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Suicide attempt in residents of São Paulo: epidemiological aspects

Intento de suicidio en los residentes de São Paulo: aspectos epidemiológicos

Tentativa de suicídio em residentes de São Paulo: aspectos epidemiológicos

ABSTRACT

Objective: to analyze the epidemiological profile of suicide attempts in the population living in the city of São Paulo during 2015. **Method:** This is a cross-sectional, descriptive study. The collection period occurred between January and December 2015, the eligible data base was the website of the Department of Informatics of the Unified Health System (Datasus), for analysis of the notifications recorded in the SIVVA/Sinan, and frequency measurements of the variables were calculated. **Result:** 910 suicide attempts were identified, 44, 5% female and 55.5% male. About the age group 3.2% were children (0 to 9 years old); 22.3% adolescents (10 to 19 years of age); 72.1% adults (20 to 59 years of age) and 2.4% elderly (60 years and older). With regard to the variable race/color; white (36.7%), black/brown (37.9%), indigenous (0.4%), yellow (0.3%) and the other data were ignored. **Conclusion:** the study showed that suicide attempts occur mainly among the adult population, emphasizing the need to reinforce the need for health services to be sensitive to their record regarding the care to be promoted, due to their magnitude.

DESCRIPTORS: Suicide attempt; Mental health; Mental Health Services; Mental Health Care.

RESUMEN

Objetivo: analizar el perfil epidemiológico de los intentos de suicidio en la población que vive en la ciudad de Sao Paulo durante 2015. **Método:** Este es un estudio transversal y descriptivo. El período de recolección se produjo entre enero y diciembre de 2015, la base de datos elegible fue el sitio web del Departamento de Informática del Sistema Unificado de Salud (Datasus), para el análisis de las notificaciones registradas en el SIVVA/Sinan, y se calcularon las mediciones de frecuencia de las variables. **Resultado:** se identificaron 910 intentos de suicidio, 44, 5% mujeres y 55,5% hombres. Alrededor del grupo de edad 3,2% eran niños (0 a 9 años de edad); 22,3% adolescentes (10 a 19 años de edad); 72,1% adultos (20 a 59 años de edad) y 2,4% de edad avanzada (60 años o más). Con respecto a la raza/color variable; blanco (36,7%), negro/marrón (37,9%), indígena (0,4%), amarillo (0,3%) y los otros datos fueron ignorados. **Conclusión:** el estudio mostró que los intentos de suicidio ocurren principalmente entre la población adulta, haciendo hincapié en la necesidad de reforzar la necesidad de que los servicios de salud sean sensibles a su historial con respecto a la atención a promover, debido a su magnitud.

DESCRIPTORES: Intento de suicidio; Salud mental; Servicios de Salud Mental; Atención de salud mental.

RESUMO

Objetivo: analisar o perfil epidemiológico das tentativas de suicídio na população residente da cidade de São Paulo durante o ano de 2015. **Método:** Trata-se de um estudo transversal, descritivo. O período de coletas ocorreu entre os meses de janeiro a dezembro de 2015, a base de dado elegível foi o sítio eletrônico do Departamento de Informática do Sistema Único de Saúde (Datasus), para análise das notificações registradas no SIVVA/Sinan, foram calculadas medidas de frequências das variáveis. **Resultado:** Foram identificadas 910 tentativas de suicídio sendo 44, 5% no sexo feminino e 55,5% no sexo masculino. Acerca da faixa etária 3,2% eram crianças (0 a 9 anos de idade); 22,3% adolescentes (10 a 19 anos de idade); 72,1% adultos (20 a 59 anos de idade) e 2,4% idosos (60 anos e mais de idade). No que tange a variável raça/cor; branca (36,7%), preto/pardo (37,9%), indígena (0,4%), amarela (0,3%) e os demais dados foram ignorados. **Conclusão:** o estudo evidenciou que as tentativas de suicídio ocorrem principalmente entre a população adulta, ressalta-se a necessidade de reforçar quanto aos serviços de saúde estarem sensíveis ao seu registro atentando quanto aos cuidados a serem promovidos, mediante sua magnitude.

DESCRIPTORES: Tentativa de suicídio; Saúde mental; Serviços de Saúde Mental; Assistência à Saúde Mental.

