

Factors associated with suicidal ideation among travestis and transsexuals receiving assistance from transgender organizations

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Abstract *The aim of this study was to determine the prevalence of suicidal ideation and explore associated factors among travestis and transsexuals. A cross-sectional study was conducted between 2015 and 2016 with 22 travestis and 36 transsexuals who were members of the four transgender organizations operating in the state of Rio Grande do Norte, Brazil. Associations between suicidal ideation and the categorical variables were measured using the chi-squared test, Fisher's exact test, and likelihood ratios. Multivariate analysis was performed using robust Poisson regression. The suicidal ideation prevalence rate was 41.4% (95%CI 41.3-54.51%): 13.79% among travestis (95%CI 4.91-22.66%) and 27.61% in transsexuals (95%CI 16.08-39.08%). The prevalence of suicidal ideation was higher among respondents who reported suffering violence at school (PR = 2.05; 95%CI 1.08-3.87) and those experiencing moderate/severe depression (PR = 3.86; 95%CI 1.51-9.83). The findings suggest that unfavorable school contexts and the presence of depression compromise mental health and contribute to suicidal ideation among travestis and transsexuals.*

Key words *Suicidal ideation, Transgender, Gender-based violence, Self-injurious behavior, Vulnerable populations*

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Introduction

Suicide is a public health priority due to the magnitude of the problem and its wide-ranging effects. Globally over 800,000 people die from suicide every year, accounting for 1.4% of all deaths worldwide (11.4 deaths per 100,000 population)¹, and it is the second leading cause of death among young adults aged between 15 and 29 years^{2,3}.

Worldwide 78% of suicides occur in low and middle-income countries. The highest suicide rates are found in Southeast Asia and Europe, ranging between 11.9 and 14.0 deaths per 100,000 population, while the lowest rates occur in the Eastern Mediterranean (3.8 to 4.3 deaths per 100,000 population)³. However, it is important to note that these rates may be underestimated due to underreporting and the large proportion of deaths classified as events of undetermined intent.

The suicide rate in Brazil between 2011 and 2016 was 5.5 per 100,000 population and risk of suicide was almost four times greater among males (8.7/100,000 men versus 2.4/100,000 women). During the same period, the number of reported suicides rose 209.5% in women and 194.7% among men. The occurrence of self-inflicted injury was concentrated in the 10 to 39 year age group, among both men (70.1%) and women (74.4%)⁴.

Suicide is a multifactorial problem, with rates varying widely from country to country and within countries influenced by political, economic, social, cultural, and religious factors and individual characteristics^{1,3,5}. In this respect, travestis and transsexuals are at greater risk of death by suicide than the general population due to their daily exposure to stressor events associated with prejudice⁶.

Reports published by non-governmental organizations have documented an elevated risk of suicide and self-injurious behavior among this population group. A study conducted in the United States with 6,456 transgender and gender non-conforming adults reported that the prevalence of suicide attempts among respondents was 41%, vastly exceeding the rate in the overall population and around four times greater than in the lesbian, gay and bisexual population⁷.

Suicidal ideation (SI) – which means thinking about or planning suicide – has been shown to be a risk factor for attempted suicide and suicide among travestis and transsexuals^{8,9}. A study showed that transgender adults living full-time in their gender of choice (OR = 2.68, $p < 0.01$)

with a history of physical and sexual violence (OR = 5.44; $p < 0.001$) and who had experienced one or two types of trans-related discrimination (OR = 2.09, $p < 0.05$ and OR = 2.86, $p < 0.05$, respectively)⁹ were more likely to report lifetime SI. Another study reported that higher levels of internalized transphobia were associated with a greater likelihood of lifetime suicide attempts (OR = 1.18; 95%CI: 1.04-1.33)¹⁰. These findings highlight the importance and relevance of exploring the influence of symbolic and structural violence on the occurrence of suicide and SI in this population.

