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Conflict of interest

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Factors associated with suicidal Ideation: a block-ordered multivariate modeling approach

Fatores associados à ideação suicida: uma abordagem de modelagem multivariada ordenada em blocos

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Abstract

Objective

To analyze the occurrence of suicidal ideation in an urban population of a large Brazilian municipality, based on block-organized factors.

Method

A cross-sectional study with a total of 4,170 individuals aged 15 or older participated. Sociodemographic and health factors, lifestyle habits, experience of violence and dimensions of dissatisfaction were identified. Suicidal ideation was directly investigated. Bivariate analyses and ordered intra- and inter-block multivariate modeling were conducted, using logistic regression and weighting for complex samples.

Results

The prevalence of suicidal ideation was 6.8%. The following were associated, in order: being female, lower educational attainment, experience of emotional or physical violence, negative perception of health, dissatisfaction with quality of life, and generalized anxiety disorder.

Conclusion

More effective priority actions for addressing the issue of suicide should be directed increasingly at early interventions.

Keywords: Suicidal ideation; Mental health; Public health; Public health surveillance; Suicide.

Resumo

Objetivo

Analisar a ocorrência da ideação suicida em população urbana de grande município brasileiro a partir de fatores ordenados em blocos.

Método

Estudo transversal com 4.170 indivíduos de 15 anos ou mais. Fatores sociodemográficos, de saúde, hábitos de vida, vivência de violência e dimensões da insatisfação, foram identificados. A ideação suicida foi investigada diretamente. Foram conduzidas análises bivariadas e modelagem multivariada ordenada intra e inter-blocos, com regressão logística e ponderações para amostras complexas.

Resultados

A prevalência de ideação suicida foi de 6,8%. Associaram-se, ordenadamente: ser mulher, menor escolaridade, violência emocional ou física, percepção negativa de saúde, insatisfação com a qualidade de vida e o transtorno de ansiedade generalizada.

Conclusão

Ações prioritárias mais efetivas para a problemática do suicídio necessita residir em intervenções cada vez mais precoces.

Palavras-chave: *Ideação suicida; Saúde mental; Saúde pública; Vigilância em saúde pública; Suicídio.*

Estimates indicate that 9.2% of the population experiences Suicidal Ideation (SI) at some point in their lives (Denneson et al., 2020). In the United States, approximately 140 million reports of SI and 25 million suicide attempts are recorded annually (Martínez Baquero et al., 2017). Approximately 2.7% of the world population attempts suicide. Attempts are between 10 and 20 times more frequent than the incidence of the tragic event (Rocha et al., 2020). Thus, ideation is part of a suicidal context, composed not only of the fatal event but also of the suicide attempt and plans. Understanding it is crucial for health planning.

The World Health Organization states that 90% of suicide cases could be prevented, yet approximately 800,000 people commit suicide annually, meaning there is one suicide occurring every 40 seconds worldwide (11.6/100,000 population). Brazil ranks second in the Americas in absolute cases of suicide (14,540 cases – 40 per day), second only to the United States (53,099) (World Health Organization [WHO], 2021).

Understanding the determinants of suicidal ideation is essential for planning more efficient interventions. Multiple conditions impact suicidal ideation. Psychopathologies are the ones most strongly associated in the international literature, with depression being the most proximal factor to the suicidal context (Zakhour et al., 2021).

Despite strong evidence linking suicide to psychopathologies, it is crucial to understand that it is not an event exclusively determined by mental disorders. It derives from a construction determined by cognitive, behavioral, and emotional processes of multiple origins that culminate in individual suffering, often mediated by psychopathologies but not exclusively conditioned by them (Neves, 2021). Therefore, comprehending additional factors influencing SI is crucial for moving away from the conventional biomedical model, which often relies on these terminal outcomes to reinforce the medicalization of the issue.

There is a set of conditions that promote suffering and determine the suicidal context. A recent study emphasized that the experience of residing in violent environments, coupled with socioeconomic conditions, constituted a 'contextual factor' explaining the elevated suicide rates in the Americas (Lange et al., 2023). Factors such as gender and low/medium educational attainment directly impact access to structures that offer social security and well-being (Chen et al., 2019; Lange et al., 2023). These conditions are part of a chain that facilitates the occurrence of feelings, behaviors, and clinical manifestations proximal to the suicidal context. Dissatisfaction arising from an exclusionary way of life is a precursor construct of this context (Martínez Baquero et al., 2017; O'Connor & Kirtley, 2018; Pereira et al., 2020).

