

Young adult women with suicidal behavior in Brazil: A literature review

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ABSTRACT

Introduction: According to the World Health Organization (WHO), suicide is the third leading cause of death among young women aged 15 to 29 years. Suicidal behavior encompasses suicidal ideation with or without a plan, suicide attempts, and suicide itself. Objective: to carry out an integrative literature review on national scientific production in the period from 2017 to 2022, collecting in the literature what leads young women to attempt against their own lives. Method: an integrative literature review of the literature on suicide attempts by young adult women in Brazil. a database of the National Library of Medicine, National Institute of Health (PubMed) was searched. Results: that there is a lack of knowledge about suicide attempts with a gender perspective, as well as the creation of strategies to promote life and prevent suicide. Conclusion: there is a lack of studies in the literature in the area that cover young adult females. Through the analysis of the selected studies, it is evident that the most frequent causes in the study refer to violence, disorders and the use of alcohol and other drugs.

Keywords: Young adult, Suicide attempt, Suicidal behavior.

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INTRODUCTION

Suicide can be understood as "a deliberate act performed by the individual himself, whose intention is death, consciously and intentionally, using a means that he believes to be lethal".

According to the Pan American Health Organization (PAHO)², it appears as the third leading cause of death among young women aged 15 to 29 years and the fourth cause among men at the same age; therefore, it can be defined as an intentional action designed to be lethal2. Thus, suicidal behavior encompasses a diversity of behaviors, ranging from suicidal ideation with or without a plan, suicide attempts and suicide itself3. Self-injurious behavior or self-inflicted violence includes suicidal ideation, self-mutilation, suicide attempts, and suicides4. Self-harm is distinguished from suicide attempt because, although it includes any intentional act of self-mutilation intended to cause harm to oneself, there is not necessarily an intention to kill, although it can represent a warning sign that the person needs mental health care4.

Suicide is a difficult phenomenon to understand, due to the fact that it is multifaceted, studied by several areas of the field of health, sociology and philosophy, and there is no single consensus among the areas. Thus, knowledge of the subject becomes indispensable to approach it in an ethical and respectful manner5.

In 2019, approximately 703,000 people of all ages committed suicide worldwide. Of these, 97,339 people died by suicide in the Americas alone. In Brazil, in the same period, 12,745 individuals lost their lives due to suicide. In Rio Grande do Sul, 1,280 people were killed in self-harm in 20196. PAHO warns that suicide rates in the Americas increased by 17% in 2019, although they have decreased in the rest of the world2 – in the Eastern Mediterranean region these rates shrank by 17%, in the European region by 47% and in the Western Pacific by 49%.

A suicide has an impact on the lives of at least six other people emotionally, socially, and economically7. All people close to the victim are affected, whether colleagues, friends, health professionals, police officers or any people who have witnessed the suicide or followed the fact in any way. These effects can remain for generations in the family through the community's reporting and culture8. An American study concluded that each suicide affects up to 135 people; According to this research, all the people who knew the victim suffer some effect9.

The World Health Organization (WHO)¹⁰ states that it is possible to prevent suicide, but health professionals need to be able to recognize the risk factors present during care. Some studies, such as those by Abreu *et al.*¹¹, demonstrated that when suicide risk is correctly identified and necessary measures are taken, suicide rates tend to fall.

In order to change this scenario, the WHO10 has produced new guidelines so that countries can create conditions to prevent suicide and, thus, provide humane care to people at risk and their families. Moving in this direction, in June 2022, the WHO announced that the 194 countries that are



part of the Organization signed the term committing to global goals to positively modify mental health. The Mental Health Plan 2013-2030 has advanced in the last decade, proving that it is possible to change the suicide scenario, but greater effort is needed on the part of member states 12. The WHO10 considers young adults to be people between 20 and 24 years of age. Thus, when referring to this age group, we will use the expression: young adult. The decision to use this specific public is due to the need to analyze data on suicide attempts in order to better understand this phenomenon and contribute with knowledge that can serve as a basis for the production of Public Care Policies 12.

