

Measuring suicide risk in the elderly with non-institutionalized depression: an integrative review

Mensuração do risco de suicídio no idoso com depressão não institucionalizado: revisão integrativa
Evaluación del riesgo suicida en el anciano con depresión no institucionalizado: revisión integrativa

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ABSTRACT

Objective: Analyze the state of the art about instruments, at national and international levels, for assessing the risk of suicide in elderly people with depression assisted in the community. **Methods:** Integrative review of 38 complete articles, published in journals indexed in the databases: US National Library of Medicine (PubMed Central), Scopus, CINAHL and Web of Science, located using controlled descriptors combined with Boolean operators: elderly OR aged OR older OR elder OR geriatric AND depression AND suicide AND risk assessment. **Results:** Six instruments were found, all international and published in the English language, in order to identify suicidal behavior and ideation in the elderly. Of these, two are specific scales for assessing the risk of suicide in the elderly in the community: 5-item GDS subscale and Geriatric Suicide Ideation Scale. **Final considerations:** With the scarcity of national instruments to assess such risk, research is recommended to cross-culturally adapt one of these scales to the Brazilian Portuguese language. **Descriptors:** Elderly; Suicide; Depression; Psychiatric Status Rating Scales; Mental Health.

RESUMO

Objetivo: Analisar o estado da arte acerca dos instrumentos, em âmbitos nacional e internacional, de avaliação do risco de suicídio em idosos com depressão assistidos na comunidade. **Métodos:** Revisão integrativa de 38 artigos completos, publicados em periódicos indexados nas bases de dados: US National Library of Medicine (PubMed Central), Scopus, CINAHL e Web of Science, localizados mediante descritores controlados combinados com operadores booleanos: *elderly OR aged OR older OR elder OR geriatric AND depression AND suicide AND risk assessment*. **Resultados:** Localizaram-se seis instrumentos, todos internacionais e publicados na língua inglesa, com objetivo de identificar comportamento e ideação suicida em idosos. Destes, dois são escalas específicas para avaliação do risco de suicídio em idosos na comunidade: *5-item GDS subscale* e *Geriatric Suicide Ideation Scale*. **Considerações finais:** Com a escassez de instrumentos nacionais para avaliar tal risco, recomenda-se pesquisa para adaptar transculturalmente uma dessas escalas à língua portuguesa brasileira. **Descritores:** Idoso; Suicídio; Depressão; Escalas de Graduação Psiquiátrica; Saúde Mental.

RESUMEN

Objetivo: Analizar el estado del arte acerca de los instrumentos, en ámbitos nacional e internacional, de evaluación del riesgo suicida en ancianos con depresión asistidos en la comunidad. **Métodos:** Revisión integrativa de 38 artículos completos, publicados en periódicos indexados en las bases de datos: *US National Library of Medicine (PubMed Central), Scopus, CINAHL y Web of Science*, localizados mediante descritores controlados combinados con operadores booleanos: *elderly OR aged OR older OR elder OR geriatric AND depression AND suicide AND risk assessment*. **Resultados:** Se localizaron seis instrumentos, todos internacionales y publicados en lengua inglesa, con objetivo de identificar comportamiento e ideação suicida en ancianos. De estos, dos son escalas específicas para evaluación del riesgo suicida en ancianos en la comunidad: *5-item GDS subscale* y *Geriatric Suicide Ideation Scale*. **Consideraciones finales:** Con la escasez de instrumentos nacionales para evaluar tal riesgo, se recomienda investigación para adaptar transculturalmente una de esas escalas a la lengua portuguesa brasileña. **Descritores:** Anciano; Suicídio; Depressión; Escalas de Valoración Psiquiátrica; Salud Mental.

INTRODUCTION

In Brazil, projections indicate that the number of elderly people will equal the number of young people in 2031 and that there will be approximately 70 million people in 2055⁽¹⁾, scenario that ignites the need for health professionals trained to this new epidemiological profile. In this context, mental illnesses that predominantly compromise quality of life in senescence, through the impairment of cognitive function and functional capacity, stand out⁽²⁾.

The changes arising from the aging process, both physiological and pathological, can contribute to the development of depression in the elderly⁽³⁾, today considered a public health problem that affects about 154 million people worldwide. Studies indicate an increased incidence of depression among the elderly and a significant association with age, race and physical activity⁽⁴⁾.

The clinical manifestations of depression in old age when compared to those of adults are not so evident, as they involve biological, psychological and social aspects, often related to changes in lifestyle⁽⁵⁻⁶⁾ and impaired functional capacity⁽⁷⁾.

In addition, when depression is associated with chronic diseases, morbidity and mortality increase, causing psychological and financial burden for the individual, family and health system⁽⁸⁾. In such a scenario, it is worth highlighting the greater vulnerability of this population to chronic diseases and to the losses and negative events accumulated throughout life⁽⁷⁾, that, associates, leverage suicide rates⁽⁹⁾.

