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Original Article

Suicidal ideation, psychoactive substance use and mental distress among the homeless population of a Brazilian municipality

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Objective: to characterize the presence of suicidal ideation, use of psychoactive substances and mental distress among homeless people. Methodology: a cross-sectional study carried out with 127 participants. Data collection was through the application of a questionnaire containing sociodemographic data, economic information related to living and health conditions and the Self-Reporting Questionnaire; the Alcohol, Smoking and Substance Involvement Screening Test; and the Alcohol Use Disorders Identification Test. Data analysis was carried out descriptively. Results: 37% of the sample reported suicidal ideation, with predominance of the female gender (52.6%), adults (from 30 to 39 years old) (36.3%), non-white skin color (35.2%), low schooling level (39.7%), without a partner (36.4%) and earning no income (36.7%). Problematic consumption of alcohol, tobacco, marijuana and cocaine was observed among the participants with suicidal ideation. More than half of the sample that presented suicidal ideation was experiencing mental distress. Conclusion: suicidal ideation was identified in a significant portion of the sample. Problematic use of psychoactive substances and mental distress were also prevalent in those with suicidal ideation.

Descriptors: III-Housed Persons; Suicidal Ideation; Mental Health; Public Health.

How to cite this article

Ideação suicida, uso de substâncias psicoativas e sofrimento mental entre a população em situação de rua de um município brasileiro

Objetivo: caracterizar a presença de ideação suicida, o uso de substâncias psicoativas e o sofrimento mental entre pessoas em situação de rua. **Metodologia:** estudo transversal realizado com 127 participantes. A coleta dos dados ocorreu por meio da aplicação de questionário contendo informações sociodemográficas e econômicas, relacionadas às condições de vida e saúde e dos instrumentos *Self-Reporting Questionnaire*; *Alcohol, Smoking and Substance Involvement Screening Test* e *Alcohol Use Disorders Identification Test*. A análise dos dados foi realizada de forma descritiva. **Resultados:** da amostra, 37% relataram ideação suicida, com predominância do sexo feminino (52,6%); adultos (30 a 39 anos) (36,3%); cor de pele não branca (35,2%); baixo nível de escolaridade (39,7%); sem companheiro(a) (36,4%) e sem renda (36,7%). Observou-se consumo problemático de álcool, tabaco, maconha e cocaína entre os participantes com ideação suicida. Mais da metade da amostra que apresentou ideação suicida encontrava-se com sofrimento mental. **Conclusão:** a ideação suicida foi identificada em parcela significativa da amostra. O consumo problemático de substâncias psicoativas e o sofrimento mental também foram prevalentes naqueles com ideação suicida.

Descritores: Pessoas Mal Alojadas; Ideação Suicida; Saúde Mental; Saúde Pública.

Ideación suicida, uso de sustancias psicoactivas y sufrimiento mental entre la población sin hogar de un municipio brasileño

Objetivo: caracterizar la presencia de ideación suicida, el uso de sustancias psicoactivas y el sufrimiento psíquico entre personas en situación de calle. **Metodología:** estudio transversal realizado con 127 participantes. La recolección de datos ocurrió mediante la aplicación de un cuestionario que contiene información sociodemográfica, económica relacionada con las condiciones de vida y de salud y de los instrumentos *Self-ReportingQuestionnaire*; *Alcohol, Smoking and Substance Involvement Screening Test* y *Alcohol Use Disorders Identification Test*. El análisis de los datos se realizó de forma descriptiva. **Resultados:** de la muestra, el 37% refirió ideación suicida, con predominio del sexo femenino (52,6%); adultos (30 a 39 años) (36,3%); color de piel no blanco (35,2%); bajo nivel de educación (39,7%); sin pareja (36,4%) y sin ingresos (36,7%). Se observó consumo problemático de alcohol, tabaco, marihuana y cocaína entre los participantes con ideación suicida. Más de la mitad de la muestra que presentó ideación suicida padecía sufrimiento psíquico. **Conclusión:** la ideación suicida fue identificada en una porción significativa de la muestra. El uso problemático de sustancias psicoactivas y el sufrimiento mental también prevalecieron entre aquellos con ideación suicida.

Descriptores: Personas con Mala Vivienda; Ideación Suicida; Salud Mental; Salud Pública.

Introduction

Surviving on the streets is not a recent problem, nor is it unknown to society. During the coronavirus disease (COVID-19) pandemic, the Homeless Population (*População em Situação de Rua*, PSR) in Brazil exceeded 281,000 people. This represents a 38% increase since 2019, with emphasis on the Southeast and Northeast regions, which have the highest rates of people in this condition in the country⁽¹⁻²⁾.

In Brazil, the National Policy for the Homeless Population (*Política Nacional para a População em Situação de Rua*, PNPSR) is not new, having been instituted in 2009⁽³⁾. However, studies are required to understand how people live on the streets and, thus, to promote complementary public policies to reduce health problems among the PSR⁽⁴⁾.