According to the "Suicide Worldwide in 2019: global health estimates", a report published by the WHO, in 2019, 703,000 people committed suicide worldwide. That same year, suicide killed more people than HIV/AIDS or cancer13. In Brazil, 12,745 people died by suicide in 20206.

In terms of gender, the number of suicides among men is historically higher than that of women 14. However, for Meneghel *et al.* ¹⁵, there is an increasing trend in recent years among women aged 10 to 14 and 20 to 29 years of age. Statistics from 2011 to 2015 indicate that suicide is the eighth leading cause of death among women 16, explaining this increase, data from 2019 referring only to suicide attempts showed that the rates are equivalent to 60% for women and 31% for men, making it evident that female suicide attempts need greater attention 14.

For Meneghel *et al.*¹⁵, there are many studies on the subject, but there are few that consider female suicide and gender perspectives, and additional research is needed to understand the determinants of female suicide. When considering only completed suicide, the existing problem is male, but when considering suicidal ideation and attempts, the problem becomes predominantly female. Thus, the social determinants involved in its occurrence deserve to be studied in order to be understood more comprehensively15.

Analyzing gender in notifications can be an important element to identify adversities experienced by certain populations 17. There is a considerable number of publications on the subject of suicide, but suicide attempts with a gender debate are still little explored 14.

Blanco 18 developed an exploratory bibliographic research, compiling the published and available material on female suicide in Brazil in order to understand the seriousness of the issue and what else there was of research in the area. The author identified that half of the articles analyzed focused on the relationship between suicide/suicide attempts and everyday violence.

An advance in suicide prevention took place with the implementation of the National Policy for the Prevention of Self-Mutilation and Suicide (PNPAS), when Law 13,819/2019 was sanctioned. Suspected or confirmed cases of self-inflicted violence have become mandatory not only in health institutions (public or private), but have also been included in educational establishments, whether public or private14.



In this study, we sought to analyze the publications that deal with the theme of suicide attempts, in order to identify the reasons and means most used by young adult women, to contribute to the understanding of this phenomenon from a gender perspective.

METHODOLOGICAL PROCEDURES

This study consists of an integrative literature review, whose method consists of summarizing the state of the art, i.e., selecting the results obtained and published in scientific articles, books, book chapters, as well as theses and dissertations, among other sources, in an organized and comprehensive manner19. In this study, the National Library of Medicine and National Institute of Health (PubMed) database was chosen. This review method is composed of six steps: 1) identification of the theme and the guiding research question (which can be found in the introduction of this work); 2) definition of inclusion and exclusion criteria; 3) data collection of selected articles; 4) critical analysis of the articles and identification of the evidence found; 5) interpretation of results; and 6) synthesis of knowledge20.

By conducting an integrative literature review on national scientific production, in the period from 2017 to 2022, we searched the literature for what leads young women to attempt against their own lives, synthesizing by production according to author, year of publication, journal of publication, objective and methods. The objective was to identify if there are publications on the means most used by young women in Brazil who attempted against life, published between the years 2017 and 2022 and if there is a profile described of these young women.

The inclusion criteria used in this research were as follows: 1) complete and free scientific articles; 2) scientific articles containing the set of keywords: young adult, suicide attempt or suicidal behavior; and 3) articles describing the characteristics of suicide attempts among young women.

For the exclusion criteria, the following were used in this research: 1) articles that did not deal with the theme; 2) articles dealing only with suicide; and 3) articles whose full access would be paid.

In order to meet the specific objectives of the study, a spreadsheet was created in Google Drive with the information obtained about the publications selected according to the criteria described. Data collection was carried out in November 2023. For the research, the following database was chosen: PubMed.