It is estimated, in the elderly, one death for every four suicide attempts in the world, with a multifactorial etiology, resulting from the combination of physical, mental and social morbidities. Psychotherapy is less requested in the elderly than in younger population groups⁽⁷⁾. Thus, satisfactory achievement in prevention actions should aim at reducing suffering, active participation in society and the search for autonomy. The establishment of links with the health team, the Singular Therapeutic Project and intersectoriality are fundamental strategies for carrying out the actions⁽¹⁰⁾.

In Brazil, suicide mortality prevails in the elderly over 70 years old (8.9 / 100 thousand inhabitants), compared to all other age groups. It should be noted that in the elderly aged 60 to 69, the rate is 7.7 / 100 thousand inhabitants⁽¹¹⁾.

Taking into account the phenomenon of population aging, the difficulty presented by health services in the diagnosis of depression and the increased incidence of suicide among elderly people, it is understood the need to equip health professionals to track the risk of suicide in the elderly with depression assisted in the community.

OBJECTIVE

Analyze the state of the art about instruments, at national and international levels, for assessing the risk of suicide in elderly people with depression assisted in the community.

METHOD

Integrative review⁽¹²⁾, with the following outlining question: What instruments are validated nationally and internationally to assess suicide risk of elderly people with depression assisted in the community?

The sample was selected through access to the databases: Latin American and Caribbean Literature on Health Sciences (LILACS), US National Library of Medicine (PubMed Central), Scopus, Current Nursing and Allied Health Literature (CINAHL) and Web of Science (WoS), without determining a specific search field (article title; abstract; keywords...), but opting for all fields. Controlled descriptors combined with Boolean operators, used in the Medical Subject Headings (MeSH), were used as search strategy: elderly OR age OR older OR elder OR geriatric AND depression AND suicide AND risk assessment. In the LILACS database, the Portuguese equivalence of the descriptors was employed. The inclusion criteria were: complete articles with abstracts and related to the research object, without language restrictions, originating from national and international journals, indexed in the referred databases, from January 2012 to December 2019.

Six articles from CINAHL, 20 articles from PubMed, nine articles from Web of Science and three from Scopus were selected, resulting in a final sample of 38 articles (Figure 1).

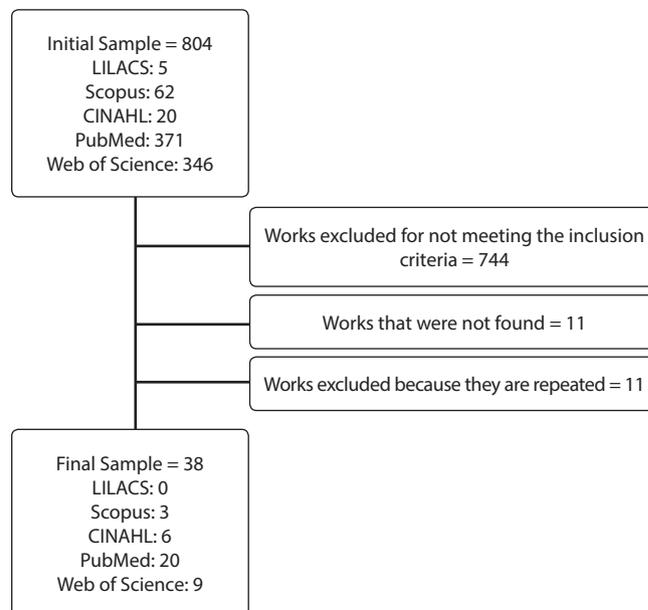


Figure 1 – Sample constitution flowchart

After selecting the articles, the title and abstract were carefully read; then, those who did not answer the guiding question and who were repeated between databases were excluded. For the analysis and subsequent synthesis of articles that met the inclusion criteria, an instrument for data collection was elaborated that included data related to the publication, the database, the objectives and the main conclusions.

It should be noted that the research was classified according to the levels of evidence proposed by Melnyk and Fineout-Overholt⁽¹³⁾.

RESULTS

The search result showed a sample with all articles in the English language, and the country that contributed most was the United States of America - USA. North America was the most cited continent, followed by Asia, Europe and Oceania. The years 2012, 2015

and 2016, together, concentrated the majority of publications, as can be seen in Chart 1.

In this study, a prevalence of 45.8% of depression was found⁽¹⁴⁾ and 6.3% of suicide among elderly people in the community⁽¹⁴⁾. This latter rate, associated with socio-cultural factors, presence of chronic diseases, previous and current mental health status, physical health status and degree of autonomy^(14,26). Although research shows that individuals with depression are more susceptible to suicide⁽²³⁾, the event may incur people without mental illness⁽²⁷⁾.