Therefore, assessing suicidal ideation presupposes analyzing both its most proximal events and understanding the structural characteristics (factors referred to as distal) that govern inequalities and affect the fluctuation of the intensity of proximal phases. Analyzing these dimensions can identify elements for proposing coping actions considering different levels of action. The objective of this study was to estimate the prevalence of suicidal ideation and identify associated factors categorized into ordered blocks (proximal, intermediate, and distal) in a large Brazilian municipality.

Method

Study Type and Location

Cross-sectional study, with data derived from the second wave of the prospective cohort titled *Vigilância em saúde mental e trabalho: uma coorte da população de Feira de Santana (BA)* “Surveillance on Mental Health and Work: a cohort of the population of Feira de Santana (BA)”, conducted by the Epidemiology Center of the Universidade Estadual de Feira de Santana and funded by the Fundação de Amparo à Pesquisa do Estado da Bahia (FAPESB, Bahia State Research Support Foundation/SESAB/CNPQ/MS PPSUS/BA – 028/2018).

Population, Sample, and Eligibility Criteria

The sample for this study consisted of 4,170 individuals, aged 15 years or older, residing in urban areas of the municipality of Feira de Santana, Bahia, Brazil. The selection was done by complex sampling, stratified according to the five subdistricts of the municipality, establishing cluster sampling in two stages (census tracts and streets).

Eligibility criteria: being 15 years of age or older and residing in the selected household. All eligible individuals were invited, excluding those with hearing or verbal impairments and/or any sensitive psychoemotional condition that would prevent them from responding reliably to the survey.

Data Collection

Individual interviews were conducted in the participants’ own homes by a previously trained research team, with as much privacy as each household offered. Data collection took place between December 2018 and November 2019, during daytime, on all days of the week.

Data Collection Instrument and Study Variables

Suicidal ideation was assessed using item 17 of the Self-Reporting Questionnaire (SRQ-20) (Santos et al., 2009) instrument: “Has the thought of ending your life been on your mind?” categorized as 0 (not exposed) and 1 (exposed). The independent variables of the study are described in Table 1.