Firstly, the search in the PubMed database was performed using the descriptors and the selection of the period of publication, and 23 articles were selected by the search strategy. Then, those that were not freely available were excluded; Subsequently, by reading the title and the abstracts found, those that were not related to the theme and objectives of the research were excluded. Next, the articles in the final sample were read in full, discarding those that were not aligned with the objectives of this review. The selected articles, in the number of five studies, had



their data synthesized and their information extracted, as well as the evaluation of the studies, discussion of the results and, finally, the construction of the review was made. The flowchart of this research is below and the product was represented by a table that can be found in the results for a better visualization and evaluation of the full applicability of the methodology in the review.

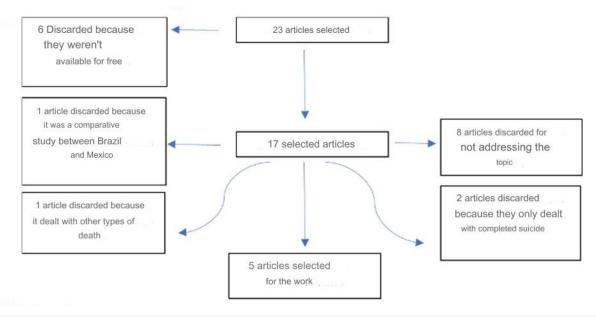


Figure 1 - Flowchart of the study selection process for the systematic review

Source: prepared by the authors.

RESULTS

Chart 1 presents the results of the integrative literature review research, showing the authors of the articles read, the year of publication, the titles of the articles, the objectives outlined, the methods used, their main results, and the conclusion.

Chart 1 - Results found in the literature review from 2017 to 2022 related to suicide attempts among young women in Brazil

Authors	Pub Year.	Magazine / Newspap er	Objectives	Method	Results	Conclusion
Vasconcelo s Neto ²¹ PJA, Moreira RDS, Oliveira Júnior FJM, Ludermir AB.	2020	Rev Bras Epidemio 1	OBJECTIVE: To investigate the association of suicide attempt (ST) with Post-Traumatic Stress Disorder (PTDD) and Intimate Partner Violence (IPV) in a cohort of women enrolled	This is a cross-sectional study nested in a prospective cohort study with 644 women aged 18 to 49 years.	Women who had PTSD and those who had no religion had a higher risk of suicide.	Prevention, treatment and promotion of greater knowledge about this disorder, in addition to the aggregating and social protective effect promoted by religiosity, can be a strategy for



			at the Family Health Unit of Recife.			the reduction and prevention of suicide.
Wiener ²² CD, Moreira FP, Zago A, Souza LM, Branco JC, Oliveira JF de.	2018	Brazilian Journal of Psychiatr y	To assess the prevalence of alcohol abuse and/or dependence in a population sample of young adults and to assess the prevalence of comorbid mood disorders, anxiety, and suicide risk in this population.	This is a cross-sectional population-based study.	Alcohol abuse and/or dependence was identified and proven to be more prevalent among men than among women and among those who used tobacco, illicit drugs, or had an anxiety disorder, mood disorder, and suicide risk.	Alcohol abuse and/or dependence are consistently associated with a higher prevalence of psychiatric comorbidities, and deserve greater public health attention, necessitating alcohol abuse prevention programs
Rafael23 RMR, Jalil EM, Luz PM, de Castro CRV, Wilson EC, Monteiro L, Ramos M, Moreira RI, Veloso VG, Grinsztejn BGJ, Velasque LS.	2021	PLoS One.	OBJECTIVE: To estimate the lifetime prevalence of suicidal behavior and identify its associated factors among Brazilian trans women.	This cross- sectional study was conducted among 345 trans women living in Rio de Janeiro, Brazil.	Suicide attempt was significantly associated with living alone, physical violence by a casual partner, and sexual violence by a family member. Depression was associated with both suicidal ideation and suicide attempts.	The prevalence rates of suicidal behavior among Brazilian trans women are directly linked to violence and poor mental health. Effective mental health and public health policies that address violence against trans women are necessary for its prevention.
Gomes24 AP, Soares ALG, Kieling C, Rohde LA, Gonçalves H.	2019	Rev Public Health.	To evaluate the prevalence of some mental disorders and the risk of suicide and the association between them in young people.	Data from the 1993 Pelotas Birth Cohort (Brazil) were used.	All disorders (except APD) and suicide risk were higher among women. The greater the number of concomitant mental disorders, the higher the risk of suicide.	About 20% of the young people had at least one mental disorder. Mental disorders were associated with a higher risk of suicide, especially comorbidity among them.



