

Multidimensional Analysis of Clinical, Demographic, and Cultural Factors in Suicidal Ideation and Behavior in a Psychiatric Inpatient Ward

Sebastián Malleza[®], Lara A. Remezovski[®], Fernando C. Bertolani[®] and Daniel Matusevich[®]

Departamento de Psiquiatría, Hospital Italiano de Buenos Aires. Buenos Aires, Argentina

ABSTRACT

Introduction: Suicide is responsible for 1.5% of deaths worldwide, totaling approximately 800,000 deaths per year. Estimates suggest that it will become one of the leading contributors to the global burden of morbidity in the next two decades. Proper clinical training in the field of suicidology and the prevention of suicidal behavior is particularly relevant in the context of the psychiatric inpatient ward. This study aims to analyze the factors that contribute to suicidal ideation and behavior in patients hospitalized in the psychiatric inpatient ward of a general university hospital.

Materials and Methods: We conducted a cross-sectional study of hospitalized patients over one year (October 2018 to September 2019, n=254). We examined sociodemographic, cultural, and clinical variables related to suicide.

Results: Of the patients admitted during the study period, 39.4% reported suicidal ideation, 13.4% had a suicidal plan, and 10.6% had attempted suicide. Women had a higher chance of hospitalization due to suicidal ideation (OR=2.22, 95% CI [1.28-3.77]), suicidal plan (OR=2.77, 95% CI [1.15-6.62]), and suicide attempt (OR=3.12, 95% CI [1.13-8.47]). Seventy percent of patients over 65 years old with a suicidal plan lived alone, while this percentage was 80% for those admitted after a suicide attempt.

Conclusions: Most epidemiological data on suicidal behavior come from developed countries. Considering the complexity of this phenomenon, we believe it is necessary to incorporate social, political-economic, cultural, and gender perspectives into the analysis. Application of the idiographic method could provide a useful tool to advance our understanding of suicidology by proposing an approach that draws on quantitative and qualitative information centered on the individual in an iterative process that starts with the individual and then seeks contextualized common elements.

Key words: suicide, epidemiology, isolation, women, culture, ideographic, ideographic.

Análisis multidimensional de factores clínicos, demográficos y culturales en la ideación y conducta suicida en una sala de internación psiquiátrica

RESUMEN

Introducción: el suicidio es responsable del 1,5% de las muertes mundiales, totalizando aproximadamente 800 000 muertes al año. Se estima que se convertirá en uno de los mayores contribuyentes a la carga mundial de morbilidad en las próximas 2 décadas. La formación clínica

Author for correspondence: sebastian.malleza@hospitalitaliano.org.ar, Malleza S.

Received: 08/24/23 Accepted: 04/16/23 Online: 05/21/24

DOI: <http://doi.org/10.51987/revhospitalbares.v44i2.290>

How to cite: Malleza S, Remezovski LA, Matusevich D. Multidimensional Analysis of Clinical, Demographic, and Cultural Factors in Suicidal Ideation and Behavior in a Psychiatric . Rev. Hosp. Ital. B. Aires. 2024;44(2):e0000290

adecuada en el campo de la suicidología y la prevención de la conducta suicida resulta de especial relevancia en el contexto de la sala de internación de Psiquiatría. El presente estudio tiene como objetivo analizar los factores que contribuyen a la ideación y al comportamiento suicida en pacientes hospitalizados en la sala de internación de Psiquiatría de un hospital general universitario.

Materiales y métodos: se realizó un estudio transversal de pacientes hospitalizados durante un año (octubre de 2018 a septiembre de 2019, n=254). Se examinaron las variables sociodemográficas, culturales y clínicas asociadas al suicidio.

Resultados: el 39,4% de los pacientes que ingresaron en el período de estudio refería ideación suicida, el 13,4% un plan suicida y el 10,6% había presentado un intento de suicidio. Las mujeres tuvieron mayor chance de hospitalización debido a ideación suicida (OR=2,22, IC 95% [1,28-3,77]), plan suicida (OR=2,77, IC 95% [1,15-6,62]) e intento suicida (OR=3,12, IC 95% [1,13-8,47]). El 70% de los pacientes mayores de 65 años que tenían un plan suicida vivían solos, mientras que dicho porcentaje fue del 80% para quienes ingresaron luego de un intento de suicidio.

