatric disorders¹⁴.

Regarding these psychiatric disorders, the high frequency of the presence of depression in the interviewees stands out, higher than that found in other studies that points to the presence of psychiatric comorbidities in PAS users, especially depression as one of the most common disorders in this audience, and from that, we see the importance of tracking¹⁴⁻¹⁶.

In PAS users, depressive behaviors and feelings of anger and impulsivity are predominant when compared to the general population, in which the effects of using SPA and the relationship with emotional changes even after abstinence, also becomes a factor that increases considerably. the risk for suicidal behavior^{3,17}.

When assessing the risk of suicide, it was observed that more than half were at high risk, which corroborates with some research, which points out the relationship between drug use and the high risk of suicide¹⁸⁻¹⁹. Thus, it is highlighted that the risk factors as well as the protective ones must be carefully evaluated, since suicide is a complex and multi-causal phenomenon.

Among the factors associated with the risk of suicide, being male was the predominant one, in which this variable is considered to be at risk due to the prevalence of impulsive behaviors which implies the choice of more violent means to perform the suicidal act, such as the use of a firearm. fire, hanging and precipitation from high places. As well, there is also abuse of PAS as a risk factor for suicide, with the majority of users being male, and the sum of factors increases this risk²⁰⁻²¹.

Regarding the protective factors for suicidal behavior, the SRI analyzes the practice of a religion or religiosity, since the literature points out that the highest levels of religious engagement positively influence life satisfaction and psychological well-being, while that their absence is associated with alcohol abuse and other PAS, suicidal thoughts and diagnosis of depression²². In the present study, the absence of this variable was observed in about half of the users, constituting itself as a predictor of psychological distress that increases the risk for suicide²².

In addition, a high percentage of users reported a marked recent bereavement loss, a material loss especially related to employment. These data corroborate with that found in another study, which shows losses of parental figures in childhood, termination of romantic relationships and family death among PAS users seen at a CAPS, in which about 9% of these losses were close to admission to the service¹⁹.

It is worth noting the high percentage of users who made abusive use of SPA (91.1%), which is a predisposing factor that doubles the chances for attempting suicide²³. A study indicates the occurrence of the development of mental disorders related to substance abuse and dependence²⁴, with the presence of these in half of the participants.

Another important component in the assessment is the history of suicidal behavior, which was present in 48.2% of the interviewees, with at least two previous attempts, or one considered serious with a violent method or the need for intensive care. The previous suicide attempt is an important fact, since it can be a predictor of a new self-injurious behavior and increases the chances for the consummation of suicide, as the user tends to use more lethal methods²³. A study carried out with 45 users of psychoactive substances identified that 24.4% had psychiatric comorbidities and 33.3% clinical; and 55.6% of them had episodes of depression²⁵.

Conclusion

In the present study, it was found that the high frequency of the presence of psychiatric comorbidities in PAS users, with regard to non-psychotic disorders and depression, with relevance in aspects related to the risk of suicide, in which the majority had a high risk for this behavior.

This study made it possible to identify the influence of the abusive use of PAS on the mental health of the PAS user, and factors associated with suicide from the perspective of risk or protection. With this, the need to care for this population is realized in order to minimize the rates of mental disorders and suicide attempts resulting from the psychiatric comorbidities they develop.

Thus, the importance of studies related to the theme is shown, as it enables the development of care actions at different levels of health care, focusing on the demands and reality of these individuals in order to provide more qualified care, in addition to guiding the design of public policies and nursing care for this public.

However, it has some limitations, such as a restricted sample, but representative of a specific municipality. In addition, the difficulty of accessing reliable and updated information in DATASUS for sample calculation is highlighted, as well as the difficulty of access for some users. Because it is a complex theme, more studies related to the theme are needed with a larger sample at a national level, in order to better understand the related factors.

Author contributions

Oliveira EN participated in the conception, design, search and statistical analysis of the research data, interpretation of the results, writing of the scientific article. Mel BT and Carvalho AG participated in the data collection of the research and writing of the article. Moreira RMM participated in the conception, design, statistical analysis of the research data. Lira RC contributed interpretation of the results. Aragão JMN contributed to the interpretation and analysis of the results and helped in the final adjustments of the article.