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INTRODUCTION

Conceptualized as self-harm and included in the categories ranging from X60 to X84 of the International Statistical Classification of Diseases and Related Health Problems (known by the acronym ICD) 10th Revision ¹, according to Tavares ¹, suicide is a phenomenon experienced by people who understand, in carrying out this act, the release of intolerable psychological pain. ¹

Suicide stems from the influence of mutual factors, which can be of an order, anthropological, psychological, philosophical, biological and social, with its consummation derived from an act incited and carried out by the individual with the aim of ending life. ² However, it is considered a complex and universal human event and represents a major public health problem worldwide. In addition to defining suicide as the death of a person caused by self-harm, this phenomenon also includes everything from motivation and ideation to self-extinction, to planning the act, the attempt and the death. ³ In this perspective, the data show that around one million people are affected by suicide in the world annually and every 45 seconds, a person somewhere on the planet commits suicide. Countries in Eastern Europe, Central America and South America are among those that represent high rates of suicide. ⁴

Data from the World Health Organization (WHO) of 2017, describes in its report on preventive measures of suicide

Brazil being the eighth country with the highest suicide rate. It points out possible preventive measures, highlighting measures and strategies through a comprehensive multisectoral approach. ⁵

Conceptually, the suicide attempt comprises any non-lethal suicidal behavior related to an intentional act against one's own life. Studies show that the risk of suicide increases proportionally to the number of attempts, which tend to be recurrent, emphasizing that the history of attempted suicide is the main risk factor for a new attempt. ^{6,7}

Suicide and attempted suicide are assessed as a major public health problem, suicide is a concrete act, carried out by a person who shows awareness and notion of the ultimate implication of their act. The expression suicide comes from the Latin form "sui caedere" which expresses "to kill oneself". ⁷

Suicide attempts are considered a complex and multi-causal event, and the identification of areas at greatest risk is a tool for planning more effective strategies for their prevention. ⁸

According to Vasconcelos Neto⁹, suicidal behavior is intrinsic to humans and represents an important public health problem. The spectrum of this behavior involves suicide (self-inflicted death), suicide attempt (SA) (self-aggressive behavior without fatal evolution) and suicidal ideation (thinking about ending one's own life). ⁹

Suicide attempts occupy an important place in the study of self-harm, since they

are an important predictor of self-inflicted death. ¹⁰

Epidemiological studies are important. Knowing the profile of suicide attempts allows not only to identify among the victims who are most at risk, but to support decisions aimed at prevention and actions for their care by health professionals and medical professionals. ¹⁰ Therefore, this study aimed to analyze the epidemiological profile of suicide attempts in the resident population of the city of São Paulo during 2015.

METHOD

Cross-sectional, descriptive study on notifications and hospitalizations resulting from attempted suicide in the resident population of the city of São Paulo, SP. The survey period runs from January to December 2015, as the data for 2015 were the last made available on the website of the Informatics Department of the Unified Health System (Datusus) at the time of the analysis. The data sources come from the following health information systems: Violence and Accident Surveillance System (Sistema de Vigilância de Violência e Acidentes - SIVVA).

Notifications were selected for analysis which, in the field of the Individual Notification Form for the registration of 'self-harm', were marked as 'yes', and in the reference field of the 'author of the aggression', the 'person himself. For the analysis of notifications registered in SIVVA/Si-

nan, frequency measures were calculated according to the following variables:

- Sex (female and male), Age (in years), Race/skin color (white; black/brown; indigenous; yellow); Place of occurrence (residence; collective housing; school; public road; and others [sports venue, bar or similar; trade or service location; industry; construction site]); Medium used (hanging; use of blunt object; use of sharp objects; use of hot substance; poisoning/intoxication; use of firearms); Alcohol use (yes; no);

- Evolution of the case: discharge, hospitalization, death in care, transfer to specialized service. The study did not require evaluation by a Research Ethics Committee due to the use of secondary, non-nominal data, available for public consultation on the Datasus website 11, according to resolution of the National Health Council - 466/12.

RESULTS

910 suicide attempts were identified in the population living in the city of São Paulo, 44,5% of which were female and 55,5% were male.

Data on the victim's age group: 3,2% children (0 to 9 years old); 22,3% adolescents (10 to 19 years old); 72,1% adults (20 to 59 years old) and 2,4% elderly (60 years and older).

Regarding the race/color variable; white (36,7%), black/brown (37,9%), indigenous (0,4%), yellow (0,3%) and the other data were ignored.

As shown in table 1, the main place of occurrence is the victim's own residence (38,7%).

The data in Table 2. Show that the main means used for suicide attempts is through intoxication and poisoning (76,8%), in both sexes.