PSR live in a psychosocial context that is exclusionary and which reflects in thoughts and behaviors that make them vulnerable to health problems. Social issues, exposure to violence, prejudice, lack of privacy, poor infrastructure for hygiene care and difficulty accessing education are all conditions that represent this context of vulnerability to which these people are exposed and which can result in harms to their physical and mental health⁽⁵⁾. Also noteworthy are the barriers to accessing health services, which culminate in the interruption of effective care⁽⁶⁾.

Among the main health problems faced by this population are mental disorders, addictions and substance abuse and lack of emotional and social support, conditions that are considered risk factors for problems such as suicidal behavior⁽⁷⁾. This behavior is defined as a concern, desire or act that intentionally seeks to cause self-harm, and encompasses suicidal ideation, suicidal planning and attempted suicide, which may or may not result in death⁽⁸⁾. On the other hand, suicidal ideation is associated with thoughts of ending one's life, in which there is not always a desire for death but, rather, to eliminate existing distress⁽⁹⁾.

Diverse evidence shows that suicidal ideation is common and that its prevalence varies widely among PSR. A meta-analysis study involving 27,497 homeless people found 17.8% prevalence of suicidal ideation in the last year and 41.6% over a lifetime⁽¹⁰⁾. A Brazilian study found 29.8% prevalence⁽¹¹⁾. Identifying suicidal behavior actually helps to identify related risk factors, plan strategic intervention actions and strengthen public health policies aimed at this social group⁽¹²⁾.

Despite the magnitude of suicidal behavior, the literature is limited concerning PSR, both nationally and internationally. In addition, based on a previous bibliographic survey, no evidence has been found to date that addressed the presence of suicidal behavior among the PSR in the state of Piauí, specifically. This knowledge

gap sparked certain interest in investigating the topic. In addition, it was observed that, in other national and international scenarios^(10,13), suicidal behavior has become a reality among this population segment, and it is important to analyze the local panorama, which can result in contributions to the social and scientific contexts, such as planning of preventive strategies, access to treatment for related mental disorders, social support, community education and awareness and reduction of the associated stigma.

Based on the above, this study aims at characterizing presence of suicidal ideation, use of psychoactive substances and mental distress among homeless people.

Methodology

Study design

This is a cross-sectional study with a quantitative approach.

Study locus

The study was carried out at the Specialized Reference Centre for the Homeless Population (*Centro Pop*), the Specialized Social Approach Service (*Serviço Especializado de Abordagem Social*, SEAS) and the Municipal Hostel (*Casa do Caminho*). These places are part of the network of integrated actions of Special Medium-Complexity Social Protection. More precisely, specialized care is offered to the PSR through temporary welcoming, referrals and coordination with the social assistance network and other public policy networks. Such services are located in the city of Teresina, capital of the state of Piauí, in the Brazilian Northeast region.

Period

Data collection took place between October 2019 and March 2020.

Population and sample

The study population was made up of homeless people assisted by the aforementioned services. As this is an unstable population segment, in terms of the exact number of individuals in this condition in the municipality, the list of care actions provided by the *Centro Pop* coordinators was taken into account, corresponding to a total of 500 records. To select the sample, the formula for sample calculation for finite populations⁽¹⁴⁾ was applied, obtaining a minimum sample of 212 participants. To avoid possible losses and/or dropouts, 10% was added to the value obtained, totaling a sample of 233 participants.

Due to the public health emergency caused by the COVID-19 pandemic, which required the adoption of

precautionary measures to prevent spread of the virus and protect the integrity both of the participants and of the researchers, the data collection stage had to be closed before the total sample was obtained, with a total of 127 participants.

Selection criteria

People of both genders and aged at least 18 years old were included. The exclusion criteria were as follows: having any impairment that would interfere with understanding and answering the instrument's items. These criteria were observed by the researcher when interviewing the participants, taking into account their comprehension or the presence of difficulties answering the questions and/or issues informed by the professionals from the teams of each service where the research took place. With this criterion in mind, 13 people were excluded.

Collection instrument and study variables

The data were collected using a questionnaire prepared by the authors containing sociodemographic and economic information such as gender (male or female), age (in complete years old), marital status (with or without a partner), race/skin color (white, black, Asian, brown or indigenous), schooling (years of study) and source of income (retired, government benefit, self-employed or none); and questions related to living and health conditions (presence or absence of mental distress and suicidal ideation at some point in life) and consumption of Psychoactive Substances (PAS).

The Self-Reporting Questionnaire (SRQ-20)⁽¹⁵⁾ was used to identify presence of mental distress, while theAlcohol, Smoking and Substance Involvement Screening Test (ASSIST)⁽¹⁶⁾ and the Alcohol Use Disorders Identification Test (AUDIT)⁽¹⁷⁾ were employed to investigate psychoactive substance use.

SRQ-20 is a scale that assesses non-psychotic symptoms related to insomnia, fatigue, appetite, thinking, mood and somatic problems, which are manifestations of Common Mental Disorders (CMDs), and evaluates mental distress. It consists of 20 items with "Yes"/"No" answers, with each item adding one point to the final score. A number of "Yes" answers greater than or equal to 7 corresponds to presence of mental distress⁽¹⁵⁾.