Roglio25 VS, Borges EN, Rabelo- da-Ponte FD, Ornell F, Scherer JN, Schuch JB, Passos IC, Sanvicente -Vieira B,	2020	PLoS One.	To investigate factors associated with suicide attempts in hospitalized patients diagnosed with cocaine use disorder using two analytical approaches.	This was a cross-sectional study using a secondary database with 247 men and 442 women hospitalized for cocaine use disorder.	The prevalence of suicide attempts was 34% for men and 50% for women. Depression and hallucinations were factors associated with suicide attempts.	The findings indicate that suicide attempt is associated with depression, lucinations, and childhood trauma in both sexes. Psychiatric issues were shown to be more important for women than for men.
IC, Sanvicente			approaches.	use disorder.		for women than

Source: prepared by the authors.

DISCUSSION

With the proposed objective of identifying if there are in the literature the motives and means most used by young adult women who tried against their own lives, analyzing the selected texts of Vasconcelos Neto *et al.*²¹, Wiener *et al.*²², Rafael *et al.*²³, Gomes *et al.*²⁴ and Roglio *et al.*²⁵, the following results were found.

Vasconcelos Neto *et al.*²¹ produced a cross-sectional cohort study with 644 women aged 18 to 49 years, enrolled in the Family Health Strategy of the Sanitary District II of the city of Recife (PE), whose main objective was to investigate the association of suicide attempts (ST) with post-traumatic stress disorder (PTSD), intimate partner violence (IPV) and variables related to socioeconomic and demographic aspects in this portion of the population. The authors found that women who had PTSD and those who had no religion were more likely to attempt suicide.

Wiener *et al.*²² produced a population-based cross-sectional study involving 1,953 young adults aged between 18 and 35 years living in the city of Pelotas, Southern Brazil. The aim of this study was to evaluate alcohol use disorders (APD) in a population sample of young adults and to assess the prevalence of comorbid mood disorders, anxiety, and suicide risk in this population. Among the study participants, 54.9% were female and 75.9% were white. Their study showed that 7.5% reported the use of other illicit drugs and 13% demonstrated suicide risk. Alcohol abuse was present in 187 individuals, or 9.6%, of which 5.10% were women and 15.20% were men. In their study, Wiener *et al.*²² asserted that the abuse of alcohol, tobacco, and other illicit drugs was more associated with males, as well as anxiety, mood, and suicide risk disorders. Their research confirmed that alcohol abuse and/or dependence is related to a higher share of psychiatric comorbidities.



Rafael *et al.*²³ conducted a cross-sectional study among 345 trans women living in Rio de Janeiro, whose main objective was to estimate the prevalence of suicidal behavior throughout life, seeking to identify associated factors among Brazilian trans women. In this study they report that trans women face a disproportionate burden, which results in a negative burden on health, including mental health, and that little is known about suicidal behavior in this portion of the population. They described that suicidal ideation was present in 47.25% of the participants, and the lifetime prevalence of suicide attempts was 27.25%. Suicidal ideation was significantly lower in those who reported sex work than in those who reported previous violence committed by a family member. However, suicide attempt was considerably associated with living alone, physical violence by a casual partner, and sexual violence by a family member. Depression was associated with both suicidal ideation and suicide attempts. Rafael *et al.*²³ deduced that suicidal behavior among Brazilian trans women has a high prevalence and is directly linked to violence and poor mental health.