Conclusiones: la mayor parte de los datos epidemiológicos en relación con la conducta suicida provienen de países desarrollados. Tratándose de un fenómeno de suma complejidad, creemos necesario incorporar al análisis aristas sociales, político-económicas, culturales y de género. La aplicación del método ideográfico podría brindar una herramienta útil para avanzar nuestro entendimiento en el campo de la suicidología, planteando un abordaje que se nutra de información tanto cuantitativa como cualitativa centrada en la persona, en un proceso iterativo que parta del individuo y luego busque elementos comunes contextualizados.

Palabras clave: suicidio, epidemiología, aislamiento, mujer, cultura, ideográfico.

INTRODUCTION

Each year, approximately 800,000 people commit suicide worldwide, accounting for 1.5% of global deaths. In 2019, suicide was the most common cause of death in the 15 to 29 age group¹. Around 20 suicide attempts are estimated for every suicide, reaching 16 million attempts per year and 160 million patients experiencing suicidal ideation². Estimates suggest that suicide will become one of the world's leading contributors to the global burden of disease over the next two decades³.

Suicide rates vary according to sex and age group, with higher prevalence in the elderly and men (15.6 suicides per 100,000 men vs. seven suicides per 100,000 women)⁴. The epidemiology of self-injurious behaviors (whether with suicidal intent or not) differs in this regard, with higher prevalence in women and young people. Approximately 1 in 50 people who attempt suicide will die by suicide within the next 12 months, and 1 in 25 people will do so within the next five years⁵.

The alarming impact of these figures underscores the relevance and seriousness that the phenomenon of suicide has acquired for Public Health, urging us to deepen its study in one of the settings where it becomes most prominent: the psychiatric inpatient ward. We consider this environment as a favorable setting where the various facets of suicidal behavior can be studied, with the ultimate goal of providing improved care to individuals facing severe mental health conditions⁶.

As professionals in the field of Mental Health, we face a challenge that highlights the need to provide adequate clinical education in suicidology. This training should prioritize the acquisition of knowledge and skills in both the care of individuals at risk of self-harm and the implementation of suicide prevention and postvention strategies⁷. Within the context of a university general hospital, we are focused on training medical and psychology residents in this regard^{8,9}.

The objective of this work is to examine epidemiological, clinical, and cultural determinants that could be associated with suicidal ideation and behavior in patients hospitalized in the psychiatric ward of a private-sector university general hospital. Aware that we are dealing with one of the most sensitive topics in Mental Health, we applied a method where quantitative information complements qualitative analysis to avoid abstract reflections that could create confusion in an already complex scenario.

MATERIALS AND METHODS

Design

We conducted a cross-sectional study that gathered sociodemographic, clinical, and therapeutic data from patients admitted to the Psychiatry Ward between October 1, 2018, and September 30, 2019, inclusive¹⁰. Based on the information obtained, we decided to deepen the analysis of the determinants associated with

the suicidal phenomenon. Details of the design and methodological specifications of the study are available in the referenced publication¹⁰.

Setting and Population

The Psychiatry Inpatient Ward is within the central headquarters of the hospital network. The patients admitted to this unit are of both sexes. It is a facility for acute and subacute patients. At the time of this study, the inpatient ward had 31 beds¹⁰.

Statistical Analysis

Quantitative variables were represented by measures of central tendency, either the mean or median (as appropriate), along with standard deviation (SD) or interquartile range (IQR). As for the categorical variables, we expressed them as proportions. Regarding statistical analysis, we compared quantitative variables using the T-Test or Mann-Whitney tests, while those for categorical variables used the Chi-Square and Fisher tests.

Results were deemed statistically significant when the p-value was less than 0.05. The software used to perform these statistical analyses was R-4.0.3.

Ethical Considerations

The protocol of this study was approved by the Institutional Research Ethics Committee and conducted in compliance with ethical principles and regulatory standards for human health research at both national and international levels, in line with the Resolution of the Ministry of Health of the Nation, the Declaration of Helsinki of the World Medical Association and all its amendments, and in compliance with the ICH E6 Good Clinical Practice Guidelines. The primary data source was the institutional electronic health record, in which all patients signed, upon registration, voluntary and certified informed consent for our use of their data. The study posed no risk to the patient. Patient data confidentiality was ensured, with access to the information restricted solely to the study investigators.