ASSIST is a structured questionnaire containing eight questions about psychoactive substance use, subdivided into nine classes: tobacco, alcohol, marijuana, cocaine, stimulants, sedatives, inhalants, hallucinogens and opiates. The items investigate use frequency, problems related to use, concern about use on the part of people close to the user, impairment in the performance of expected tasks, unsuccessful attempts

to cease or reduce use, feelings of compulsion and use by injection. Scores from 0 to 3 indicate occasional use; from 4 to 15, abuse; and \geq 16 suggests dependence⁽¹⁶⁾. Occasional use was categorized as low risk and abuse and dependence as problematic consumption.

The alcohol consumption patterns were identified using AUDIT. This instrument consists of ten questions and its score classifies the consumption pattern as follows: low risk use (Zone I: from 0 to 7 points), risk use (Zone II: from 8 to 15 points), harmful use (Zone III: from 16 to 19 points) and probable dependence (Zone IV: from 20 to 40 points)⁽¹⁷⁾. "Risk use", "harmful use" and "probable dependence" were categorized as problematic consumption.

Data collection

The research team was made up of a graduate student nurse and four Nursing undergraduate students, who were trained to carry out this task. A pre-test was performed to check suitability of the instruments and guide the researchers' approach. Adaptations to the structure of some items were necessary to make it easier for the participants to understand. The results obtained in this stage were not taken into account in the survey results⁽¹⁸⁾.

The participants were approached by the researchers during their time at the services selected as the study *loci*. The study objectives, procedures and purpose were presented to them. Those who agreed to take part in the study signed the Free and Informed Consent Form (FICF) in two copies.

This stage took place in a private environment, in rooms provided by the services so as to guarantee the participants' privacy and confidentiality of the information. The data collection instrument was applied by the researchers, who read the questions and helped with the answers, lasting approximately 30 minutes.

Data treatment and analysis

The data were analyzed descriptively. The data collected were double-typed into *Microsoft Excel*® (2016) spreadsheets. They were then exported to the *Statistical Package for the Social Sciences* (SPSS), version 22.0, and analyzed. To describe the data collected, absolute and relative frequencies, central tendency (mean) and dispersion (standard deviation) measures and the maximum and minimum values of the numerical variables were calculated.

Ethical aspects

The study was approved by the Research Ethics Committee of the Federal University of Piauí in February 2019, under opinion number 3,152,268. The research follows the recommendations set forth in resolutions $466/12^{(19)}$ and $510/16^{(20)}$ of the National Health Council.

The study is part of the matrix project entitled "Use of alcohol and other drugs, common mental disorders and violence among the homeless population", developed by the Study and Research Group on Mental Health and Work of the UFPI Graduate Nursing Program.

Results

The sample consisted of 127 homeless people, most of whom were male (85%), adults (from 30 to 39 years old) (34.6%), non-white (82.7%), with low schooling levels (65.4%), without a partner (79.5%) and with no source of income (38.6%). Of the total, 47 (37%) reported suicidal ideation. Presence of ideation

was observed in 34.25% of the males and 52.6% of the females; as well as in 36.3% of the adults; 35.2% of those self-declared as non-white; 39.7% of those with low schooling levels; 36.4% of the people without a partner; and 36.7% of those with no source of income, according to the data presented in Table 1.

With regard to psychoactive substance use, problematic consumption of alcohol (69.3%), tobacco (74.8%), marijuana (61.4%) and cocaine (58.3%) was identified. A description of their use and of other PAS and presence of suicidal ideation is shown in Table 2.

Mental distress was identified in 63% of the participants. Of these, 55% stated having had thoughts of ending their lives, as shown in Figure 1.

Table 1 - Frequency of suicidal ideas among the homeless population according to sociodemographic and economic characteristics ($n^* = 127$). Teresina, PI, Brazil, 2020

Variables		Suicidal ideation				
	No		Yes		Total	
	n*	%	n*	%		
Gender						
Male	71	88.8	37	78.7	108	85.0
Female	9	11.2	10	21.3	19	15.0
Total	80	100.0	47	100.0	127	100.0
Age group (years old)						
19 – 29	14	17.5	14	29.8	28	22.2
30 – 39	28	35.0	16	34.0	44	34.6
10 – 49	22	27.5	8	17.0	30	23.6
≥50	16	20	9	19.2	25	19.6
Total .	80	100.0	47	100.0	127	100.0
Race/Skin color						
Vhite	12	15.0	10	21.8	22	17.3
Non-white	68	85.0	37	78.2	105	82.7
Total	80	100.0	47	100.0	127	100.0
Schooling (years of study)						
<8	50	62.5	33	70.2	83	65.4
28	30	37.5	14	29.8	44	34.6
Total Total	80	100.0	47	100.0	127	100.0
Marital status						
Nithout a partner	68	85.0	39	83.0	107	79.5
Nith a partner	12	15.0	8	17.0	20	20.5
Total	80	100.0	47	100.0	127	100.0
Source of income						
Retirement	9	11.3	2	4.2	11	8.7
Government benefit	21	26.3	16	34.0	37	29.1
reelancer	19	23.7	11	23.4	30	23.6
None	31	38.7	18	38.4	49	38.6
Total	80	100.0	47	100.0	127	100.0