A search of literature databases did not yield any articles in Brazil investigating suicidal behavior among travestis and transsexuals. It is assumed that this is due to the fact that this population group does not appear in census data, thus hampering research on travestis and transsexuals and, consequently, limiting access to their rights, education, health, employment, etc., thus negatively affecting their well-being and quality of life.

Further research is therefore needed, together with the development of techniques and methodologies to reach out to travestis and transsexuals, to make this population nationally visible and promote an equitable healthcare model. This model should focus on health promotion and suicide prevention supported by the National Lesbian, Gay, Bisexual, Travesti, and Transgender Health Policy, National Suicide Prevention Guidelines, National Agenda for Suicide Surveillance and Prevention and Health Promotion, and the Ministério da Saúde Priority Research Agenda, which emphasize the importance of conducting research on the impact of social determinants such as gender and sexual orientation on mental health and on the epidemiology of suicide among vulnerable population groups.

In light of the above, the aim of this study was to determine the prevalence of suicidal ideation and explore associated factors among travestis and transsexuals receiving assistance from transgender organizations in the State of Rio Grande do Norte.

Method

A cross-sectional study was conducted with a sample of self-declared travestis and transsexuals who were members of the four transgender organizations operating in the State of Rio Grande do Norte, Brazil: *Associação Potiguar de Traves-*

tis e Transexuais na Ação pela Coerência no RN; Associação das Travestis Encontrando a Atuação e Valorização na Saúde Santa-Cruzense; Associação de Homens-Trans Potiguares; and Associação de Travestis Reencontrando a Vida. Founded by the regional transgender movement to contribute to the struggle for the social recognition of transgender individuals and their rights, these organizations have members across the state.

For the purposes of this study, transsexual or travesti is someone whose gender identity does not conform to the socially imposed biological sex assigned at birth, regardless of sex reassignment, hormone therapy, or change of name by deed poll. It is important to highlight that the following individuals participated in the study, falling under the umbrella term “trans”: trans men (assigned female at birth, but identifies as male), trans women (assigned male at birth, but identifies as female), and travestis (in some cultures, most particularly in Latin America, travestis are people assigned male at birth who assume a female role, categorizing themselves as neither man nor woman, but rather a third gender)¹¹.

A total of 79 people were receiving assistance from these organizations during the study period. The inclusion criteria were: (i) aged 18 years and over; and (ii) self-declared trans. The following exclusion criteria were adopted: (i) people who joined the organizations during data collection; (ii) people not living in Rio Grande do Norte; (iii) and intersex people or those who self-identify as non-binary.

To enroll participants we met with the organization coordinators, who provided a list of telephone numbers of potential participants. The researcher then phoned the people on the list to formally invite them to participate in the study. The organization coordinators also helped make telephone contact and accompanied the visits to the participants' homes. In some cases, a face-to-face meeting was held with the potential study participant before data collection.

Fifty-eight individuals (73.42%) were intentionally selected. It is important to highlight that despite the small size of the data set, the sample is representative of the study population (travestis and transsexuals receiving assistance from transgender organizations).

The following reasons resulted in the loss of 21 (26.58%) eligible participants, illustrating the complexity of the study question: failed to answer the telephone (n = 3; 3.80%); were not at the informed address (n = 5; 6.33%); did not turn up for the interview (n = 4; 5.06%); refused

to participate (n = 6; 7.59%); were under the influence of illicit drugs at least twice during data collection (n = 1; 1.27%); and committed suicide before data collection (n = 2; 2.53%).

Data was collected between November 2015 and June 2016. Before data collection, the study objectives and procedures were explained to the participants, who signed an informed consent form stating that they had the right to withdraw from the study at any time. The participants were also offered follow-up psychological support after data collection at the Federal University of Rio Grande do Norte's Psychology Laboratory. Data on sociodemographic characteristics, health history, history of violence, and suicidal behavior was collected using a questionnaire designed by the researchers and pretested on five organization coordinators who were not part of the final sample.