RESULTS

We examined 259 cases of patients who had received hospitalization in the psychiatry unit during the research period. Four patients were excluded from this group because they were under 18 years old, and one additional patient was excluded due to insufficient data required to complete the discharge form. Consequently, the final sample included 254 patients¹⁰. The overall results are available in the reference publication¹⁰. In this paper, we will exclusively analyze aspects relevant to suicidal ideation and behavior (Table 1). For this purpose, we used the definition of suicidal behavior developed by Mann and Oquendo¹¹, as outlined in the Columbia-Suicide Severity Rating Scale (C-SSRS)¹².

To structure the analysis, we decided to separate the results into three groups:

A. First, considering that the presence of suicidal ideation confers an increased risk of completed suicide

even in the absence of psychiatric pathology¹³, we believe it is relevant to further examine those patients who exhibit suicidal ideation without a specific plan (SI) at the time of admission.

B. Next, we focused on determinants that were significant in patients who had a suicidal plan (SP).

C. Lastly, we analyzed the group of patients admitted after having attempted suicide (SA).

A. Group of Patients with Suicidal Ideation

Of the 254 patients admitted to the Psychiatry ward during the study period, 100 (39.4%) presented with suicidal ideation without a specific plan upon admission. As observed in Table 2, a significantly higher percentage of patients with suicidal ideation were female (OR=2.22, [95% CI=1.28-3.77]), $p=0.004$. This trend is also noted across different age groups, consistent with what has been described in the literature^{5,14}.

Regarding age stratification, we observed a higher proportion of hospitalizations among adult patients aged 35 to 65 (45%), although this was not statistically significant ($p=0.70$). Both younger and older adults exhibited a similar relative frequency of suicidal ideation. We identified a high proportion of patients over 65 years old living alone at admission (59.2%).

We also noted a significantly higher percentage of patients with a history of previous suicide attempts, which is an epidemiological indicator to consider in assessing self-harm risk and is consistent with what has been reported in the literature (OR=4.02 [95% CI=2.34-6.91], $p<0.001^{15}$). Regarding family history, the differences found were not significant (OR=1.47 [95% CI=0.73-2.94], $p=0.27$).

B. Group of Patients with a Suicidal Plan

Table 3 presents the results for the group of patients who had a specific suicidal plan upon admission, comprising 13.4% of the patients hospitalized during the study period.

Once again, we found a strong predominance of women in this high-risk epidemiological group, totaling 79.4% of the patients (OR=2.77, 95% CI [1.15-6.62], $p=0.018$).

Consistent with the findings in the previous group, 28.6% of the patients with a suicidal plan lived alone at the time of admission, with this percentage rising to 70% among those over 65 years old.

Similarly to the preceding group, we observed a significantly higher percentage of patients with a history of previous suicide attempts (OR=5.27, 95% CI [2.38-11.6], $p<0.001$). Concerning a history of suicidal attempts in family members, a significant association was also identified (OR=2.37, 95% CI [1.01-5.58], $p=0.04$).

C. Group of Patients with Suicide Attempts

This group includes actual, interrupted, and aborted suicide attempts, as conceptualized in the literature^{11,12}. In our sample, 10.6% of the patients were admitted after a suicide attempt. Of these, 81.4% were women (OR=3.12, 95% CI [1.13-8.47], $p=0.02$). In the follow-up conducted

Table 1. Epidemiology of suicide. Overall number of hospitalized patients

	Total n = 254	From 18 to 35 years old n = 67	From 35 to 65 years old n = 111	Over 65 years old n = 76
Gender				
Male	99 (39%)	32 (47.8%)	44 (39.6%)	23 (30.3%)
Female	155 (61%)	35 (52.2%)	67 (60.4%)	53 (69.7%)
Age (mean SD)	51.9 (21.2)	24.8 (4.9)	50.4 (8.7)	77.8 (7)
Duration of hosp.(mean SD)	28.8 (32.3)	37 (53.4)	24.1 (18.5)	28.6 (20.7)
Self-aggressive behaviors=Yes(%)	48 (18.9%)	18 (26.9%)	20 (18.0%)	10 (13.2%)
Self-aggressive ideation=Yes (%)	100 (39.4%)	28 (41.8%)	45 (40.5%)	27 (35.5%)
Suicide plan=Yes (%)	27 (10.6%)	8 (11.9%)	9 (8.1%)	10 (13.2%)
Suicide attempt =Yes (%)	34 (13.4%)	10 (14.9%)	14 (12.6%)	10 (13.2%)
Personal history of suicide attempts=Yes (%)	93 (36.6%)	37 (55.2%)	44 (39.6%)	12 (15.8%)
Family history of suicide attempts=Yes(%)	38 (15,0%)	8 (11,9%)	21 (18,9%)	9 (11,8%)