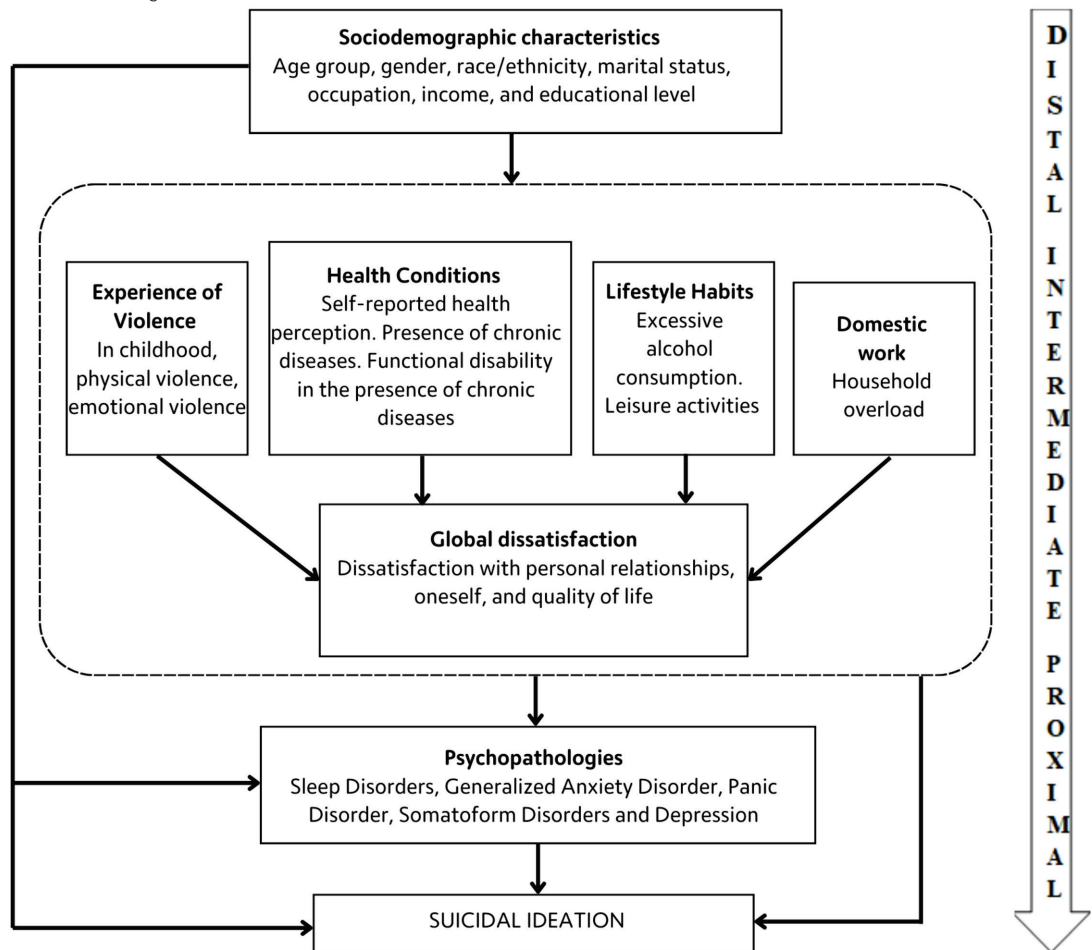
Ordered Theoretical Model

The theoretical model was constructed based on a comprehensive review of the international literature, establishing an ordered structure through blocks of variables arranged by proximity to suicidal ideation. These characteristics are displayed, each at its level, in Figure 1.

Table 1
Independent study variables and instruments used

| Independent variables | Instruments |
|----------------------------------|--|
| Sociodemographic characteristics | Age group, gender, race/ethnicity, marital status, occupation, income, and educational level |
| Experienced violence | Experience of emotional or physical violence in the last 24 months, and during childhood. |
| Health conditions | Perception of one's own health condition, presence of diagnosed chronic diseases (both self-reported). |
| Lifestyle habits | Excessive alcohol consumption (CAGE) (Amaral & Malbergier, 2004), absence of leisure activities and sociocultural activities. |
| Domestic work | Household overload (Aquino, 1996). |
| Global dissatisfaction | Dissatisfaction with personal relationships, oneself, and quality of life (WHOQOL) (Fleck, 2000). |
| Psychopathologies | Sleep disorders (MSQ) (Falavigna et al., 2010); Generalized Anxiety Disorder (GAD); panic disorder (Kroenke et al., 2010), somatoform disorders (Körber et al., 2011); and depression (PHQ Modules) (Kroenke et al., 2010; Spitzer, 1999). |

Figure 1
Ordered theoretical model for determining suicidal ideation



Data Analysis

Analyses were conducted using Stata software, version 16.0, with the use of the survey module to perform weighting for complex samples. First, absolute and relative frequencies of the categorical variables of interest were calculated, followed by measures of central tendency

and dispersion for continuous variables, and overall prevalence estimates of suicidal ideation and according to independent variables. The Odds Ratio (OR) with 95% Confidence Intervals (CI) were calculated as the estimated measure of association, considering that the outcome's prevalence was less than 10%.

In the bivariate analysis, Pearson's Chi-square test with Rao-Scott correction was used to test the association between the outcome – suicidal ideation, and the independent variables, with a statistical significance level of 5%. For the processing of ordered inter- and intra-block modeling (Hosmer et al., 2013), Logistic Regression analysis with backward procedure was conducted. First, intra-block analysis was performed, with all variables from each block that had a p -value ≤ 0.20 in the bivariate analysis being included, and retaining those with a p -value ≤ 0.17 (Hosmer et al., 2013). Next, inter-block analysis was conducted, with gradual entry of blocks according to the conceptual structure of the ordered model (Figure 1), retaining in the model the variables kept in the previous block and those from the newly inserted block with a p -value ≤ 0.05 . To assess the accuracy of the models, the F-adjusted mean residual test was applied (Archer & Lemeshow, 2006).