Among victims of attempted suicide, 18,8% abused alcohol.

Data on the evolution of the case: 68,1% were discharged immediately, 14,0% hospitalized, 10,3% transferred to specialized services and 1,4% died in care.

DISCUSSION

During 2015, 910 cases of suicide attempts were reported in the city of São Paulo. The care with the phenomenon of suicide must envision, in addition to specific actions in moments of crisis, educational, health and social actions that have as a guideline the link between the subject and the other, and life, the protection of the human being in their moments of suffering and ethical and integral care with the promotion of dignified lives. Thinking of integrality as a basic principle for the care of people at risk for suicide, carried out through intersectoriality and health care based on the subject-subject relationship, should be the way to build plans that contribute to the implementation of policies of valuing life. The great distance between theory and practices that still reinforce a hospital-centered, biologist and vertical model in health must be broken, in favor of a care network in which all subjects are valued, with articulated and dialogical work between management and attention.¹²

According to the present study, poisoning and poisoning were prevalent in male victims; young people and adults aged 20 to 49 years. Suicide and suicide attempts have important differences between men and women, since they adopt self-destructive behaviors congruent with the peculiarities of each gender. According to Palma 8, worldwide men commit suicide three to four times more than women, a result similar to that found in this study for the city of São Paulo, where men who had a higher number of suicide attempts. 8 As for the location of suicide attempts, there was a predominance in the victim's home (38,7%). This data corroborates studies at the international and national levels, which refer to residence as the predominant

Table 1. Place of the occurrence of suicide attempts by the resident population of the city of São Paulo, 2015.

| Tipo de local da ocorrência | Notificações | f(%) |
|-----------------------------|--------------|-------|
| Bar e afins | 2 | 0,2 |
| Escola | 1 | 0,1 |
| Local de trabalho | 1 | 0,1 |
| Residência | 352 | 38,7 |
| Via pública | 21 | 2,3 |
| Ignorado | 533 | 58,6 |
| Total | 910 | 100,0 |

Source: author, 2015.

Table 2. Instrument used for attempted suicide in the resident population of the city of São Paulo, according to the sex of the victim, 2015.

| Instrumento utilizado | Feminino | f(%) | Masculino | f(%) |
|-------------------------------|----------|-------|-----------|-------|
| Afogamento | 1 | 0,2 | 0 | 0,0 |
| Arma Branca | 28 | 6,9 | 44 | 8,7 |
| Arma de Fogo | 1 | 0,2 | 2 | 0,4 |
| Enforcamento ou sufocação | 6 | 1,5 | 12 | 2,4 |
| Intoxicação / Envenenamento | 322 | 79,5 | 388 | 76,8 |
| Outros Meios | 40 | 9,9 | 41 | 8,1 |
| Precipitação de lugar elevado | 7 | 1,7 | 18 | 3,6 |
| Total | 405 | 100,0 | 505 | 100,0 |

Source: author, 2015.

environment for the realization of suicide, due to free access.¹³

In the present study it was shown that intoxication and poisoning were predominant in suicide attempts, with the victim's home being the main place of occurrence. During the care of the victim of a suicide attempt in the health services, the importance of multiprofessional performance is emphasized, being an important factor with regard to patient care, as the exchange of information between professionals can be effective in prevention, diagnosis, treatment, notification and monitoring of intoxications.¹⁴

Given the scenario of suicide attempts by intoxications, it is relevant to note that despite the high rates of occurrence of these injuries in the population, many cases are underreported. Almeida¹⁴, reports that the majority of intoxications are treated and reported in units of medium to high complexity, indicating that the majority consisted of acute and severe intoxications, with mild and chronic conditions not being reported.¹⁴

As the suicide attempt and suicide result from a complex interaction of a psychological, genetic, cultural and socio-environmental nature, multidisciplinary approaches must be adopted, respecting regional circumstances. It is necessary to obtain continuous data in order to be strengthened in effective strategies for prevention, formulation of public policies and adequate treatment of victims of suicide attempts and to redirect oneself into ineffective ones.¹⁵

The race / color variable in the present study showed a higher suicide attempt among blacks and browns. Contrary to what was found in the present study, people of white race/color are those who have the highest proportions of suicide attempts in Brazil.¹⁶

Matos and Tourinho¹⁷, report that studies associate race with mental health, with the black population more prone to these disorders, a reality found in the fact that suicide was among the 3 main causes of death in the brown population in 2016. A possibility to justify the greater concen-

As the suicide attempt and suicide result from a complex interaction of a psychological, genetic, cultural and socio-environmental nature, multidisciplinary approaches must be adopted, respecting regional circumstances.

tration of blacks in the centers of Psychosocial Care (Centro de Atenção Psicossocial - CAPS) in relation to Basic Health Units is that this population is having less access, after all studies reveal the differences in access and treatment received in health services, as well as the existence of discrimination in them.^{16,17}

In this study, it was found that 18,8% of the victims of suicide attempt abused alcohol.