Drug treatment of depressive disorder in the elderly is considered complex, as it involves social and environmental issues and the presence of pre-existing comorbidities. Thus, psychotherapy and non-drug approaches are ways to be considered⁽²⁸⁾, emphasizing that psychosocial interventions contribute significantly to improvement in symptoms of sub-syndromic depression and

anxiety⁽²⁹⁾ and, consequently, in the frailty of the elderly⁽³⁰⁾.

Primary Health Care (PHC) plays an essential role in coping with suicide in old age, given its ability to detect and treat depression earlier⁽³¹⁾. To the satisfaction, there is a need to improve the assessment of suicide risk among patients with a history of depression, in addition to the inclusion of strategies for the assessment and prevention of suicidal ideas⁽³¹⁾. In this context, most suicide cases are not discussed in medical appointments⁽³²⁾, demanding a systematic approach⁽³³⁾, with the use of effective screening tools⁽³⁴⁾.

By analyzing the 38 articles, six instruments were found to assess and identify suicidal behavior and ideation. Of the instruments, only two were considered specific scales for assessing the risk of suicide in elderly people in the community: 5-item GDS subscale and Geriatric Suicide Ideation Scale (Chart 2).

Chart 1 – Characterization of the corpus of articles that adopted the assessment of suicide risk among the elderly in the community as the object of study, according to title, objectives and main results, published from 01/01/2012 to 12/31/2019, in journals indexed in the PubMed, Web of Science, CINAHL and Scopus databases, Botucatu, São Paulo, Brazil, 2019

Title / Journal / Database	Objectives	Main results
1. A study of suicidal thoughts in acute stroke patients/ J Stroke Cerebrovasc Dis/ CINAHL	Describe reports of suicidal thoughts in patients in the acute phase of stroke.	Suicidal thoughts can occur in the acute phase of a stroke, especially in patients with low education, with a history of mood disorder and in those who developed depressive symptoms after the stroke.
2. Gender differences in determinants of suicidal ideation in French speaking Community living elderly in Canada/ International Psychogeriatrics / CINAHL	Check if the gender is related to suicidal ideation and thoughts of death in the community elderly.	There was no statistical association between gender and suicidal ideation and / or thoughts of death in French-speaking elderly people living in the Canadian community.
3. Medical examiner and coroner reports: uses and limitations in the epidemiology and prevention of late-life suicide/ International Journal of Geriatric Psychiatry / CINAHL	Survey the risk factors that contributed to the suicide of the elderly in research that used the records of medical examiners.	The following risk factors were found: diagnosis of depression (33%); depressive symptoms (47%); a physical health problem (55%); terminal illness (7.1%). Older people probably received, prior to suicide, care by PHC services, instead of mental health services. The detection of these factors and treatment in PHC services is a potential strategy to combat suicide in the elderly.
4. Personality and suicidal ideation in the elderly: factorial invariance and latent means structures across age/ Aging Mental Health/ CINAHL	Analyze the components of an invariable measurement model between adults and the elderly and then investigate the relationships between personality dimensions and the risk of suicide.	Multi-group confirmatory factor analyzes produced a final model with excellent fit to the data, showing a similar pattern of associations between suicidal ideation and personality in the groups, elderly and adults.
5. Screening for and treatment of suicide risk relevant to primary care: a systematic review for the U.S. Preventive Services Task Force / Ann Intern Med / CINAHL	To evaluate the accuracy of screening instruments and their effectiveness in conducting treatment for population groups, with relevant risk of suicide, in Primary Care.	Systematic review showed that there is not enough scientific evidence (strong evidence) regarding the accuracy of screening instruments and their effectiveness in conducting treatment for people in the community with a relevant risk of suicide, whether adolescents, adults or the elderly.
6. Suicide Assessment and Prevention During and After Emergency Commitment/ Community Mental Health Journal/ CINAHL	Evaluate the suicide preventive actions implemented in the emergency services and understand the perception of the patients attended about access to services in PHC, after discharge from those services.	Suicide preventive measures in emergency services focus on the use of suicide assessment tools on admission and discharge, as well as strategies to safeguard patient safety, when the problem is identified on admission. Almost half of the interviewees (46.6%) rated the availability of mental health treatment in Primary Care services as "insufficient" after discharge from the emergency service, pointing to long waiting periods and insufficient investment in these services.
7. Geriatric depression: prevalence, risk factors, and relationship to physical illnesses in a sample of medical clinic outpatients/ Middle East Curr Psychiatry/ Scopus	Assess the clinical presentation, prevalence and main factors associated with geriatric depression in outpatients, seen at Mynia University Hospital, to support treatment planning.	The prevalence of geriatric depression in outpatients was 38.7%, significantly associated with previous and / or family history of depression, as well as with psychosocial stressors, physical illnesses, prescribed drugs and previous hospitalizations.