^{*}n = Number

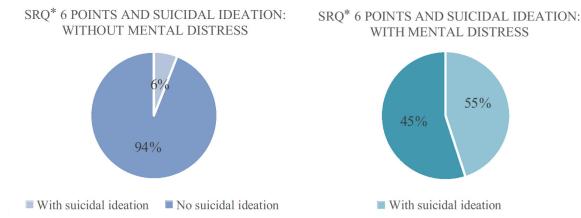
Table 2 - Frequency of suicidal ideas among the homeless population according to PAS* (n^{\dagger} = 127). Teresina, PI, Brazil, 2020

Psychoactive substance use	Suicidal ideation				Total	
	No		Yes		Total	
	n†	%	n†	%	n†	%
Alcohol						
Low risk	24	30.0	15	32.0	39	30.7
Problematic	56	70.0	32	68.0	88	69.3
Total	80	100.0	47	100.0	127	100.0
Tobacco						
Low risk	20	25.0	12	25.5	32	25.2
Problematic	60	75.0	35	74.5	95	74.8
Total	80	100.0	47	100.0	127	100.0
Marijuana						
Low risk	31	38.8	18	38.3	49	38.6
Problematic	49	61.2	29	61.7	78	61.4
Total	80	100.0	47	100.0	127	100.0

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Psychoactive substance use	Suicidal ideation				- Total	
	No		Yes		Iotai	
	n†	%	n†	%	n†	%
Cocaine						
Low risk	37	46.2	16	34.0	53	41.7
Problematic	43	53.8	31	66.0	74	58.3
Total	80	100.0	47	100.0	127	100.0
Amphetamines						
_ow risk	71	88.8	46	98.0	117	92.0
Problematic	9	11.2	1	2.0	10	8.0
Total	80	100.0	47	100.0	127	100.0
nhalants						
∟ow risk	67	83.8	41	87.2	108	85.0
Problematic	13	16.2	6	12.8	19	15.0
otal	80	100.0	47	100.0	127	100.0
lypnotics						
Low risk	72	90.0	40	85.1	112	88.2
Problematic	8	10.0	7	14.9	15	11.8
otal	80	100.0	47	100.0	127	100.0
lallucinogens						
ow risk	75	93.8	44	93.6	119	93.7
Problematic	5	6.2	3	6.4	8	6.3
otal	80	100.0	47	100.0	127	100.0
)pioids						
ow risk	77	96.2	41	87.2	118	93.0
Problematic	3	3.8	6	12.8	9	7.0
otal	80	100	47	100.0	127	100.0
Others						
ow risk	78	97.5	45	95.8	123	96.8
Problematic	2	2.5	2	4.2	4	3.2
otal	80	100.0	47	100.0	127	100.0

^{*}PAS = Psychoactive Substances; †n = Number



*SRQ = Self-Reporting Questionnaire

Figure 1 – Frequency of suicidal ideas among the homeless population related to presence of mental distress (n = 127). Teresina, PI, Brazil, 2020

Discussion

The PSR is characterized as a significant segment and represents the inequalities present in society, especially since the global political, social and economic changes of recent decades. Therefore, there is a tendency, coming from contemporary approaches, to understand the particularities in which this population lives, which aspires to public mental health policies that are convergent with their demands⁽²¹⁾.

It is worth mentioning that the PSR requires intersectional attention on their health issues since these issues are permeated by variables such as gender, race and class, which converge to amplify their social marginalization and the health-disease process⁽²²⁾.

The literature converges on the sociodemographic and economic characterization of the study participants. According to data, it was estimated that there would be 281,472 homeless people in Brazil by 2022, with the Northeast region ranking second in

terms of the growth of this population between 2019 and $2022^{(2)}$.

There is no exact figure for this population in Teresina, the city where this study was carried out. The last national census, released in 2009, reported 370 individuals living in this condition in the municipality⁽²³⁾. Data from *Centro Pop* based on services provided in 2019 showed 500 records. The increase follows the national trend. However, there are no surveys carried out at local level that accurately point to this information, given that not all PSR are covered by social assistance policies.

The census carried out in 2009 highlighted some characteristics, such as people who were male, self-declared as black-skinned, aged between 25 and 44 years old and with low schooling levels⁽²³⁾. The findings of this study corroborate a sociodemographic survey of PSR carried out in the Brazilian regions, which identified prevalence of males, aged between 18 and 59 years old, black-skin, with low schooling levels and living in extreme poverty⁽²⁴⁾.

Regarding the presence of suicidal ideation in the PSR of Teresina, the related rates may vary depending on the methods, instruments used and size of the sample. It appears that, as it involves assuming certain type of suicidal behavior, the participants may have been afraid or embarrassed to report it.

Understanding a person that experiences suicidal behavior sometimes requires understanding the stigma attached to the phenomenon and of contemporary views that see this behavior as marginal. In addition, it is essential to interrupt these partial views and gain a comprehensive understanding of the spectrum surrounding the issue⁽²⁵⁾.

The suicidal ideation rates identified in this research corroborate the data presented in the systematic review and meta-analysis carried out in 2019, which pointed out that the prevalence of suicidal ideation was present throughout life among homeless individuals, ranging from 17.83% to $41.6\%^{(10)}$.