The guided questionnaire was designed drawing on the relevant literature on the theme and contained questions with the following groups of variables: (i) sociodemographic data – age, age at which the individual came out, marital status, spirituality, education, race, occupation, income, sexual orientation, and gender identity; (ii) health history – sexually transmitted diseases, awareness of HIV status, sex reassignment surgery, use of liquid silicone, hormone therapy, professional follow-up for hormone therapy, and use of licit or illicit psychoactive substances; (iii) history of violence – victimization, typology, place of violence, perpetrators, being cast out by the family because of gender identity, full respect for preferred name, feeling ashamed of oneself and of one's gender identity; (iv) suicidal behavior – history of attempted suicide, intensity of the will to die at the last attempt, attempted suicide or suicide in the family, attempted suicide or suicide among friends, and travesti or transsexual friends with suicidal behavior.

Depression and SI were measured using the gold standard Beck Depression Inventory (BDI) and the Beck Scale for Suicidal Ideation (BSI), respectively, both validated in Portuguese. The reliability of the Portuguese version was tested on psychiatric and non-psychiatric samples using Cronbach's alpha coefficient, obtaining excellent internal consistency ranging between 0.75 and 0.95 for all scales¹².

The BSI and BDI determine the presence/absence of suicidal ideation and depression intensity, respectively, in clinical and non-clinical populations. The BSI consists of 21 items divided into two parts (items 1 to 5 and items 6 to 21).

The overall score is the total score of the first 19 sets of statements; items 20 and 21 are merely informative. SI is considered to be present when the study participant responds any number other than 0 for items 4 and/or 5, scored in terms of severity of suicidal ideation, which is a prerequisite for completing the remaining items assessing suicidal intent¹².

The BDI consists of 21 items with *four* possible responses ranked in terms of severity from 0 to 3. The following cut-off scores were adopted: minimal depression (0 to 11), mild depression (12 to 19), moderate depression (20 to 35), and severe depression (36 to 63)¹².

The data was double entered into Microsoft Office Excel v.2016 and exported for testing to R 3.5.1.

The reliability of the BSI and BDI was measured using Cronbach's alpha coefficient, obtaining good internal consistency (0.85 and 0.93, respectively).

Bivariate analysis was conducted to determine whether there was a statistically significant association between SI (dependent variable) and the categorical variables based on likelihood ratios calculated using the chi-squared test or Fisher's exact test according to the suitability of the test to the data. A 95% confidence level was adopted.

Multivariate analysis was performed using the robust Poisson regression model¹³, including possible associated factors that obtained a p-value of ≤ 0.20 in the univariate analysis^{13,14}. Variables that showed a p-value of ≤ 0.05 in the Poisson regression model were included in the final model, in which strength of the association was tested using the Akaike Information Criterion¹⁴. The choice of the final model considered epidemiological and biological plausibility and a significance level of 0.05. Associations were calculated using adjusted prevalence ratios and associated confidence intervals.

The study was conducted in accordance with the norms and standards for research involving human subjects set out by Resolution 466/2012 of the National Health Council and approved by the Committee of Ethics in Research with Human Beings of the Federal University of Rio Grande do Norte.

Results

Overall prevalence of SI among travestis and transsexuals was 41.4% (95%CI: 41.3-54.51%):

13.79% among travestis (95%CI: 4.91-15.66%) and 27.61% (95%CI: 16.08-39.08%) among transsexuals. The difference in prevalence between transsexuals and travestis was statistically significant ($p \leq 0.05$).

The minimum and maximum scores of the BSI were 0 and 21, respectively, with an average score of 4.71 (standard deviation = 6.497). The minimum and maximum scores of the BDI were 0 and 39, respectively, with an average score of 14.6 (standard deviation = 9.392).

With regard to sociodemographic characteristics (Table 1), the majority of the sample identified as transsexual (62.1%) and 82.8% were heterosexual. Average age was 26.78 years and median age was 24.5 years (standard deviation = 7.96). The majority of the sample were single or widowed (81%), reported having a sense of spirituality (63.8%), and had completed primary or secondary school (77.6%). Only three individuals (5.2%) had completed higher education. The majority of the sample self-declared themselves as black or brown (69%).