The consumption of alcoholic beverages is a common practice worldwide, causing frequent and numerous clinical, psychological, professional and family problems. In Brazil, this problem is accentuated, because it is sold openly, without any type of inspection, in addition to the various advertisements to encourage consumption in different types of communication vehicles.¹⁸

According to Cordeiro¹⁸, the alcoholic intoxication that precedes the suicide

attempts of the so-called depressed alcoholics presents a peak in alcohol consumption on the eve of the event. It is a dose-response relationship in which the greater the consumption of alcohol, the greater the chance of suicidal behavior.¹⁸

We emphasize, the importance of the information acquired by the multidisciplinary health team, the better the planning for an appropriate therapeutic approach, it is important to emphasize that each individual is different from the other and that alcohol acts negatively in the control, in the motivation, in the internal attitude and contributes materially to the impulse of suicidal behavior.¹⁸

In this study, we identified as a limitation a possible underreporting of cases, probably due to changes in the flow of care for psychiatric emergencies. Faced with a phenomenon permeated by taboos and prejudice, in which most health professionals are not adequately prepared to meet this demand, there is a need for urgent investment in continuing education for health professionals in the different health services aimed at attending to the suicidal crisis.¹⁹

Underreporting is still an obstacle to health surveillance and better identification of suicidal behavior, however, this information can contribute to health professionals being sensitized to the timely detection of this behavior and due attention.²⁰

Most consultations in the health sector did not demand the necessary referrals for support and adequate follow-up to the victim, not even for repetitive cases.²⁰ In this series, 10,3% were referred to specialized services.

Hospitals are institutions of great social scope in the territory in which the victims are inserted, with the main function of receiving the highest demand for serious cases, whether of suicide or of several problems, playing a notifying role in these cases.²¹

It is also important to highlight some of the strategic tools that managers and health professionals can use in an attempt to reduce the occurrence of the disease,

which is the object of analysis in this study, they are: to promote awareness that suicide is a major public health problem and that it can be prevented; develop and expand the support base for suicide prevention; develop and program strategies to minimize the stigmas associated with being a mental health user; and promote efforts to reduce access to lethal self-harm means and methods.²¹

CONCLUSION

Suicide attempts occur mainly among the adult male population through intoxication and poisoning, occurring in the victim's own home.

The results presented reinforce the need for health services to be sensitive to the registration, attention and care of the population who reach them for this cau-

se. The numbers of suicide attempts reveal the dimension of the phenomenon. It is necessary to act in the elaboration and implementation of public policies and prevention of this phenomenon. Health professionals and medical professionals must receive and assist with skill and understanding, psychologically support and accompany these victims arrive at health services. ■