Suicidal behavior is multifactorial and can be influenced by a number of factors, including age, gender, family income, schooling level, current place of residence, family situation, physical or mental health conditions, alcohol or drug use, immunoinflammatory abnormalities, and history of mental disorders and suicides in the family, as well as a history of suicide attempts⁽²⁶⁾.

In terms of suicidal behavior and gender, a number of studies show that men die by suicide more than women, as they tend to use methods with high lethality degrees, whereas women have a higher number of suicide attempts, through intake of drugs and other toxic substances⁽²⁷⁾.

Despite the findings, it is inferred that homeless women are more likely to manifest suicidal behavior, as they are constantly exposed to a set of oppressive conditions and their experiences are surrounded by invisibility. As a result, in addition to the messy situations common in this context, these women also have to endure a macho society and exposure to all types of violence, whether physical, sexual or psychological, characterizing a complex and highly vulnerable scenario⁽²⁸⁾.

In this study, the presence of ideation stood out among adults (from 30 to 39 years old), similarly to the results of national and international cross-sectional studies⁽²⁹⁻³¹⁾. However, the World Health Organization (WHO) highlights the prevalence of suicidal behavior, including suicide, as the second leading cause of death among adolescents and young adults in the 15-29 age group⁽³²⁾.

Concerning race and schooling, in this study suicidal ideation was predominant among those of non-white race/skin color and with low schooling levels. This research corroborates the findings of a US study that investigated suicidal ideation, plans and attempts among 255 homeless people, highlighting that 81% of the participants were non-white, and that presence of these behaviors was associated with lack of schooling⁽³³⁾. It has been shown that the lower the formal education level, the greater the vulnerability to suicidal behavior because the economic challenges faced are greater, such as unemployment and poverty, which can hinder access to information and mental health services⁽³⁴⁾.

Regarding marital status, it was found that some of the PSR with suicidal ideation lived alone, without a partner. A study carried out with 274 homeless people in Recife, Pernambuco, Brazil, found that most of the participants stated being single. Despite this, it has been pointed out that the affective relationships engendered in this scenario, even if inconstant, can serve as support and coping for people living on the streets⁽³⁵⁾.

Of the factors related to lack of income, it is important to consider that many people are unable to generate enough money to meet their housing needs, either because they do not have a formal job, or because they do informal and precarious work that does not meet the financial demands of a household, especially in large cities. Combined with other unfavorable conditions, this factor predisposes individuals to suicidal ideation⁽³⁶⁾.

It is important to analyze the PSR broadly. It is not only the susceptibility linked to certain conditions or diseases that should be understood, but also the contexts and paths that culminated in homelessness and its confluence with each person's particularities⁽²¹⁾.

In light of these findings, some issues that permeate the context of the PSR are elucidated. This dialectical movement between exclusion and inclusion leads to ethical-political distress, a consequence of the relationship between the experience of social injustice and affective responses to social, economic and subjective processes⁽³⁷⁾.

The influence of income can be seen, highlighting financial instability as a strong socioeconomic issue to be discussed, as it can be related to anguish and other problems, which corroborate suicidal thoughts as a means for escaping reality. It is therefore essential to understand the distress involved in living in poverty, especially in a society marked by consumption and the appreciation of material accumulation.

A study on the profile of users assisted by a Street Clinic team from a municipality in Piauí, Brazil, found that the main reasons for living on the streets were related to family conflicts, followed by consumption of psychoactive substances. These factors alone constitute a risk because experiencing conflicts, violence, abuse or loss and isolation is strongly associated with suicidal behavior⁽³⁸⁻³⁹⁾.

Specifically regarding psychoactive substance use, the literature suggests that this consumption is associated with an increased risk of suicidal behavior. In addition, the assessment of psychoactive substance use should be part of the care provided to people at risk. Efforts can also be focused on reducing hazardous use of alcohol, tobacco and marijuana, for example, as a suicide prevention strategy in low- and middle-income countries⁽⁴⁰⁾.

According to the data collected in this study, consumption of alcohol and other drugs is a variable that has repercussions for suicidal ideation. In this way, a parallel can be drawn between the isolation experienced by people living on the streets, conflicting and precarious (and oftentimes non-existent) family ties, and abuse of alcohol and other drugs.

The findings on psychoactive substance use and suicidal ideation in this study corroborate data from a survey of crack users in six Brazilian state capitals. It was found that people who live on the streets consume more alcohol and use illicit drugs, which contributes to the emergence of suicidal behavior⁽¹³⁾.

Problematic use of alcohol and other drugs can lead to difficulties in emotional relationships and contribute to social isolation, which is why it is closely linked to suicidal behavior. A study of 123 drug addicts undergoing treatment at a Psychosocial Support Center III showed that around 30% had suicidal ideation and that presence of family problems and depression was associated with suicidal behavior⁽⁴¹⁻⁴²⁾.