With regard to occupation, 29.3% reported practicing prostitution, 15.5% failed to report an occupation, 13.8% were hairdressers, 13.8% were domestic workers, 3.5% salespersons, 3.5% attendants, 3.5% teachers, 3.5% business people, and 13.8% were other categories with only one person (nursing technician, elderly caregiver, general services assistant, beautician, manager, electrician, retiree, self-employed, and cook).

Average monthly income was R\$ 1,522.52 (standard deviation = 4,567.276; median = R\$ 835). After excluding a discrepant monthly income of R\$ 35,000 reported by one respondent, the average income decreased to R\$ 935.19 (median = R\$ 800).

No significant association was found between SI (yes/no) and sociodemographic characteristics and health history (Table 2). The data showed a statistically significant association between SI and depression ($p = 0.002$), where prevalence of minimal depression/mild depression was higher in participants who did not show SI than in those who did.

Regarding history of violence (Table 3), the data show that there was a statistically significant association between SI and having suffered violence at school ($p = 0.012$). The findings show that individuals who showed suicidal ideation reported a higher frequency of having suffered violence at school compared to those without SI (25.9% versus 17.2%). Furthermore, the proportion of suicidal ideation was higher among

Table 1. Sociodemographic characteristics of travestis and transsexuals receiving assistance from transgender organizations in Natal, Rio Grande do Norte, Brazil. December 2015 to June 2016.

	Variables	n	%
Gender identity	Travesti	22	37.9
	Transsexual	36	62.1
Sexual orientation	Heterosexual	48	82.8
	Non-heterosexual	10	17.2
Age group*	> 29 years	18	31.0
	≤ 29 years	40	69.0
Age at which came out as transgender†	≤ 18 years	39	67.2
	≥ 19 years	19	32.8
Marital status	Married or stable union	11	19.0
	Single or widowed	47	81.0
Spirituality	Yes	37	63.8
	No	21	36.2
Education	Higher education	13	22.4
	Secondary education or below	45	77.6
Color/race	White	18	31.0
	Black/brown	40	69.0
Occupation	Yes	48	82.8
	Retired	01	1.7
	No	09	15.5
Prostitution	No	41	70.7
	Yes	17	29.3
Income‡	> 1 minimum salary	23	39.7
	< 1 minimum salary	35	60.3

*According to the cut-off age suggested by the World Health Organization for greater suicide risk; †Classification of child/adolescent employed by Brazil's Child and Adolescent Statute; ‡Minimum salary in Brazil in 2016: R\$ 880,00.

Source: Authors' elaboration.

respondents who did not report being cast out by the family because of gender identity (36.2% versus 5.2%; $p = 0.020$).

With regard to suicidal behavior (Table 4), the findings show that respondents with a past history of attempted suicide showed a higher proportion of SI (22.4% versus 19.0, $p = 0.008$). Respondents who never attempted suicide or showed a low intensity of the will to die at the last attempted monstred a higher prevalence of SI in comparison to those with a moderate or strong intensity (15.5% versus 6.9%, $p = 0.028$).

The results of the multiple analysis (Table 5) show that prevalence of suicidal ideation was higher in respondents who suffered violence at school (PR = 2.05; 95%CI: 1.08-3.87) and moderate/severe depression (PR = 3.86; 95%CI: 1.51-9.83).

Discussion

The findings of this study show a high prevalence of SI among travestis and transsexuals receiving assistance from transgender organizations in the State of Rio Grande do Norte associated with spirituality, depression level, having suffered violence at school, history of past suicide attempt, and being cast out by the family because of gender identity.