Ethical and Legal Aspects

The study was approved by the Research Ethics Committee of the Universidade Estadual de Feira de Santana (protocol No. 2,420,653), following Resolutions 466/2012 and 510/2016 of the Brazilian National Health Council, as it involves research with human subjects.

Results

The prevalence of suicidal ideation was 6.8% ($n = 270$). All factors were evaluated and are described in order, according to the theoretical model in Table 2.

Table 2

Frequency distribution of the urban population aged 15 and over, according to independent variables and prevalence of suicidal ideation. Feira de Santana-BA, Brazil, 2022. (N = 4,170)

| Variables | n | % | Suicidal ideation | | |
|-------------------------------|-------|------|-------------------|-------|----------|
| | | | n | P (%) | p-value* |
| 1 of 2 | | | | | |
| Suicidal ideation (N = 4,162) | | | | | |
| Yes | | | 270 | 6.8 | - |
| Distal determinants | | | | | |
| Socioeconomic characteristics | | | | | |
| Gender | | | | | 0.005 |
| Male | 1,421 | 34.4 | 61 | 3.3 | |
| Female | 2,749 | 65.6 | 209 | 8.6 | |
| Age range (N = 4,163) | | | | | 0.022 |
| 15 to 24 years | 783 | 18.6 | 70 | 10.7 | |
| 25 to 59 years | 2,313 | 57.9 | 152 | 6.1 | |
| 60 years or older | 1,067 | 23.5 | 47 | 3.8 | |
| Education (N = 4,108) | | | | | 0.006 |
| Up to secondary school | 3,814 | 92.8 | 253 | 7.3 | |
| Higher education | 294 | 7.2 | 12 | 2.2 | |
| Race/Skin color (N = 3,942) | | | | | 0.444 |
| non-Black | 682 | 20.7 | 41 | 8.4 | |
| Black | 3,260 | 79.3 | 224 | 5.7 | |

Table 2

Frequency distribution of the urban population aged 15 and over, according to independent variables and prevalence of suicidal ideation. Feira de Santana-BA, Brazil, 2022. (N = 4,170)

| Variables | n | % | Suicidal ideation | | |
|---|-------|------|-------------------|-------|----------|
| | | | n | P (%) | p-value* |
| Marital status (N = 4,107) | | | | | 0.361 |
| Without partner | 2,217 | 50.9 | 163 | 7.4 | |
| With partner | 1,890 | 49.1 | 106 | 6.3 | |
| Occupation (N = 2,993) | | | | | 0.058 |
| Employed | 1,629 | 54.7 | 94 | 5.0 | |
| Unemployed | 1,364 | 45.3 | 94 | 12.0 | |
| Monthly income (N = 1,608) | | | | | 0.045 |
| Up to R\$ 1,000.00 | 786 | 49.8 | 62 | 5.9 | |
| R\$ 1,000.00 or above | 822 | 50.2 | 37 | 3.2 | |
| Intermediate determinants | | | | | |
| Experienced violence | | | | | |
| Physical or emotional violence (N=4,078) | | | | | <0.001 |
| No | 3,536 | 87.3 | 170 | 4.9 | |
| Yes | 542 | 12.7 | 92 | 19.8 | |
| Violence during childhood (N=4,129) | | | | | 0.001 |
| No | 3,613 | 81.5 | 193 | 4.4 | |
| Yes | 516 | 13.5 | 74 | 22.3 | |
| Health conditions | | | | | |
| Perception of health (N=4,138) | | | | | <0.001 |
| Positive | 2,756 | 67.0 | 103 | 2.9 | |
| Negative | 1,382 | 33.0 | 165 | 14.8 | |
| Chronic diseases (N=4,135) | | | | | 0.448 |
| No | 2,632 | 62.1 | 163 | 6.5 | |
| Yes | 1,503 | 37.9 | 103 | 7.3 | |
| Domestic work | | | | | |
| Household overload (N=3,723) | | | | | 0.021 |
| Low/Moderate | 2,465 | 67.0 | 150 | 6.2 | |
| High | 1,258 | 33.0 | 106 | 9.1 | |
| Lifestyle habits | | | | | |
| Excessive alcohol consumption (N=1,278) | | | | | 0.021 |
| No | 1,126 | 89.3 | 59 | 4.0 | |
| Yes | 152 | 10.7 | 18 | 10.8 | |
| Lack of leisure activities (N=4,135) | | | | | 0.864 |
| No | 3,363 | 83.3 | 200 | 6.8 | |
| Yes | 772 | 16.7 | 68 | 7.2 | |
| Lack of sociocultural activities (N=4,053) | | | | | 0.914 |
| No | 3,975 | 98.1 | 247 | 6.7 | |
| Yes | 78 | 1.9 | 7 | 6.3 | |
| Global dissatisfaction | | | | | |
| Dissatisfaction with personal relationships (N=3,953) | | | | | <0.001 |
| No | 3,406 | 85.7 | 170 | 5.1 | |
| Yes | 547 | 14.3 | 85 | 19.4 | |
| Self-dissatisfaction (N=3,955) | | | | | <0.001 |
| No | 3,369 | 84.6 | 139 | 4.4 | |
| Yes | 586 | 15.4 | 115 | 22.5 | |
| Dissatisfaction with quality of life (N=3,967) | | | | | <0.001 |
| No | 2,645 | 66.0 | 103 | 2.8 | |
| Yes | 1,322 | 34.0 | 153 | 15.6 | |
| Proximal determinants | | | | | |
| Psychopathologies | | | | | |
| Generalized Anxiety Disorder (N=4,114) | | | | | <0.001 |