Gomes *et al.*²⁴ described a cross-sectional birth cohort study in Pelotas with follow-up of 5,249 individuals. These children, whose mothers consented to the study, were followed at various times for 22 years, starting in 1993. The observation indicated that 20% of the research participants had one or more disorders, and of these, 8.8% were at risk of suicide. In addition, the research showed that, among the mental disorders, those with the highest risk of suicide were major depressive disorder (MDD) and PTSD. Regarding gender, women had a higher risk of suicide and other disorders, with the exception of antisocial personality disorder (ADD). The researchers showed that the greater the number of disorders, the greater the risk of suicide. The study revealed that 60% of the young participants in the research with suicidal ideation had a plan formulated and that 45% of those who developed a plan consummated suicide.

Roglio *et al*.In their study, ²⁵ describe a cross-sectional study with 247 men and 442 women hospitalized due to crack and cocaine use disorders. The rate of suicide attempts for this group was 34% for men and 50% for women. Research has shown that some signs can be related to both sexes, such as mental disorders, drug abuse, and early exposure to violence; However, sexual violence, eating disorders and bipolar disorder are factors related to the female sex. Depression and hallucinations were associated with suicide attempts for both sexes. Other factors such as childhood trauma, aggression and severity of drug use were also found. Drug use was considered a serious indication of suicide risk, especially for women. The authors concluded that psychiatric issues are more important for women and that suicide attempts are intrinsically related to depression, hallucinations and childhood trauma in both sexes.

As a strategy to reduce and prevent suicide attempts and PTSD, Vasconcelos *et al.*²¹ affirm that there is a need for greater knowledge about them, understanding the social protective effect that religiosity offers.



According to Wiener *et al.*²², it would be interesting to create programs that inhibit alcohol abuse, since his research has shown that this factor is related to a greater participation in psychiatric comorbidities.

Roglio *et al.*²⁵ suggest the creation of strategies to promote life and combat suicide, since there is a lack of studies that analyze cocaine use, stratified by sex, demonstrating the existence of an important gap in the fight against suicide.

For Gomes *et al.*²⁴, the idea that individuals at risk of suicide need close monitoring was confirmed in their research, since suicide attempts are the main risk factor for completed suicide.

Rafael *et al.*²³, whose study focused on trans women, infers that the development of effective public mental health and public health policies that address violence against trans women can prevent suicidal behavior in this portion of the population.

CONCLUSION

From 2017 to 2022, the literary production was systematized according to author, year of publication, journal of publication, objective, methods, results, and conclusion. Regarding this objective, it was concluded that there is still a lack of studies in the literature in the area that cover young adult females. Through the analysis of the selected studies, it was evident that the most frequent causes in the study refer to violence, disorders and the use of alcohol and other drugs.

Although all the articles in the selection dealt with the theme of suicide attempts, the causes were not common to all; but the coincidental identification in all the articles is that the highest rate of suicide attempts is among women. The objective of identifying which methods were most used and which reasons was inconclusive – there would be a bias, since each study considered a disorder and/or some element, such as the use of crack and cocaine by Roglio *et al.*²⁵, on alcohol and illicit drugs by Wiener *et al.*²² and female transsexuality for Rafael *et al.*²³.

In addition, the lack of knowledge of the specific factors that contribute to young women attempting to take their own lives impedes the formulation of effective prevention strategies. Thus, contributing to the identification, restricting itself to the female gender to better delineate this profile, becomes fundamental in suicide prevention.