Overall prevalence of SI in the last 15 days before data collection was 41.4%. Prevalence of SI was greater in transsexuals than in travestis. This rate is lower than that found in a study in the US that reported a suicidal ideation prevalence rate of 64.9%⁹. This difference may be due to the fact that the studies used different methodologies and assessment instruments. Further research is needed using appropriate assessment tools to

Table 2. Sociodemographic characteristics, health history, and level of depression and presence/absence of suicidal ideation among travestis and transsexuals in Natal, Rio Grande do Norte, Brazil. December 2015 to June 2016.

Variables		Suicidal ideation				p-value*
		Present		Absent		
		n	%	n	%	
Gender identity	Travesti	14	24.1	8	13.8	0.544
	Transsexual	20	34.5	16	27.6	
Sexual orientation	Heterosexual	26	44.8	22	37.9	0.171 [†]
	Non-heterosexual	8	13.8	2	3.5	
Age group	> 29 years	22	37.9	18	31.1	0.403
	≤ 29 years	12	20.7	6	10.3	
Age at which came out as transgender	≤ 18 years	21	36.2	18	31.1	0.29
	≥ 19 years	13	22.4	6	10.3	
Marital status	Married or stable union	26	44.8	21	36.2	0.333 [†]
	Single or widowed	8	13.8	3	5.2	
Spirituality	Yes	25	43.1	12	20.7	0.066
	No	9	15.5	12	20.7	
Education	Higher education	26	44.8	19	32.8	0.808
	Secondary education or below	8	13.8	5	8.6	
Color/race	White	8	13.8	10	17.2	0.141
	Black/brown	26	44.8	14	24.2	
Employability	Yes/retired	28	48.3	20	34.5	0.999 [†]
	No	6	10.3	4	6.9	
Prostitution	No	24	41.4	17	29.3	0.983
	Yes	10	17.2	7	12.1	
Income	> 1 minimum salary	13	22.4	10	17.2	0.792
	< 1 minimum salary	21	36.2	14	24.1	
Lifetime sexually transmitted diseases	No	25	43.1	19	32.8	0.621
	Yes	9	15.5	5	8.6	
Awareness of HIV status	No	29	50	23	39.7	0.384 [†]
	Yes	5	8.6	1	1.7	
Sex reassignment surgery [§]	No	34	58.6	24	41.4	-
	Yes	0	0	0	0	
Presence of liquid silicone in the body	No	19	32.8	13	22.4	0.897
	Yes	15	25.9	11	19	
Hormone therapy	No	6	10.3	7	12.1	0.3
	Yes	28	48.3	17	29.3	
Professional follow-up for hormone therapy	No	8	13.8	11	19	0.074
	Yes	26	44.8	13	22.4	
Use of licit or illicit psychoactive substances	No	6	10.3	1	1.7	0.220 [†]
	Yes	28	48.3	23	39.7	
Depression level	Minimal/mild	30	51.7	12	20.7	0.002 [†]
	Moderado/grave	4	6.9	12	20.7	

*p-value: chi-squared test; [†]Fisher's exact test; [§]test of association was not performed because the variable "sex reassignment surgery" was a constant.

Source: Authors' elaboration.

obtain a deeper insight into this problem in accordance with the national guidelines on suicide prevention recommending the development of methods, data collection, and the dissemination of information and knowledge¹⁵.

A systematic review of correlates of suicidal ideation among transgender people¹⁶ showed that the risk of suicidal ideation, attempted suicide, and suicide was greater among travestis and trans people than in the general population. These

Table 3. History of violence and presence/absence of suicidal ideation among travestis and transsexuals in Natal, Rio Grande do Norte, Brazil. December 2015 to June 2016.