Table 2

Frequency distribution of the urban population aged 15 and over, according to independent variables and prevalence of suicidal ideation. Feira de Santana-BA, Brazil, 2022. (N = 4,170)

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| Variables | n | % | Suicidal ideation | | |
|--------------------------------|-------|------|-------------------|-------|----------|
| | | | n | P (%) | p-value* |
| No | 3,845 | 93.1 | 204 | 5.1 | |
| Yes | 269 | 6.9 | 64 | 31.1 | |
| Sleep disturbances (N=4,102) | | | | | <0.001 |
| No | 3,047 | 69.2 | 99 | 3.1 | |
| Yes | 1,055 | 30.8 | 167 | 15.0 | |
| Panic disorders (N=4,125) | | | | | <0.001 |
| No | 3,776 | 90.3 | 169 | 4.6 | |
| Yes | 349 | 9.7 | 94 | 25.7 | |
| Somatoform disorders (N=1,931) | | | | | <0.001 |
| No | 1,668 | 85.8 | 81 | 5.4 | |
| Yes | 263 | 14.2 | 64 | 30.6 | |
| Depression | | | | | <0.001 |
| No | 3,791 | 89.4 | 149 | 3.9 | |
| Yes | 338 | 10.6 | 117 | 31.9 | |

Note: *p-value obtained by the Pearson Chi-Square test with Rao-Scott correction (significance level of 5%). P: Prevalence; The estimates were weighted for complex sampling.

After inter-block multivariate analysis, the variables that remained associated with suicidal ideation were gender, education, emotional or physical violence, perception of health, dissatisfaction with quality of life, with oneself, sleep disorders, depression, and GAD. The association measures of the variables in the final model were robust. The frequency of suicidal ideation was nearly four times higher in groups with GAD ($OR = 3.91$; 95% CI = 1.25-12.22) and of those with complete high school education ($OR = 3.56$; 95% CI = 1.23-10.36); almost three times higher among women ($OR = 2.63$; 95% CI = 1.27-5.45), those with negative perception of health ($OR = 2.76$; 95% CI = 1.53-4.99), and dissatisfaction with quality of life ($OR = 2.67$; 95% CI = 1.49-4.80); about twice as high among those who experienced emotional and physical violence ($OR = 1.98$; 95% CI = 1.02-3.82), self-dissatisfaction ($OR = 1.89$; 95% CI = 1.03-3.48), sleep disorders ($OR = 1.87$; 95% CI = 1.03-3.40), and depression ($OR = 2.39$; 95% CI = 1.03-5.56). The average Variance Inflation Factor (VIF) was 1.82, and the maximum individual VIF was 3.04 for education, ruling out the possibility of multicollinearity among the variables in the model (Table 3).