Table 2. Patients with suicidal ideation at admission

	Total n = 100	From 18 to 35 years old n = 28	From 35 to 65 years old n = 45	Over 65 years old n = 27
Gender				
Male	28 (28%)	10 (35.7%)	14 (31.1%)	4 (14.8%)
Female	72 (72%)**	18 (64.3%)	31 (68.9%)	23 (85.2%)
Age (mean SD)	49.9 (21.2)	23.5 (4.24)	49.8 (8.4)	77.4 (6.52)
Duration of hosp.(SD)	29.4 (38)	37.6 (65.3)	23.6 (13.7)	30.7 (25.1)
Lives alone	35 (35%)	3 (10.7 %)	14 (31.1%)	16 (59.2%)***
Institutionalized	35 (35%)	1 (3.6%)	0 (0%)	1 (3.7%)
Personal history of suicide attempts = Yes (%)	56 (56%)*	22 (78.6%)	29 (64.4%)	5 (18.5%)
Family history of suicide attempts=Yes(%)	19 (19%)	4 (14.3%)	11 (24.4%)	3 (11,1%)

*p ≤ 0.05 **p ≤ 0.01 ***p ≤ 0.001

Table 3. Patients with a suicidal plan at admission

	Total n=34	From 18 to 35 years old n=10	From 35 to 65 years old n=14	Over 65 years old n=10
Gender				
Male	7 (20.6%)	2 (20%)	4 (28.6%)	1 (10%)
Female	27 (79.4%) *	8 (80.0%)	10 (71.4%)	9 (90.0%)
Age (mean SD)	50.7 (21.5)	23.3 (5.2)	52.4 (8.4)	75.6 (5.7)
Duration of hosp.(SD)	27.7 (20.7)	31.1 (30.8)	24.4 (16.4)	29 (13.9)
Lives alone	12 (35.3%)	1 (10%)	4 (28.6%)	7 (70%)*
Institutionalized	1 (2.9%)	0 (0%)	0 (0%)	1 (10%)
Personal history of suicide attempts = Yes (%)	24 (70.6%)**	8 (80%)	12 (85.7%)	4 (40%)
Family history of suicide attempts=Yes (%)	9 (26.4%)*	2 (20%)	5 (35.7 %)	2 (20%)

*p ≤ 0.05 **p ≤ 0.001

two years after discharge, none of these patients had completed suicide, highlighting the importance of the prevention work carried out by our team. Regarding age groups, 37% of the patients with suicide attempts were over 65 years old. As to the cohabitation group, 44.4% of the patients who were admitted after a suicide attempt lived alone, with this percentage rising to 80% among those over 65 years old. Table 4 summarizes relevant findings in this group.

We observed a significantly longer hospitalization duration among patients admitted after a suicide attempt (13.8 more days of hospitalization on average, 95% CI [0.9-26.7], $p=0.03$).

Having previously attempted suicide tripled the chances of hospitalization for a new attempt (OR=3.38, 95% CI [1.48-7.73], $p=0.003$). That is consistent with what has been described in the literature about the importance of this element as a predictive factor^{14,16}.

DISCUSSION

In this study, we aimed to describe and analyze a series of relevant epidemiological determinants to characterize suicidal ideation and behavior in the hospitalized population of a general university hospital. The results of the study suggest that women constitute a more vulnerable group across the entire suicidal spectrum. Specifically, the female population had more than twice the odds of presenting suicidal ideation upon admission and nearly triple the odds of having a specific suicide plan compared to men. Furthermore, women were more than three times as likely as men to submit to hospitalization following a suicide attempt. These results highlight the need to prioritize the development of strategies aimed at prevention and intervention in specific groups.

The findings of our study require a deeper analysis of the sociocultural factors that might contribute to this phenomenon¹⁷. Most of the epidemiological data regarding suicide in women come from centralized countries and identify that women have higher rates of

suicide attempts compared to men, who have a higher incidence of completed suicides¹⁴. However, there is a marked intercultural heterogeneity in suicidal behavior patterns. In the United States, for example, suicide is more frequent in adult white men, and it has been considered since the era of industrialization as both a “masculine” behavior and an “individual act”, thus relegating suicide in women to being interpreted as a “maladjusted” male act, indicative of psychopathology¹⁸. In contrast, in societies like China, suicide arises as a response to socioeconomic vulnerability and adversity and is more common among young women; in men, it tends to be considered an act of cowardice, a sign of weakness. In this sense, suicide takes on the character of a “public gesture”, a desperate attempt to change reality¹⁹.