Mental distress was identified among most of those interviewed. The mental health of the PSR is fragile, given that living conditions on the streets contribute to the onset and worsening of mental disorders⁽⁴³⁾. The national census showed psychiatric disorders (6.1%) among the most cited health problems⁽²³⁾. The literature refers to schizophrenia, depression, cognitive impairment, alcohol abuse/dependence, mood disorders, anxiety disorders, attention deficit hyperactivity disorder, eating disorders and personality

disorders as the most prominent among this population group. The presence of one or more of these disorders is commonly associated with suicide $risk^{(8,44)}$.

It is important to point out that access to health services is a difficulty experienced by PSR, as a result of which barriers to mental health diagnoses arise. These limitations increase their frailty and prevent the early identification of psychological distress and the adoption of strategies to prevent suicidal behavior⁽⁴⁵⁾.

In addition to the PNPSR⁽³⁾, which has brought about advances in guaranteeing access to healthcare for the PSR, other strategies have been implemented to assist these people, such as the Street Clinic, which has a multidisciplinary team and develops strategies based on health promotion, harm reduction and social inclusion⁽⁴⁶⁾. However, it is still necessary to make progress in an equal way to guarantee access of the PSR to health care services in a comprehensive manner⁽²²⁾.

The limitations of this study include its cross-sectional approach, in which it is not possible to establish a cause and effect relationship between the condition investigated and the related factors. In addition, the fact that the instruments were applied at a single point in time does not allow for longitudinal monitoring or for a more in-depth professional clinical assessment. However, the indicators produced can provide support for scientific knowledge, for the development of actions and for the elaboration of policies that favor the health of the PSR, especially for issues related to the mental health of this population.

Conclusion

Suicidal ideation was identified in a significant portion of the sample, and was predominant in people with characteristics such as female gender, adults (from 30 to 39 years old), non-white, low schooling level, without partner and with no source of income. In addition, problematic consumption of psychoactive substances and mental distress were also prevalent among those with the idea of ending their own lives.

It can be seen that being homeless can be a risk factor for suicidal ideation when linked to other problems, such as use of alcohol and other drugs, socioeconomic issues and mental distress, forming a complex feedback relationship. The PSR live in a context of vulnerability, which exerts a direct impact on the frailty of basic human needs and presents health risk behaviors that deserve to be highlighted and paid attention to.

It is thus understood that homeless people face several factors that influence suicidal behavior, which points to the need to strengthen the strategies stemming from the National Policy for the Homeless Population, in order to combat the difficulties accessing health services and ongoing treatment for this population,

which, for being more vulnerable, requires efforts and more attention from the scientific community, health professionals and public authorities.

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References

- 1. Sicari AA, Zanela AV. Homeless people in Brazil: a systematic review. Psicol Cienc Prof. 2018;38(4):662-79. https://doi.org/10.1590/1982-3703003292017
- 2. Natalino M. Estimativa da população em situação de rua no Brasil (setembro de 2012 a março de 2020 [Internet]. Brasil: Ipea; 2020 [cited 2023 Jun 15]. Available from: https://repositorio.ipea.gov.br/bitstream/11058/10074/1/NT_73_Disoc_Estimativa%20 da%20populacao%20em%20situacao%20de%20 rua%20no%20Brasil.pdf
- 3. Brasil. Decreto Nº 7.053 de 23 de dezembro de 2009. Institui a Política Nacional para a População em Situação de Rua e seu Comitê Intersetorial de Acompanhamento e Monitoramento, e dá outras providências. Diário Oficial da União [Internet]. 2009 Dec 24 [cited 2023 Nov 25]: seção 1:16. Available from: https://www.planalto.gov.br/ccivil_03/_ato2007-2010/2009/decreto/d7053.htm
- 4. Cervieri NB, Uliana CH, Aratani N, Fiorin PM, Giacon BCC. Access to health services from the perspective of homeless people. SMAD, Rev Eletrônica Saúde Mental Álcool Drog. 2019;15(4):1-8. https://doi.org/10.11606/issn.1806-6976.smad.2019.151229
- 5. Sousa AP, Macedo JP. Population in street situation: (Im)pertinent expression of the social issue. Psicol Teor Pesqui. 2019;35. https://doi.org/10.1590/0102.3772e35510
- 6. Fernandes MA, Ribeiro AAA. Homeless population and the right to access health services. Rev Interdisc Direitos Humanos. 2022;10(1):129-39. https://doi.org/10.5016/ridh.v10i1.124
- 7. Patrício ACFA, Figueiredo MSBR, Silva DF, Rodrigues BFL, Silva RF, Silva RAR. Health risk conditions: people on the streets. Rev Enferm UERJ. 2020;28. https://doi.org/10.12957/reuerj.2020.4452
- 8. Baggio L, Palazzo LS, Aerts DRGDC. Suicide planning among teenage students: prevalence and associated factors. Cad Saúde Pública. 2009;25:142-50. https://doi.org/10.1590/s0102-311x2009000100015
- 9. Klonsky ED, May AM, Saffer BY. Suicide, suicide attempts, and suicidal ideation. Ann Rev Clinic Psychol. 2016;12:307-30. https://doi.org/10.1146/annurev-clinpsy-021815-093204
- 10. Ayano G, Tsegay L, Abraha M, Yohannes K. Suicidal ideation and attempt among homeless people: a Systematic Review and Meta-Analysis.