Table 3

Ordered analysis of factors associated with suicidal ideation in an urban population aged 15 or older residing in a medium-sized municipality. Feira de Santana-BA, Brazil, 2022. (N=4,170)

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| Variables | OR ^a | 95% CI |
|-------------------------------|-----------------|------------|
| Distal determinants | | |
| Socioeconomic characteristics | | |
| Gender | | |
| Female | 2.63 | 1.27-5.45 |
| Male | 1.00 | |
| Education | | |
| Up to secondary school | 3.57 | 1.23-10.36 |
| Higher education | 1.00 | |
| Intermediate determinants | | |
| Experienced violence | | |

Table 3

Ordered analysis of factors associated with suicidal ideation in an urban population aged 15 or older residing in a medium-sized municipality. Feira de Santana-BA, Brazil, 2022. (N=4,170)

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| Variables | OR ^a | 95% CI |
|--------------------------------------|-----------------|------------|
| Physical or emotional violence | | |
| No | 1.00 | |
| Yes | 1.98 | 1.02-3.82 |
| Health conditions | | |
| Perception of health | | |
| Positive | 1.00 | |
| Negative | 2.76 | 1.53-4.99 |
| Global dissatisfaction | | |
| Dissatisfaction with quality of life | | |
| No | 1.00 | |
| Yes | 2.67 | 1.49-4.80 |
| Self-dissatisfaction | | |
| No | 1.00 | |
| Yes | 1.89 | 1.03-3.48 |
| Proximal determinants | | |
| Psychopathologies | | |
| Sleep disturbance | | |
| No | 1.00 | |
| Yes | 1.87 | 1.03-3.40 |
| Generalized Anxiety Disorder | | |
| No | 1.00 | |
| Yes | 3.91 | 1.25-12.22 |
| Depression | | |
| No | 1.00 | |
| Yes | 2.39 | 1.03-5.56 |

Note: a Model adjusted for the variables: dissatisfaction with personal relationships, self-dissatisfaction, sleep disturbances, and depression. CI: Confidence Interval; OR: Odds Ratio; The estimates were weighted for complex sampling.

Discussion

This study analyzed a broad set of factors potentially associated with SI. These factors were analyzed based on an ordered theoretical model at distal, intermediate, and proximal levels. This ordering structure was designed to allow investigation of different levels of interaction with the studied outcome, as traditionally, the analysis of proximal factors, such as mental disorders, predominates in the literature. This study included these factors, which are closest to the SI event, but also focused on structural factors involving distal levels of determination.

Distal Determinants of Suicidal Ideation

Gender differences are widely established in global publications. There is ample evidence indicating that being a woman poses a greater risk for suicidal ideation (Campisi et al., 2020; WHO, 2021). In a study involving over twenty thousand French workers, being a woman was highlighted as a determinant of suicidal ideation (Niedhammer et al., 2020). This association was also observed in China, in a study involving over two thousand workers (Liu et al., 2019). Family stress, manifested in household work overload and work-related stress, increased the chances of women experiencing SI by five times compared to men (Lin et al., 2020).

Educational level is a structuring factor of general living conditions, enabling or creating barriers to job quality, unemployment, income, social valuation, and access to goods and services.

Low educational attainment may favor experiences in social contexts of marginalization and violence, leading to mental distress. Therefore, it is a predominant factor in explaining SI, as evidenced in global studies (Aslan et al., 2019; Chen et al., 2019; Lange et al., 2023; Lin et al., 2020; Pereira et al., 2020). Suicidal ideation associated with low or medium education occurred in multiple age groups: in adults (Chen et al., 2019; Pereira et al., 2020), older individuals (Aslan et al., 2019), and young people (Sousa et al., 2020).

Gender differences, along with low and medium levels of education, historically impact employment conditions and income. These are social phenomena historically determined by an exclusionary model of life production, especially for women who, subjugated in a sexist and misogynistic society, occupy unfavorable and undervalued social and economic positions, compounded by domestic work and family care responsibilities (Pinho & Araújo, 2012).