Variables		Suicidal ideation				p-value*	
		Ausente		Presente			
		n	%	n	%		
Victimization	Yes	33	56.9	23	39.7	0.999 [†]	
	No	1	1.7	1	1.7		
Typology	Verbal	No	5	8.6	4	6.9	0.999 [†]
		Yes	29	50	20	34.5	
Sexual	No	15	25.9	9	15.5	0.614	
	Yes	19	32.8	15	25.9		
Psychological	No	18	31	13	22.4	0.926	
	Yes	16	27.6	11	19		
Physical	No	21	36.2	14	24.4	0.792	
	Yes	13	22.4	10	17.2		
Place of violence	Home	No	22	37.9	15	25.9	0.863
		Yes	12	20.7	9	15.5	
Street	No	9	15.5	6	10.3	0.899	
	Yes	25	43.1	18	31.1		
School	No	24	41.4	9	15.5	0.012	
	Yes	10	17.2	15	25.9		
Health services	No	32	55.2	19	32.8	0.113 [†]	
	Yes	2	3.4	5	8.6		
Other	No	31	53.4	21	36.2	0.683 [†]	
	Yes	3	5.2	3	5.2		
Perpetrators	Family members	No	22	37.9	15	25.9	0.863
		Yes	12	20.7	9	15.5	
People unknown to the victim	No	4	6.9	2	3.4	0.999 [†]	
	Yes	30	51.7	22	37.9		
Being cast out by the family because of gender identity	No	19	32.8	21	36.2	0.020 [†]	
	Yes	15	25.9	3	5.2		
Full respect for preferred name	Yes	20	34.5	13	22.4	0.724	
	No	14	24.1	11	19		
Feel ashamed of oneself and of one's gender identity	No	21	36.2	10	17.2	0.13	
	Sim	13	22.4	14	24.1		

*p-value: chi-squared test; [†]Fisher's exact test.

Source: Authors' elaboration.

findings are corroborated by a literature review¹⁷ that reported an attempted suicide rate of 43% and suicide ideation rate of 77% among trans people, compared to 0.5% and 3.7%, respectively, in the general population.

The association between SI and depression level observed by the present study is consistent with the findings of a study conducted in Ontario, Canada that reported that gender liminal people (n = 704) obtained high scores for depres-

sion and were more likely to developed pression in the last 12 months than cisgender women (p = 0.009)¹⁸.

Another study observed that 48% of transgender older adults experienced depressive symptomatology¹⁹, while 15% of the general older population showed some symptoms of depression²⁰. It is believed that this is due to stigma and discrimination suffered by the travesti and transsexual population, with depressive disorders

Table 4. Suicidal behavior and presence/absence de suicidal ideation among travestis and transsexuals in Natal, Rio Grande do Norte, Brazil. December 2015 to June 2016.

Variables		Suicidal ideation				p-value*
		Absent		Present		
		n	%	n	%	
History of past suicide attempt	No	27	46.6	11	19.0	0.008
	Yes	7	12.1	13	22.4	
Intensity of the will to die at the last attempt	Never tried or weak intensity	30	51.7	15	25.9	0.028†
	Moderate or strong intensity	4	6.9	9	15.5	
Suicidal behavior in the family	No	27	46.6	20	34.5	0.999†
	Yes	7	12.1	4	6.9	
Suicidal behavior among friends	No	5	8.6	5	8.6	0.543
	Yes	29	50	19	32.8	
Travesti or transsexual friends with suicidal behavior	No	13	22.4	11	19.0	0.562
	Sim	21	36.2	13	22.4	

*p-value: Chi-squared test; †Fisher's exact test.

Source: Authors' elaboration.

Table 5. Multiple logistic regression model showing the association between depression level and history of violence and suicidal ideation among travestis and transsexuals receiving assistance from transgender organizations in Natal, Rio Grande do Norte, Brazil. December 2015 to June 2016.

Variables	Non-adjusted PR* (95%CI†)	Adjusted PR* (95%CI†)
Depression level		
Minimal/mild depression		1‡
Moderate/severe	1.36 (1.16-1.60)	3.86 (1.51-9.83)
Place of violence – School		
No		1‡
Yes	1.28 (1.06-1.49)	2.05 (1.08-3.87)

*Prevalence ratio; †Confidence interval; ‡Reference category.

Source: Authors' elaboration.

being triggered by factors such as advanced age, low self-esteem, poor interpersonal functioning, limited social support²¹, and intimate partner violence²².