Competing interests

No financial, legal or political conflicts involving third parties (government, companies and private foundations, etc.) have been declared for any aspect of the submitted work (including, but not limited to, grants and funding, participation in advisory council, study design, preparation of manuscript, statistical analysis, etc.).

References

1. United Nations Office on Drugs and Crime (UNODC). World Drug Report 2019 [Internet]. 2019. [acesso em 2020 mar 18]. Disponível em: https://wdr.unodc.org/wdr2019/prelaunch/pre-launchpresentation_WDR_2019.pdf
2. Laranjeira R. Segundo Levantamento Nacional de Álcool e Drogas. São Paulo: Instituto Nacional de Ciência e Tecnologia para Políticas Públicas de Álcool e Outras Drogas (INPAD), UNIFESP; 2014.
3. Rocha CN, Silveira DB, Camargo RS, Fernandes S, Ferigolo M, Barros HMT. Risco de suicídio em dependentes de cocaína com episódio depressivo atual: sentimentos e vivências. *SMAD, Rev Eletrônica Saúde Mental Álcool Drog.* 2015;11(2):78-84. doi: [10.11606/issn.1806-6976.v11i2p78-84](https://doi.org/10.11606/issn.1806-6976.v11i2p78-84)
4. Souza AMA, Miranda MPM, Souza EM, Sartes LMA, Miranda CT. Ideação suicida e tentativa de suicídio entre usuários de crack. *Rev Bras Pesq Saúde.* 2014;16(3):115-121.
5. Arribas-Ibar E, Suelves JM, Sanche- Niubo A, Domingo-Salvany A, Brugal MT. Suicidal behaviours in male and female users of illicit drugs recruited in drug treatment facilities, Gac Sanit. 2017;31(4):292-298. doi: [10.1016/j.gaceta.2016.11.011](https://doi.org/10.1016/j.gaceta.2016.11.011)
6. Organização Mundial da Saúde (OMS). Suicide in the world: global health estimates. [Internet]. 2019. [acesso em 2020 mar 18]. Disponível em: <https://apps.who.int/iris/handle/10665/326948>
7. Departamento de Informática do SUS/MS. Óbitos por causas externas/ Lesões autoprovocadas intencionalmente [Internet]. 2018. [acesso em 2020 mar 18]. Disponível em: <http://tabnet.datasus.gov.br/cgi/tabcgi.exe?sim/cnv/ext10uf.def>
8. Chan LF, Shamsul AS, Maniam T. Are predictors of future suicide attempts and the transition from suicidal ideation to suicide attempts shared or distinct: A 12-month prospective study among patients with depressive disorders. *Psychiatry Res.* 2014;220(3):867-73. doi: [10.1016/j.psychres.2014.08.055](https://doi.org/10.1016/j.psychres.2014.08.055)
9. Pinheiro MCP, Marafanti I. Principais quadros psiquiátricos do adulto que predispõem ao uso de álcool, Tabaco e outras drogas. In: Diehl A, Figlie NB. Prevenção ao uso de álcool e drogas: o que cada um de nós pode e deve fazer. São Paulo: Artmed; 2014.
10. Gonçalves DM, Stein AT, Kapczinski F. Avaliação de desempenho do Self-Reporting Questionnaire como instrumento de rastreamento psiquiátrico: um estudo comparativo com o Structured Clinical Interview for DSM-IV-TR. *Cad Saúde Pública.* 2008;24(2):380-390. doi: [10.1590/S0102-311X2008000200017](https://doi.org/10.1590/S0102-311X2008000200017)
11. Santos IS, Tavares BF, Munhoz TN, Almeida LSP, Silva NTB, Tams BD et al. Sensibilidade e especificidade do Patient Health Questionnaire-9 (PHQ-9) entre adultos da população geral. *Cad Saúde Pública.* 2013;29(8):1533-1543. doi: [10.1590/0102-311X00144612](https://doi.org/10.1590/0102-311X00144612)
12. Veiga FA, Andrade J, Garrido P, Neves S, Madeira N, Craveiro A et. al. IRIS: Um novo índice de avaliação do risco de suicídio. *Psiquiatria Clínica.* 2014;35(2):65-72.
13. Polit DF, Beck CT, Hungler BP. Fundamentos de pesquisa em enfermagem. 7.ed. Porto Alegre: Artmed; 2011.
14. Moreira RMM, Oliveira EN, Lopes RE, Lopes MVO, Félix TA, Oliveira LS. Transtorno mental e risco de suicídio em usuários de substâncias psicoativas. *SMAD Rev Eletrônica Saúde Mental Álcool Drog.* 2020;16(1):1-10. doi: [10.11606/issn.1806-6976.smad.2020.158433](https://doi.org/10.11606/issn.1806-6976.smad.2020.158433)
15. Marcon SR, Xavier JS, Barcelon AA, Espinosa MM, Barbosa DA. Correlação entre sintomas depressivos e qualidade de vida de usuários de substâncias psicoativas. *Rev Esc Enferm.* 2014;48(4):663-669. doi: [10.1590/S0080-623420140000400013](https://doi.org/10.1590/S0080-623420140000400013)
16. Hess ARB, Almeida RMM, Moraes AL. Comorbidades psiquiátricas em dependentes químicos em abstinência em ambiente protegido. *Estud Psicol.* 2012;17(1):171-178. doi: [10.1590/S1413-294X2012000100021](https://doi.org/10.1590/S1413-294X2012000100021)