REFERENCES

1. Tavares FL et al. Mortalidade por suicídio no Espírito Santo, Brasil: análise do período de 2012 a 2016. *Av Enferm.* 2020; 38 (1):66-76.
2. Ribeiro DB, Terra MG, Soccol KLS, Schneider JF, Camillo LA, Plein FAS. Motivos da tentativa de suicídio expressos por homens usuários de álcool e outras drogas. *Rev Gaúcha Enferm.* 2016 mar;37(1):e54896. doi: <http://dx.doi.org/10.1590/1983-1447.2016.01.54896>.
3. FélixT., OliveiraE., LopesM. V., Parentel. R., DiasM. S., & MoreiraR. M. (2016). Fatores de risco para tentativa de suicídio: Produção de conhecimento no Brasil. *Revista Contexto & Saúde*, 16(31), 173-185. <https://doi.org/10.21527/2176-7114.2016.31.173-185>.
4. Assumpção GLS, Oliveira LA, Souza MFS de. Depressão e suicídio: uma correlação. *Rev. Pret.* [Internet]. 7º de março de 2018 [citado 10º de novembro de 2020];3(5):312-33. Disponível em: <http://periodicos.pucminas.br/index.php/pretextos/article/view/15973>.
5. Muller Alcantara Sônia, et al. Estratégias de prevenção e pósvenção do suicídio: Estudo com profissionais de um Centro de Atenção Psicossocial. *Revista de Psicologia, IMED*, 2017; 9 (2): 6-23. <http://dx.doi.org/10.18256/2175-5027.2017.v9i2.1686>.
6. Borba LO, Ferreira ACZ, Kalinke LP, Maftum MA, Maftum GJ. Fatores associados à tentativa de suicídio por pessoas com transtorno mental. *Rev Min Enferm.* 2020; 24: e-1284.
7. Pessoa DMS, Freitas RJM, Melo JAL, Barreto FA, Melo KCO, Dias ECS. Assistência de enfermagem na atenção primária à saúde de adolescentes com ideações suicidas. *Rev Min Enferm.* 2020; 24: e-1290.
8. Palma DCA, Santos ES, Ignotti E. Análise dos padrões espaciais e caracterização dos suicídios no Brasil entre 1990 e 2015. *Cad. Saúde Pública* 2020; 36(4): e00092819.
9. Vasconcelos Neto PJA, Moreira RS, Oliveira Junior FJM, Ludermir AB. Tentativa de suicídio, transtorno de estresse pós-traumático e fatores associados em mulheres do Recife. *Rev Bras Epidemiol* 2020; 23: E200010.
10. Bahia CA, Avanci JQ, Pinto LW, Minayo MCS. Notificações e internações por lesão autoprovocada em adolescentes no Brasil, 2007-2016. *Epidemiol. Serv. Saude* 2020; 29(2): e2019060,2020.
11. SIVVA – Sistema de Informação e Vigilância de Violências e Acidentes. [base de dados na internet]. São Paulo: Acidentes de Trânsito. [acesso em 23 de agosto de 2020]. Disponível em: <http://www.prefeitura.sp.gov.br/secretarias/saude>.
12. Santos LA, Kind L. Integralidade, intersetorialidade e cuidado em saúde: caminhos para se enfrentar o suicídio *Interface (Botucatu)*. 2020; 24: e190116.
13. Fernandes FY et al. Tendência de suicídio em adolescentes brasileiros entre 1997 e 2016. *Epidemiol. Serv. Saude* 2020; 29(4): e2020117.
14. Almeida ABM, Uchoa GF, Carvalho AMR. Epidemiologia das intoxicações medicamentosas registradas no sistema nacional de informações tóxico-farmacológicas de 2012-2016. *Saúde e Pesqui.* 2020; 13(2): 431-440.
15. Franck MC, Monteiro MG, Limberger RP. Mortalidade por suicídio no Rio Grande do Sul: uma análise transversal dos casos de 2017 e 2018. *Epidemiol. Serv. Saude* 2020, 29(2): e2019512.
16. Fernandes DAA, Ferreira NS, Castro JGD. Perfil epidemiológico das tentativas de suicídio em Palmas-Tocantins, de 2010 a 2014. *Tempus, actas de saúde colet* 2016, 10(4), 09-23.
17. Matos CCSA, Tourinho FSV. Saúde da População Negra: como nascem, vivem e morrem os indivíduos pretos e pardos em Florianópolis (SC). *Rev Bras Med Fam Comunidade* 2018; 13(40):1-13.
18. Cordeiro EL, Silva LSR, Mendes EWP, Silva LCL, Duarte VL, Lima ECMP. Tentativa de suicídio e fatores associados ao padrão uso e abuso do álcool. *Rev. Eletrônica Saúde Mental Álcool Drog* 2020; 16(1): 1-10.
19. Grigoletto AP, Souto VT, Terra MG, Tissot GL, Ferreira CN. Tentativas de suicídio notificadas em um hospital de ensino no estado do Rio Grande do Sul, 2014-2016. *R. pesq.: cuid. fundam. online* 2020; 12: 413-419.
20. Rodrigues MF, Oliveira PP, Silva HC, Pinheiro JMC. Comportamento suicida: o perfil epidemiológico das lesões autoprovocadas no estado de Goiás. *Rev Cient Esc Estadual Saúde Pública Goiás "Cândido Santiago"* 2020; 6 (2): e600003.
21. Santos Junior CJ, Santos IV, Silva JVS, Gomes VM, Ribeiro MC. Perfil de pacientes atendidos por tentativa de suicídio em um Hospital Geral de Emergências do estado de Alagoas, Brasil. *Medicina (Ribeirão Preto. Online)* 2019; 52 (3):223-230.