Intermediate Determinants of Suicidal Ideation

Intermediate factors associated with SI included living in a context of violence (physical and/or emotional), perceiving one's own health poorly, and expressing dissatisfaction with both oneself and one's quality of life.

Manifestations of violence associated with suicidal ideation occur in various settings and are perpetrated by different actors, whether in the workplace or within the family. In Israel, emotional violence led to feelings of imprisonment and, consequently, suicidal ideation, planning, and attempts (Levi-Belz & Zerach, 2018). Psychological abuse poses a higher risk when compared to other types of abuse. Living in a violent environment causes suffering on various levels and exacerbates conditions that promote dissatisfaction, psychopathologies, low self-esteem, and consequently, conditions conducive to suicide.

Suicidal ideation was associated with negative perception of one's own health. The self-perception that something is wrong with one's health can reinforce feelings of self-depreciation. Aesthetics, self-esteem, socially referenced normative impositions, the presence of physical limitations and illnesses, the absence of leisure activities, poor social relationships, among others, may contribute to these conditions that favor the presence of SI, as observed in international studies (Adewuya & Oladipo, 2020; Kyung et al., 2020).

Global dissatisfaction, as a product of a life production model with multiple origins, is an important factor for understanding the suicidal context. Therefore, conformity in impressions about quality of life and self-understanding; as well as impressions about the physical and psychological body, shape the production of global (dis)satisfaction, which is a potent factor in explaining suicidal ideation. Understanding this dimension, which fluctuates between concrete facts and feelings, prior to psychopathologies and SI, can be an important interventional approach for secondary interventions aimed at reducing suicides.

Dissatisfaction can approach suicidal ideation through dynamic constructions stemming from feelings of devaluation, defeat, humiliation, and imprisonment. Social inability combined with a lack of moments of well-being adds to these factors, which together generate fluctuating levels of dissatisfaction (O'Connor & Kirtley, 2018). In this perspective, SI is configured as a distressing battle, crystallized by hopelessness and intense desires for death (Denneson et al., 2020; Martínez Baquero et al., 2017; Pereira et al., 2020).

Therefore, dealing with dissatisfaction is a significant task in confronting suicidal ideation. Measures involving the production of positive feelings and contentment can constitute protective

factors. Such initiatives need to be aligned with actions that promote well-being (negatively associated with SI) (Kyung et al., 2020). Thus, forms of social support emerge as a structuring mechanism for the main suicide prevention actions and its context (Faria et al., 2019). Interventions that establish the strengthening of satisfaction with personal relationships, oneself, and quality of life can prevent or alleviate the problem (Pereira et al., 2018).

Proximal Factors of Suicidal Ideation

In this study, suicidal ideation was associated with behavioral/mental disorders: sleep disturbances, depression, and anxiety. In the international literature, mental disorders appear as the most prominent explanatory factor for SI. Among individuals who died by suicide in low/middle-income countries, psychopathologies were present in 58% of them and in 45% of those who exhibited ideation, plans, and suicide attempts.

Sleep disturbances are also widely discussed in the literature as predictors of suicidal ideation (Kainat & Ijaz, 2019; Owusu et al., 2020). They can be linked to various factors that imply psychological distress. Rumination of thoughts (psychological, melancholic, and reflexive) are common explanatory components of both sleep disturbances and the suicidal context (Holdaway et al., 2018).

Depression is the most frequently associated psychopathology with SI in the international literature (Campisi et al., 2020; Chen et al., 2019; Levi-Belz & Zerach, 2018). In a study conducted in China, it was evidenced that in individuals with suicidal ideation, the severity of depression is proportionally associated with suicide attempts (Wei et al., 2018). In a study conducted with Nepalese widows, depression, post-traumatic stress disorder, and prolonged grief were strongly associated with suicide, which reached 16.2% among these women (Garrison-Desany et al., 2020). When gender differences are associated with depression, there is a notable intensification of the suicidal context, especially the idea of killing oneself. In Canada, in a study with 397,299 adolescents, being a woman was associated with suicidal ideation (Campisi et al., 2020), as well as in the United States (Martínez Baquero et al., 2017), Africa (Owusu et al., 2020), and Australia (Resko et al., 2018). The most prevalent condition in individuals at risk of suicide is depression, with this psychopathology being an important mediator of the transition from ideation to attempts (Zakhour et al., 2021).