17. Fortes PM, Hess ARB, Marrone DD, Hutz CS, Almeida RMM. Avaliação neuropsicológica do funcionamento executivo, níveis de ansiedade, depressão e raiva de poliusuários de drogas: um estudo comparativo. *Rev Neuropsicologia Latinoamericana*. 2019;11(1):28-37. doi: [10.5579/rnl.2016.0428](https://doi.org/10.5579/rnl.2016.0428)
18. Ribeiro DB, Terra MG, Soccol KLS, Schneider JF, Camillo LA, Plein FAS. Motivos da tentativa de suicídio expressos por homens usuários de álcool e outras drogas. *Rev Gaúcha Enferm*. 2016;37(1):e54896. doi: [10.1590/1983-1447.2016.01.54896](https://doi.org/10.1590/1983-1447.2016.01.54896)
19. Cantão L, Botti NCL. Comportamento suicida entre dependentes químicos. *Rev Bras Enferm*. 2016;69(2):389-396. doi: [10.1590/0034-7167.2016690224i](https://doi.org/10.1590/0034-7167.2016690224i)
20. Monteiro RA, Bahia CA, Paiva EA, Sá NNB, Minayo MCS. Hospitalizações relacionadas a lesões autoprovocadas intencionalmente - Brasil, 2002 a 2013. *Ciênc Saúde Coletiva*. 2015;20(3):689-699. doi: [10.1590/1413-81232015203.16282014](https://doi.org/10.1590/1413-81232015203.16282014)
21. Silva DLS, Torrezan MB, Costa JV, Garcia APRF, Toletto VP. Perfil sociodemográfico e epidemiológico dos usuários de um centro de atenção psicossocial álcool e drogas. *Rev Enferm Atenção Saúde*. 2017;6(1):67-79.
22. Santos WS, Ulisses SM, Costa TM, Farias MG, Fernandes DP. The influence of risk or protective factors for suicide ideation. *Psic Saúde & Doenças*. 2016;17(3):515-526. doi: [10.15309/16psd170316](https://doi.org/10.15309/16psd170316)
23. Félix TA. Fatores de risco para a tentativa de suicídio em um hospital de referência da mesorregião noroeste do Ceará: estudo caso-controle [dissertação]. Sobral-CE: Universidade Federal do Ceará; 2016.
24. Silva DAS, Oliveira NR, Graça MS. A relação entre transtornos mentais e o uso de substâncias psicoativas. *Rev Ciência (In) Cena*. 2018;1(6).
25. Nazaré E, Carvalho AG, Moreira RMM, Melo BT, Lima GF, Ximenes Neto FRG. Interfaces entre o uso abusivo de substâncias psicoativas, presença de comorbidades e risco de suicídio. *Research, Society and Development*. 2020;9(7):1-18. doi: [10.33448/rsd-v9i7.4172](https://doi.org/10.33448/rsd-v9i7.4172)