Depression is therefore associated with the cycle of violence that perpetuates social exclusion and dysfunction and the marginalization, unfair treatment, harassment, and rejection of this segment of the population. This context is illustrated by Meyer's Minority Stress Model²³, which demonstrates that socially devalued minority groups are exposed to abuse and chronic discrimination, leading to negative self-evaluation, low self-concept, low self-esteem, hiding of stigmatized status, and expectations of rejection.

These minority stressors may lead to poor adaptation in illness processes and poor health outcomes, such as mental health problems.

The association between having suffered violence at school and being cast out by the family and suicidal ideation are important findings of the present study. Characterized as a predictor of suicidal behavior in various groups, violence can have a significant negative impact on the life of travestis and transsexuals in Brazil²⁴, playing a fundamental role in the subjectivity of these individuals. The perception of violence as a risk factor for suicide is endorsed by the national suicide prevention agenda²⁵ under the topic of "continuing education", which incorporates this

theme into the training of health professionals to emphasize the interface between discrimination and suicide.

Our findings show that the prevalence of suicidal ideation was greater in respondents who reported having suffered violence at school. A study using data from the Biennial Statewide California Student Survey²⁶ showed that the prevalence of suicidal ideation in the past year was nearly twice as high for transgender youth compared with non-transgender youth (33.73%, $p < 0.001$) and that transgender youth were 2.99 times more likely to show suicidal ideation in the last school year than non-transgender youth (95%CI: 2.25-3.98). Another study in New Zealand²⁷ showed that transgender students had compromised health and well-being relative to their non-transgender peers due to school bullying (OR = 4.5; 95%CI: 2.4-8.2). In Brazil, the “Muriel Study”²⁸ in São Paulo observed that having a lower level of education (Pearson coefficient (CP = -4.1; $p < 0.05$) and having suffered verbal (CP = -8.5; $p < 0.05$) or sexual (CP = -7.8; $p < 0.05$) abuse were associated with low psychological well-being among transgender people.

It is important to highlight that travestis and transsexuals are more exposed to violence because they fail to conform to the patriarchal ideal of heteronormativity, often abandoning or being expelled from school. These factors also contribute to marginalization and the lack of professional qualifications among this group²⁹. The findings of the present study corroborate this hypothesis, showing that 20% of respondents practiced prostitution, which may be one of the results of suffering violence at school and lead to increased exposure to violence.

In this respect, it is important to stress that overcoming school violence and access to higher education are protective factors against lifetime suicide attempts, with studies showing that travestis and trans people with higher education are less likely to attempt suicide than those with only secondary education (OR = 0.49; 95%CI: 0.31-0.75)¹⁰.

Travestis and transgender people begin to experience discrimination, physical violence, and verbal abuse from the moment they come out, both at school and at home. Not fitting into the gender norms expected by the family can be one of the first sordid and dehumanizing obstacles faced by these people²⁹.

In the present study, respondents living in home environments showed a higher level of suicidal ideation when compared to those who had

been cast out by the family. This may be due to the fact that maladjustment and family instability have been shown to be risk factors for attempted suicide and suicide³⁰⁻³². On the other hand, family support has been shown to be a protective factor for SI (relative risk = 0.43; 95%CI: 0.26, 0.73)³³.

It is also important to highlight that the prevalence of past suicide attempt was highest among respondents who showed suicidal ideation. The prevalence of attempted suicide in the present study was 34.5%, which is similar to rates observed in other studies with transgender people in the United States (32.36%)¹⁰ and Argentina (33%)³⁴, but different to that found in a study in the United States on suicidal behavior among transgender people (41%)⁷.

In the same direction, a study on the health and well-being of high school students in New Zealand subdivided into gender groups showed that 19.8% of transgender students (OD = 5.0; 95%CI: 2.9-8.8) had attempted suicide during the last 12 months versus 4.1% of non-transgender students³⁵, which is lower than the rate found in the present study. In another study in the United States, lifetime prevalence of attempted suicide was 32.4%, whereas past-12 months prevalence was 6.41%¹⁰.