This illustrates how cultural and historical factors complicate a linear interpretation of the suicide process and shows the limitations of statistical methods in capturing its nuances and complexities, which results in a superficial or incomplete understanding of a phenomenon that presents multiple edges of analysis. Instead, we believe it is important to examine the contexts in which suicide occurs from both cultural and historical perspectives. In this regard, it could be argued that one of the reasons why women constitute a higher suicide risk group may be related to cultural constructs and the imposition of social roles. Suicidal behavior emerges as a way of responding to individual stress generated by gender mandates²⁰. Additionally, the implications of both inequity of opportunities and the fact that experiencing gender-based violence increases drastically the likelihood of being hospitalized for a suicide attempt cannot be overlooked²¹. This latter point highlights the importance of addressing gender-based violence as a factor in suicide prevention.

Secondly, a significant percentage of patients over 65 years old who presented with suicidal ideation, a suicide plan, or had attempted suicide upon admission were living alone. To refine the clinical assessment of self-harm

Table 4. Patients admitted following a suicide attempt

	Total n = 27	From 18 to 35 years old n = 8	From 35 to 65 years old n = 9	Over 65 years old n = 10
Gender				
Male	6 (22.2%)	1 (12.5%)	3 (33.3%)	1 (10%)
Female	21 (77.8%)*	7 (87.5%)	6 (66.7%)	9 (90%)
Age (mean SD)	51.8 (21.1)	22.8 (4.43)	49.8 (8.9)	76.2 (6.2)
Duration of hosp.(SD)	41.1 (61.6)*	72 (110)	28 (15)	27 (10)
Lives alone	12 (44.4%)	0 (0%)	4 (44.4%)	8 (80%)**
Institutionalized	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Personal history of suicide attempts = Yes (%)	17 (63%)**	7 (87.5%)	6 (66.7%)	4 (40%)
Family history of suicide attempts=Yes (%)	7 (26%)	2 (25%)	2 (22.2%)	3 (30%)

* $p \leq 0.05$ ** $p \leq 0.001$

risk, it is worth reflecting on the implications of social isolation and loneliness. Although social isolation and loneliness are expressions often used interchangeably, they are distinct concepts. Social isolation refers to the objective loss of a social network^{22,23}, and loneliness refers to a person's subjective evaluation, the perception of a discrepancy between an individual's desired and actual social connections²⁴. In this way, a person may live with others but still experience loneliness, and conversely, live alone but feel connected to their social network. Although isolation and loneliness can occur at any stage of life, this distinction is particularly relevant in the population over 65, who are more susceptible to social isolation and loneliness due to lifestyle changes, declining health conditions, and the losses inherent to this period^{25,26}. Our research indicates that both social isolation and loneliness are common in older adults and that a higher proportion of social isolation is present across the entire spectrum of suicidal behavior.

The study of the suicidal phenomenon in the gerontological population warrants introducing certain particularities into the analysis; as we have previously suggested, the disruption of identity continuity and the consequent loss of autonomy²⁷ are among the most significant challenges faced in old age. That may sometimes lead to a sense of loss of control, depressive symptoms, and hopelessness, creating an existential map with unpredictable consequences. Suicide may thus appear as a final, desperate way to regain lost self-control. These factors could result in more impulsive, unpremeditated attempts, where lower cognitive reserves may influence the use of more lethal methods^{27,28}. By adopting a comprehensive approach that acknowledges the unique aspects of the life cycle experienced by older adults, healthcare providers can better identify those at risk and offer appropriate interventions to reduce the risk of suicide.

As a limitation of this study, it is pertinent to note that it was conducted based on a cross-sectional study, primarily aimed at characterizing epidemiological variables of patients hospitalized in a Psychiatry ward and not specifically designed to investigate suicidal behavior. In that regard, the sex variable is dichotomized as male/female since the data came from secondary sources, and information related to gender identity was not available. Characterizing the epidemiology of suicide while considering this variable is of great interest and will constitute a future line of work.