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REFERENCES

- 1. Ministério da Saúde. (s.d.). *Setembro Amarelo de Prevenção ao Suicídio-10/09*. Recuperado de https://bvsms.saude.gov.br/setembro-amarelo-e-dia-mundial-de-prevençao-ao-suicidio-10-9/#:~:text=O%20suic%C3%ADdio%20pode%20ser%20definido,e%20a%20tentativa%20de%20suic%C3%ADdio
- Organização Pan-Americana de Saúde (OPAS). (2021, 17 de junho). *Uma em cada 100 mortes ocorre por suicídio, revelam estatísticas da OMS*. Recuperado de https://www.paho.org/pt/noticias/17-6-2021-uma-em-cada-100-mortes-ocorre-por-suicidiorevelam-estatisticas-da-oms
- 3. Montier, C. (2021, junho). *Comportamento suicida*. Recuperado de https://www.msdmanuals.com/pt-br/profissional/transtornos-psiqui%C3%A1tricos/comportamento-suicida-e-autoles%C3%A3o/comportamento-suicida
- 4. Centro Estadual de Vigilância em Saúde. (s.d.). *Tipologia da Violência*. Recuperado de https://www.cevs.rs.gov.br/tipologia-da-violencia
- 5. Scavacini, K. (2018). *O suicídio é um problema de todos: a consciência, a competência e o diálogo na prevenção e posvenção do suicídio* [tese, Universidade de São Paulo]. São Paulo, SP.
- 6. Fórum Brasileiro de Segurança Pública. (2021). *Anuário Brasileiro de Segurança Pública 2021*. Recuperado de https://static.poder360.com.br/2021/09/anuario-brasileiro-seguranca-publica-2021.pdf
- 7. Associação Brasileira de Psiquiatria (ABP). (2014). *Suicídio, informando para prevenir*. CFM Publicações Manuais, Protocolos e Cartilha. Recuperado de http://www.flip3d.com.br/web/pub/cfm/index9/?numero=14#page/1
- 8. Cruz, C. W. (2014). *As múltiplas mortes de si: suicídio de idosos no sul do Brasil* [tese, Unisinos]. São Leopoldo, RS.
- 9. Cerel, J., Brown, M. M., Maple, M., Singleton, M., van de Venne, J., Moore, M., & Flaherty, C. (2019). How many people are exposed to suicide? Not six. *Suicide Life Threat Behav, 49*(2), 529-534. https://doi.org/10.1111/sltb.12450
- 10. Organização Mundial da Saúde (OMS). (2019). *Estatísticas mundiais de saúde 2019: monitoramento da saúde para os ODS, objetivos de desenvolvimento sustentável*. Recuperado de https://apps.who.int/iris/handle/10665/324835
- 11. Abreu, K. P., Lima, M. A. D. S., Kohlrausch, E., & Soares, J. F. (2010). Comportamento suicida: fatores de risco e intervenções preventivas. *REE, 12*(1), 195-200. https://revistas.ufg.br/fen/article/view/9537
- 12. Organização Pan-Americana da Saúde (OPAS). (2022, 17 de junho). *OMS destaca a necessidade urgente de transformar saúde mental e atenção*. Recuperado de https://www.paho.org/pt/noticias/17-6-2022-oms-destaca-necessidade-urgente-transformar-saude-mental-e-atenção
- 13. World Health Organization (WHO). (2021, 16 de junho). *Suicide worldwide in 2019: Global Health Estimates*. Recuperado de https://www.who.int/publications/i/item/9789240026643