Generalized Anxiety Disorder (GAD) is pointed in various studies as a factor present in individuals with suicidal ideation. This data is expected, as in the very nature of the suicidal context, there is a predominance of anxious behavior (Adewuya & Oladipo, 2020; Aslan et al., 2019; Kyung et al., 2020; Pereira et al., 2018; Zakhour et al., 2021). Higher levels of anxiety may relate to impulsivity traits, a behavior strongly associated with suicide attempts and their effectiveness (O'Connor & Kirtley, 2018). Generalized Anxiety Disorder was associated with SI among healthcare professionals in Spain, where within a span of less than 30 days, six professionals attempted suicide (Mortier et al., 2021). This association was similarly observed in diverse populations across different regions. For instance, Sapara et al. (2021) found a comparable link in a population-based survey. Likewise, studies conducted in Nigeria (Adewuya & Oladipo, 2020), Portugal (Duarte et al., 2019) among adolescents, and in Brazil (Palma et al., 2020), targeting the same demographic, also reported a similar association.

Thinking of psychopathology as the main indicator for decision-making represents a belated attempt to solve the complex problem that the suicidal context represents. It is necessary to understand psychopathology not only as a proximal event but as an element that participates in a causal chain with multiple events, these being fundamental for health planning.

Protective systems need to focus on the early identification of conditions that generate mental distress; therefore, it is in a much more sensitive and difficult intervention context, which questions how social fabric is structured and sustains its value systems, how consumption relationships are established: of oneself, of others, and of the world. The current model of society is built on exclusionary social production processes historically crystallized in systems of multiple oppressions. These oppressions mark entire populations' lives with pain, and without seeing a way out, they plunge into deep suffering, from which the solution found is to cease to exist. Therefore, although it prevails in common sense that suicide is a personal/individual event, it was observed in this study that there is a context of production of this event which, when it encounters personal weaknesses, consolidates itself. It is, in this sense, a marker of a profound need to review how social relations are established.

Therefore, suicidal ideation is not necessarily dependent on psychopathologies as determinants of its occurrence (O'Connor & Kirtley, 2018). It is important to reinforce the understanding that no factor, in isolation, has the ability to explain its context. Understanding this complex event as a system that takes into account behavioral, cognitive, and affective processes is key to its comprehension. It is necessary to understand that there are multiple factors that jointly and procedurally define this outcome. A careful look at the most distal factors represents a necessary and challenging counter-hegemonic task that needs to be faced.

This complex system associated with suicidal ideation goes beyond what can be measured, not only by individual subjective characteristics tangential to mental health but also because there are established forces in the way of living, producing, and consuming oneself and the world around us that are much more potent. There was an ordered association with suicidal ideation from the most distal to the closest factors: gender, lower educational attainment, experience of emotional or physical violence, negative perception of health, dissatisfaction with quality of life and with oneself, sleep disturbances, depression, and GAD.

From the identified factors, it is necessary to flex them to the life production model that potentiates multiple sufferings. Public policies should be proposed towards the identification and early intervention of factors that cause suffering. Such policies need to be anchored in social support, through better training of caregivers, in order to be more sensitive to the signs and symptoms of suicide. It is important for the entire community to be engaged in this process so that interventions become increasingly less delayed.

Identifying and establishing interventions in factors that are statistically associated with the suicidal context and/or societal illness, in general, will still be incipient, but it is an important contributory path to demystify the complexity of this phenomenon.

Study Limitations

As this is a cross-sectional study, causal identification is compromised. Therefore, inferences in this regard need to be understood not only by empirical data but by the evidence from the discussed literature. Moreover, the outcome itself, of a subjective and complex nature, may trigger reservations in its recognition, producing underestimated indicators of SI. Assuming such a condition could generate social stigma, possibly resulting in information bias due to its concealment. Possibly, SI is even more prevalent than can be estimated.

Despite these limitations, the results obtained are consistent with evidence from international literature, providing a set of useful and coherent data that highlight the need for interventions in a range of distal, intermediate, and proximal conditions.

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