Although this study provides some clinically relevant insights, it does not allow for exploring causal relationships or assessing long-term outcomes. Moreover, our findings pertain to a specific population from a particular catchment area and may not apply directly to other cultural contexts. Therefore, it is crucial to exercise caution when extrapolating these findings to different populations, as specific studies are needed to delve deeper into the suicidal phenomenon within our context.

Despite these limitations, we believe our study identifies clinically relevant elements for assessing self-harm risk and highlights epidemiological determinants that do not usually come to light in the regional framework. It is equally valuable to consider the qualitative contributions when interpreting quantitative data, especially when dealing with complex and multifaceted phenomena like suicidal behavior. By combining qualitative and quantitative perspectives, we can achieve a more comprehensive and nuanced understanding of this issue and identify and implement specific intervention and follow-up measures for high-risk populations.

CONCLUSIONS

The results of this cross-sectional study highlight the importance of providing adequate training to psychiatry and psychology professionals in the field of suicidology, especially in light of the high prevalence of suicidal ideation among patients admitted to the Psychiatry ward. We conceive the suicidal process as a complex transdiagnostic phenomenon shaped by a multitude of factors, including sociocultural, anthropological, biological, political, and economic elements. We cannot think of suicide as a homogeneous entity; instead, we choose to conceptualize it as suicides, problematizing the individual meaning for the person in the context of collective determinants. While we strongly believe in the importance of having epidemiological data that reflect our practice, we are also aware of the limitations of approaching the suicidal phenomenon solely through generalizations.

In line with the points discussed, the trend in recent years in the field of suicidology is to consider suicidal ideation and behavior as emerging from dynamic processes that are contextualized and highly specific at the individual level⁶. The term "dynamic processes" is used intentionally: multiple factors interact to determine suicidal risk, and how these elements relate to each other is variable. The context of an individual's history, including personal experiences and circumstances, further contributes to this individual-level specificity. Suicide, then, manifests as a result of intraindividual contingencies, with interindividual differences framing these contingencies³⁰. If suicidology research continues to rely predominantly on statistical methods that are incapable of capturing individual particularities, our ability to understand and prevent suicide will remain limited. To overcome these obstacles, we believe it is necessary to adopt an idiographic approach (i.e., the study of individual cases as a means of understanding behavior rather than seeking to formulate general laws) that draws on both quantitative and qualitative information in an iterative process, starting with the individual and then identifying common elements^{6,31}. This approach would provide a more comprehensive understanding of the underlying causes and contributing factors of suicide, allowing for the development of more personalized and effective prevention and support strategies.

Author contributions: Conceptualization: SM, LR, DM. Methodology: SM. Manuscript writing and final version: SM, LR, FCB, DM. Formal analysis: SM. Revision and editing: SM, LR, FCB, DM.

Conflicts of interest: the authors declare no conflicts of interest.