- 14. Brasil. (2019, 26 de abril). *Lei nº 13.819, de 26 de abril de 2019. Institui a Política Nacional de Prevenção da Automutilação e do Suicídio, a ser implementada pela União, em cooperação com os Estados, o Distrito Federal e os Municípios; e altera a Lei nº 9.656, de 3 de junho de 1998*. Diário Oficial da União, 26 de abril de 2019.
- 15. Meneghel, S. N., Hesler, L. Z., Ceccon, R. F., Trindade, A. G., & Pereira, S. (2013). Suicídio de Mulheres: uma Situação Limite? *Athenea Digital, 13*(2), 207-217. https://www.redalyc.org/pdf/537/53728035013.pdf
- 16. Brasil. Ministério da Saúde. Secretaria de Vigilância em Saúde. (2017). *Boletim Epidemiológico Suicídio. Saber, agir e prevenir, 48*(30). https://www.gov.br/saude/pt-br/centrais-de-conteudo/apresentacoes/2017/2017-025-perfil-epidemiologico-das-tentativas-e-obitos-por-suicidio-no-brasil-e-a-rede-de-aten-ao-a-sa-de-pdf
- 17. Baére, F., & Zanello, V. (2018). O gênero no comportamento suicida: Uma leitura epidemiológica dos dados do Distrito Federal. *Estudos de Psicologia, 23*(2), 168-178. http://pepsic.bvsalud.org/pdf/epsic/v23n2/a08v23n2.pdf
- 18. Blanco, B. (2019). *Suicídio entre mulheres no Brasil: uma revisão de literatura*. Repositório Institucional Universidade Federal de Uberlândia. https://repositorio.ufu.br/bitstream/123456789/26533/3/Suic%C3%ADdioEntreMulheres.pdf
- 19. Gil, A. C. (1999). *Métodos e técnicas de pesquisa social* (5a ed.). Atlas.
- 20. Skalinski, L. M., Costa, M. C. N., & Teixeira, M. G. L. (2019). Contribuições da análise espacial para a compreensão da dinâmica de transmissão da dengue: revisão integrativa. *Journal of Health and Biological Sciences, 7*(1), 53-63. http://dx.doi.org/10.12662/2317-3076jhbs.v7i1.2115.p53-63.2019
- 21. Vasconcelos Neto, P. J. A., Moreira, R. D. S., Oliveira Júnior, F. J. M., & Ludermir, A. B. (2020). Suicide attempt, Post-traumatic stress disorder and associated factors in women of Recife. *Revista Brasileira de Epidemiologia, 23*, 1-14. https://doi.org/10.1590/1980-549720200010
- 22. Wiener, C. D., Moreira, F. P., Zago, A., Souza, L. M., Branco, J. C., Oliveira, J. F., Silva, R. A. D., Portela, L. V., Lara, D. R., Jansen, K., & Oses, J. P. (2018). Mood disorder, anxiety, and suicide risk among subjects with alcohol abuse and/or dependence: a population-based study. *Brazilian Journal of Psychiatry, 40*(1), 1-5. https://doi.org/10.1590/1516-4446-2016-2170
- 23. Rafael, R. M. R., Jalil, E. M., Luz, P. M., de Castro, C. R. V., Wilson, E. C., Monteiro, L., Ramos, M., Moreira, R. I., Veloso, V. G., Grinsztejn, B. G., & Velasque, L. S. (2021). Prevalence and factors associated with suicidal behavior among trans women in Rio de Janeiro, Brazil. *PLoS One, 16*(10), e0259074. https://doi.org/10.1371/journal.pone.0259074
- 24. Gomes, A. P., Soares, A. L. G., Kieling, C., Rohde, L. A., & Gonçalves, H. (2019). Transtornos mentais e risco de suicídio na idade adulta emergente: a coorte de nascimentos de Pelotas de 1993. *Revista de Saúde Pública, 53*, 96. https://www.revistas.usp.br/rsp/article/view/163458
- 25. Roglio, V. S., Borges, E. N., Rabelo-da-Ponte, F. D., Ornell, F., Scherer, J. N., Schuch, J. B., Passos, I. C., Sanvicente-Vieira, B., Grassi-Oliveira, R., von Diemen, L., Pechansky, F., & Kessler, F. H. P. (2020). Predição de tentativa de suicídio em homens e mulheres com transtorno por uso de crack no Brasil. *PLoS One, 15*(5). https://doi.org/10.1371/journal.pone.0232242