These findings reaffirm that attempted suicide is common among gender minorities and associated with a set of vexatious situations ranging from prejudice and discrimination to violence and abuse, causing feelings of deep sadness, melancholy, and ego-dystonic disorders. As laid out in Brazil's suicide prevention policies, it is necessary to raise awareness and mobilize the field of health, other areas, and civil society to address the social determinants of suicide and its intersection with gender identity, with the understanding that the whole of society is responsible for the voluntary deaths it produces^{15,25}.

One of the limitations of this study is that it did not use a population sample of travestis and transsexuals in the State of Rio Grande do Norte. This is due to the lack of parameters for identifying members of this group since these individuals are not counted in census surveys, creating difficulties in accessing this population. However, snowball sampling has been shown to be a viable method for enrolling hidden, hard-to-reach populations, facilitating contact and identification²⁸.

It is also important to highlight the limitations of cross-sectional studies in which data on the outcome and independent variables are collected at the same time, often leading to reverse causation and survivorship bias. With the

aim of producing other evidence using different approaches, qualitative research can help unveil symbolic relationships between trans people and suicide (social representations) and identify underlying social processes that perpetuate violence against travestis and transsexuals (grounded theory), showing how this behavior is related to individual and collective choices and the subjection of these people to a patriarchal society and the heteronormative control of their bodies.

However, it is important to highlight that the data presented represents all travesties and transsexuals involved in the four transgender organizations operating in the State of Rio Grande do Norte. This study is pioneering in so far as it reveals an organizational identity/class of belonging to a group considered vulnerable and stimulates discussion about suicide prevention and mental health promotion for vulnerable populations that remain invisible and suffer from lack of access to public services (health, social care, leisure, etc.).

In the light of the findings, it is important to highlight the responsibility of the public health field and the tools it possesses to lead the way in creating safe inclusive spaces for this population in order to promote the prevention and management of suicidal ideation. It is recommended that health professionals propose transgender health interventions, particularly in school settings as spaces of socialization, to reduce the magnitude of depression due to social maladjustment.

At the structural and policy level, our results can help guide and promote the recognition of the concept of gender and sex education in the implementation of the National Education Plan by highlighting that schools are a locus of vio-

lence against trans people and counterposing the “gender ideology” discourse that stifles and silences the voice of transsexuals in schools. We also recommend the development of mental health promotion and suicide prevention strategies in accordance with the observations of the WHO manual “Preventing youth violence: an overview of the evidence”³⁶ and Ministry of Health’s “Agenda for strategic actions for suicide surveillance and prevention and health promotion in Brazil”²⁵ and the redefinition of roles and functions in health and education diversity policies.

Conclusion

The findings show that SI among travestis and transsexuals receiving assistance from transgender organizations in the State of Rio Grande do Norte, Brazil is associated with depression level, having suffered violence at school, being cast out by the family, past attempted suicide, and intensity of the will to die at the last attempt. However, only having suffered violence at school and depression level showed a significant association with suicidal ideation in the adjusted model.

This situational study draws attention to the need for government and non-government organizations to promote prevention actions and implement policies aimed at controlling SI and its risk factors. The fact that the study participants were members of transgender organizations may constitute a protective factor against suicidal ideation, suggesting that individuals without links to such organizations may show a strikingly higher level of suicidal ideation and suicide. Further studies are needed using appropriate methodologies to increase the reach of transgender research.

Collaborations

GWS Silva worked on the conception, design, data analysis and interpretation, in the writing of the article, its critical review and approval of the version to be published; KM Cardoso, DM Azevedo, RCF Sena, SLF Lins and ESO Dantas contributed in data analysis and interpretation, in the writing of the article, its critical review and approval of the final version; FAN Miranda contributed to the design, data analysis and interpretation of data, in the writing of the article, its critical review and approval of the version to be published.

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