REFERENCE

1. Naghavi M; Global Burden of Disease Self-Harm Collaborators. Global, regional, and national burden of suicide mortality 1990 to 2016: systematic analysis for the Global Burden of Disease Study 2016. *BMJ*. 2019;364:l94. <https://doi.org/10.1136/bmj.l94>.
2. World Health Organization. Preventing suicide: a global imperative [Internet]. Geneva: WHO; 2014 [citado 2023 ago 20]. Disponible en: <https://www.who.int/publications/i/item/9789241564779>.
3. Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. *PLoS Med*. 2006;3(11):e442. <https://doi.org/10.1371/journal.pmed.0030442>.
4. World Health Organization. The Global Health Observatory. Age standardized suicide rates (per 100 000 population) [Internet]. Geneva: WHO; 2019 [citado 2023 ago 20]. Disponible en: [https://www.who.int/data/gho/data/indicators/indicator-details/GHO/age-standardized-suicide-rates-\(per-100-000-population\)](https://www.who.int/data/gho/data/indicators/indicator-details/GHO/age-standardized-suicide-rates-(per-100-000-population)).
5. Olfson M, Wall M, Wang S, et al. Suicide following deliberate self-harm. *Am J Psychiatry*. 2017;174(8):765-774. <https://doi.org/10.1176/appi.ajp.2017.16111288>.
6. Sewall CJR, Wright AGC. Personalizing suicidology. *Crisis*. 2021;42(6):405-410. <https://doi.org/10.1027/0227-5910/a000834>.
7. Shneidman ES. The suicidal mind. Oxford: Oxford University Press; 1998. 187 p.
8. Strejilevich SA, Vallejos F, Bustin J. How Argentina is training their mental health residents to face its Silver Tsunami? *Int Psychogeriatr*. 2018;30(10):1573-1574. <https://doi.org/10.1017/S1041610218000182>.
9. Matusevich D. Aplicación de los siete principios del aprendizaje pleno en una sala de internación de psiquiatría en el entrenamiento médico. *Rev Hosp Ital B. Aires* (2004). 2016;32(6):50-52.
10. Malleza S, Abudarham T, Bertolani FC, et al. Análisis epidemiológico de la sala de internación de psiquiatría de un hospital general metropolitano de comunidad de la Ciudad de Buenos Aires, Argentina. *Vertex*. 2022;33(158, oct.-dic.):6-19. <https://doi.org/10.53680/vertex.v33i158.314>.
11. Oquendo MA, Halberstam B, Mann JJ. Risk factors for suicidal behavior. En: First MB, ed. *Standardized evaluation in clinical practice*. Washington, DC: American Psychiatric Pub; 2003. p.103-129.
12. Posner K, Brent D, Lucas C, et al. Columbia-suicide severity rating scale (C-SSRS): version 6/23/10 [Internet]. New York, NY: Columbia University Medical Center; 2008 [citado 2023 ago 20]. Disponible en: https://cssrs.columbia.edu/wp-content/uploads/C-SSRS_Pediatric-SLC_11.14.16.pdf.
13. Fazel S, Runeson B. Suicide. *N Engl J Med*. 2020;382(3):266-274. <https://doi.org/10.1056/NEJMr1902944>. Errata en: *N Engl J Med*. 2020;382(11):1078. <https://doi.org/10.1056/NEJMx200005>.
14. Iribarren C, Sidney S, Jacobs DR Jr, et al. Hospitalization for suicide attempt and completed suicide: epidemiological features in a managed care population. *Soc Psychiatry Psychiatr Epidemiol*. 2000;35(7):288-296. <https://doi.org/10.1007/s001270050241>.
15. García de la Garza Á, Blanco C, Olfson M, et al. Identification of suicide attempt risk factors in a national US survey using machine learning. *JAMA Psychiatry*. 2021;78(4):398-406. <https://doi.org/10.1001/jamapsychiatry.2020.4165>.
16. Bostwick JM, Pabbati C, Geske JR, et al. Suicide attempt as a risk factor for completed suicide: even more lethal than we knew. *Am J Psychiatry*. 2016;173(11):1094-1100. <https://doi.org/10.1176/appi.ajp.2016.15070854>.
17. Wasserman D, Wasserman C. *Oxford textbook of suicidology and suicide prevention*. Oxford: Oxford University Press; 2020. 760 p.
18. Canetto SS. Women and suicidal behavior: a cultural analysis. *Am J Orthopsychiatry*. 2008;78(2):259-266. <https://doi.org/10.1037/a0013973>.
19. Kleinman A, Good BJ, eds. *Culture and depression: studies in the anthropology and cross-cultural psychiatry of affect and disorder*. Berkeley: University of California Press; 1985. 535 p.
20. González RMS, Segura IP. Impacto diferencial del estrés entre hombres y mujeres: una aproximación desde el género. *Revistas Alternativas en Psicología*. 2016;36:112-120.
21. Bergman B, Brismar B. Suicide attempts by battered wives. *Acta Psychiatr Scand*. 1991;83(5):380-384. <https://doi.org/10.1111/j.1600-0447.1991.tb05560.x>.
22. Havens B, Hall M, Sylvestre G, et al. Social isolation and loneliness: differences between older rural and urban Manitobans. *Can J Aging*. 2004;23(2):129-140. <https://doi.org/10.1353/cja.2004.0022>.
23. Clare Wenger G, Davies R, Shahtahmasebi S, et al. Social isolation and loneliness in old age: review and model refinement. *Ageing & Society*. 1996;16(3):333-358. <https://doi.org/10.1017/S0144686X00003457>.
24. Peplau LA, Perlman D. Blueprint for a social psychological theory of loneliness. En: Cook M, Wilson G, eds. *Love and attraction: an international conference* [Internet]. Oxford: Pergamon; 1979 [citado 2023 ago 20]. p. 101-109. Disponible en: <https://books.google.com.ar/books?hl=en&lr=&id=rFRFBQAAQBA>