- Psychiatr Q. 2019;90(4):829-42. https://doi.org/10.1007/s11126-019-09667-8
- 11. Vitorino LM, Possetti JG, Silva MT, Santos GS, Lucchetti G, Moreira-Almeida A, et al. The role of spirituality and religiosity on suicidal ideation of homeless people in a large Brazilian urban center. J Affect Disord. 2021;295:930-6. https://doi.org/10.1016/j.jad.2021.08.035
- 12. Sousa WL. Suicide among homeless people: interfaces for care. Rev Bras Psicol [Internet]. 2017 [cited 2023 Jun 20];4(1). Available from: https://periodicos.ufba.br/index.php/revbraspsicol/issue/download/1843/498
- 13. Castro RAS, Padilha EB, Dias CM, Botti NCL. Vulnerabilities of the homeless population to suicide behavior. Rev Enferm UFPE on line. 2019;13(2):431-7. https://doi. org/10.5205/1981-8963-v13i2a237023p431-437-2019 14. Barbetta PA. Estatística aplicada às ciências sociais. 7. ed. Florianópolis: Editora da UFSC; 2008.
- 15. Santos KOB, Araújo TM, Pinho PS, Silva ASC. Evaluation of an instrument for measuring psychiatric morbidity: a validity study of the self-reporting questionnaire (SRQ-20). Rev Baiana Saúde Pública. 2010;34(3):544-60. https://doi.org/10.22278/2318-2660.2010.v34.n3.a54
- 16. Henrique IFS, de Micheli D, Lacerda RB, Lacerda LA, Formigoni MLOS. Validation of the Brazilian version of Alcohol, Smoking and Substance Involvement Screening Test (ASSIST). Rev Assoc Med Bras. 2004;50(2):199-206. https://doi.org/10.1590/S0104-42302004000200039
- 17. Moretti-Pires RO, Corradi-Webster CM. Adaptation and validation of the Alcohol Use Disorders Identification Test (AUDIT) for a river population in the Brazilian Amazon. Cad Saúde Pública. 2011;27(3):497-509. https://doi.org/10.1590/S0102-311X2011000300010
- 18. Medronho RA, Bloch KV, Luiz RR, Werneck GL. Epidemiologia. 2. ed. São Paulo: Editora Atheneu; 2009. 19. Ministério da Saúde (BR), Conselho Nacional de Saúde. Resolução nº 466, de 12 de dezembro de 2012. Diário Oficial da União. 2013 June 13 [cited 2023 Dec 19]; seção 1:2. Available from: https://conselho.saude.gov.br/resolucoes/2012/Reso466.pdf
- 20. Ministério da Saúde (BR). Conselho Nacional de Saúde. Resolução nº 510, de 7 de abril de 2016. Diário Oficial da União. 2016 May 24 [cited 2023 Dec 19]: seção 1:44-6. Available from: https://bvsms.saude.gov. br/bvs/saudelegis/cns/2016/res0510_07_04_2016.html 21. Mendes KT, Ronzani TM, Paiva FS. Homeless population, vulnerabilities and drugs: a systematic review. Psicol Soc. 2019;31. https://doi.org/10.1590/1807-0310/2019v31169056

- 22. Andrade R, Costa AAS, Sousa ET, Rocon PC. Access to health services by the Homeless Population: an integrative review. Saúde Debate. 2022;46(132). https://doi.org/10.1590/0103-1104202213216
- 23. Cunha JVQ, Rodrigues M. Rua Aprendendo a contar: pesquisa nacional sobre a população em situação de rua [Internet]. Brasília: Ministério da Saúde; 2009 [cited 2023 July 05]. Available from: https://www.mds.gov.br/webarquivos/publicacao/assistencia_social/Livros/Rua_aprendendo_a_contar.pdf
- 24. Silva TO, Vianna PJS, Almeida MVG, Santos SD, Nery JS. Street people in Brazil: a descriptive study of their sociodemographic profile and tuberculosis morbidity, 2014-2019. Epidemiol Serv Saúde. 2021;30(1). https://doi.org/10.1590/S1679-49742021000100029
- 25. Viana DW, Gaio DM. Itinerant care and homeless: analysis of suicidal ideations. Cad Esc. Saúde [Internet]. 2015 [cited 2023 Nov 25];2(14):115-31. Available from: https://portaldeperiodicos.unibrasil.com.br/index.php/cadernossaude/article/view/2446
- 26. Yohannes K, Gezahegn M, Birhanie M, Simachew Y, Moges A, Ayano G, et al. Suicidality and homelessness: prevalence and associated factors of suicidal behaviour among homeless young adults in Southern Ethiopia. BMC Psychol. 2023;18;11(1). https://doi.org/10.1186/s40359-023-01162-x
- 27. Baére F, Zanello V. Suicide and masculinities: an analysis through gender and sexualities. Psicol Estud. 2020;25. https://doi.org/10.4025/psicolestud. v25i0.44147
- 28. Esmeraldo AFL, Ximenes VM. Homeless Women: Psychosocial Implications of Stigmas and Prejudices. Psicol Ciênc Prof. 2022;42:1-15. https://doi.org/10.1590/1982-3703003235503
- 29. Bahia CA, Avanci JQ, Pinto LW, Minayo MCS. Self-harm throughout all life cycles: profile of victims using urgentand emergency care services in Brazilian state capitals. Cien Saude Colet. 2017;22(9):2841-50. https://doi.org/10.1590/1413-81232017229.12242017 30. Landefeld JC, Miaskowski C, Tieu L, Ponath C, Lee CT, Guzman D, et al. Characteristics and factors associated with pain in older homeless individuals: results from the health outcomes in people experiencing homelessness in older middle age (HOPE HOME) study. J Pain. 2017;18(9):1036-45. https://doi.org/10.1016/j. jpain.2017.03.011
- 31. Duhoux A, Aubry T, Ecker J, Cherner R, Agha A, To MJ, et al. Determinants of unmet Mental healthcare needs of single adults who are homeless or vulnerably housed. Can J Community Ment Health. 2018;36(3):41-57. https://doi.org/10.7870/cjcmh-2017-028
- 32. Organização Mundial da Saúde; Organização Pan-Americana da Saúde. Uma em cada 100 mortes ocorre por suicídio, revelam estatísticas da OMS

- [Internet]. Washington, D.C.: OPAS; 2021 [cited 2023 July 02]. Available from: https://www.paho.org/pt/noticias/17-6-2021-uma-em-cada-100-mortes-ocorrepor-suicidio-revelam-estatisticas-da-oms
- 33. Peltier B, Raitt JM, Habazi D, Roaten K, Pollio D, North CS. A longitudinal study of suicidality in a homeless population sample. Arch Suicide Res. 2023;27(1):1-12. https://doi.org/10.1080/13811118.2021.1950588
- 34. Rodrigues HF, Morais LS, Veloso LC. Epidemiological analysis of suicide in the Northeast Region from Brazil in the period 2014 to 2018. Res Soc Dev. 2020;9(7):1-14. https://doi.org/10.33448/rsd-v9i7.4725
- 35. Silva FP, Frazão IS, Silva RA, Inácio AS, Oliveira HJP, Vasconcelos SC, et al. Mental health of people in street situation: behaviors and vulnerabilities in the urban context. Rev Saude. 2021;15(3/4):30-41. https://doi.org/10.33947/1982-3282-v15n3-4-4667
- 36. Barreto AAM, Souza LEPF. Unemployment and suicide among the Brazilian population in the crisis of capitalism. Cien Saude Colet. 2021;26(12):5869-82. https://doi.org/10.1590/1413-812320212612.14672021 37. Vale AR, Vecchia MD. Surviving on the streets: paths of resistance to the denial of health rights. Psicol Estud. 2020;25. https://doi.org/10.4025/psicolestud. v25i0.45235
- 38. Silva SYS, Rosa LCS, Lima MCS. Profile of people in situation of social fragility served by the consultant on the street in the city of Teresina-PI. Rev Cienc Plur [Internet]. 2020 [cited 2023 July 7];6(1):108-19. Available from: https://periodicos.ufrn.br/rcp/article/view/18168
- 39. Rodrigues MF, Oliveira PP, Silva HC, Pinheiro JMC. Suicidal behavior: the epidemiological profile of self-harm in the state of Goiás. Rev Cient Esc Estadual Saúde Pública Goiás Cândido Santiago. 2020;6(2). https://doi.org/10.22491/2447-3405.2020.V6N2.600003
- 40. Breet E, Goldstone D, Bantjes J. Substance use and suicidal ideation and behaviour in low- and middle-income countries: a systematic review. BMC Public Health. 2018;18(1):549. https://doi.org/10.1186/s12889-018-5425-6
- 41. Ribeiro DB, Terra MG, Soccol KLS, Schneider JF, Camillo LA, Plein FAS. Reasons for attempting suicide amongmen who use alcohol and other drugs. Rev Gaúcha Enferm. 2016;37(1). https://doi.org/10.1590/1983-1447.2016.01.54896
- 42. Cantâo L, Botti NCL. Suicidal behavior among drug addicts. Rev Bras Enferm. 2016;69(2):366-73. https://doi.org/10.1590/0034-7167.2016690224i
- 43. Patrício ACFA, Silva RAR, Araújo RF, Silva RF, Nascimento GTS, Rodrigues, TDB, et al. Common mental disorders and resilience in homeless persons. Rev Bras Enferm. 2019;72:1526-33. https://doi.org/10.1590/0034-7167-2018-0541

44. Maia LFS, Sanches AM, Vasconcelos C. Mental disorders most found in homeless people. Rev Cient Enferm. 2022;12(40):274-9. https://doi.org/10.24276/rrecien2022.12.40.274-279

45. Wijk LB, Manguia EF. Psychosocial care and healthcare for the homeless population: an integrative review. Cien. Saude Colet. 2019;24(9):3357-68. https://doi.org/10.1590/1413-81232018249.29872017

46. Macedo FAV, Speçato LG, Santos AL. The performance of the street office regarding the access of the street population to health services: A Literary Review. Conjecturas. 2021;21(3):663-80. https://doi.org/10.53660/CONJ-166-310

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