To be continued

Chart 1

Title / Journal / Database	Objectives	Main results
8. Psychosocial interventions with art, music, Tai Chi and mindfulness for subsyndromal depression and anxiety in older adults: a naturalistic study in Singapore/ Asia Pac Psychiatry/ Scopus	To evaluate a community psychosocial intervention program and the effects on mental health of the elderly in Singapore.	Psychosocial interventions with art, music, Tai Chi and Mindfulness significantly reduced the subsyndromic depression and anxiety scores in the single intervention phase ($p < 0.05$), and these reductions remained until the 52nd week after the completion of the intervention phase ($p < 0.001$). It is a simple, inexpensive and culturally accepted approach, and its replication in other communities is recommended.
9. Depressive symptoms and suicide in 56,000 older Chinese: A Hong Kong cohort study/ Soc Psychiatry Psychiatr Epidemiol/ Scopus	To evaluate, in Chinese elderly, associations between depressive symptoms and suicide, with modifying effects of sex, age and health status.	Depressive symptoms, assessed by the Geriatric Depression Scale (GDS), were associated with suicide after adjustment for sex, age, education, monthly income, smoking, alcohol consumption, physical activity and body mass index. Thus, the results suggest that sex and age do not interact with the association between depressive symptoms and suicide. Self-assessment of negative health status was an important risk factor for suicide. However, depressive symptoms were more common among older, less educated elderly people, the poorest, underweight and health problems. The GDS score showed no threshold in predicting suicide risk, suggesting that the elderly, even with low scores, deserve more attention; and those with high scores need urgent intervention.
10. Association of depression and psychotropic medication on cardiac-related outcomes in a nationwide community-dwelling elderly population in Taiwan/ Medicine (Baltimore)/ PubMed	To evaluate the association of depression, psychotropic medications and mental illness, with cardiovascular diseases, in elderly Taiwanese in the community, nationwide.	Cardiovascular disease was significantly associated with depression, as well as mental illness, both for self-reported and those diagnosed by a doctor, with the use of antipsychotic, benzodiazepine and non-benzodiazepine drugs.
11. Double RASS cut point accurately diagnosed suicidal risk in females with long-term conditions attending the emergency department compared to their male counterparts/ Compr Psychiatry/ PubMed	Using the Double RASS scale, to assess the prevalence of suicide risk in patients with chronic diseases, treated in emergency services, considering gender.	The prevalence of suicide risk was 22.9%, according to the MINI (psychiatric interview for the diagnosis of mental disorders, according to the DSM-IV or ICD-10). At an ideal cutoff point of 270, RASS had a sensitivity of 81.3% and specificity of 81.8%. The ideal RASS cutoff point for women (340) was twice the cutoff point for men (175). The burden of somatic symptoms was associated with the risk of suicide in both sexes, but it became insignificant after the depressive symptoms were taken into account; suicidal risk was also associated with a history of depression in women and lower income in men.
12. A tool to predict suicidal ideation and behavior in bipolar disorder: The Concise Health Risk Tracking Self-Report/ J Affect Disord / Pubmed	Evaluate the psychometric characteristics of the Concise Health Risk Tracking Self-report (CHRT) in terms of suicide risk in patients with bipolar disorder.	The tool presented, in the versions of 14 and 7 items, a good psychometric evaluation, obtaining a Cronbach's coefficient of 0.88 and 0.79, respectively. The use of the extended version (14 items) is more recommended, due to the higher internal consistency index.
13. Physical comorbidities in depression co-occurring with anxiety: a cross sectional study in the Czech Primary Care System/ Int J Environ Res Public Health/ Pubmed	To evaluate the correlation between physical comorbidities with depression and anxiety in Primary Care.	It was found that depression along with anxiety are associated with an increased chance of pain and gastrointestinal diseases, as well as suffering from depression with panic disorder increases the chances of pain and neoplasms. Depression, together with post-traumatic stress is associated with high chances of pain, when having both comorbidities: hypertension and diabetes mellitus.
14. Depression and risk of hospitalisations and rehospitalisations for ambulatory care-sensitive conditions in Denmark: a population-based cohort study/ BMJ Open/ Pubmed	Determine whether individuals with depression are at increased risk of hospitalization in an outpatient condition and re-hospitalization for the same reason within 30 days.	Individuals with depression have a high risk of hospitalization in outpatient conditions and, when released, increase the risk and re-hospitalization within 30 days (1.21 times of chance, when compared with individuals without depression).
15. Gender differences in depressive symptom profile: results from nationwide general population surveys in Korea/ J Korean Med Sci/ Pubmed	To investigate differences between the sexes in the Korean population in relation to symptoms in depression.	Depression is greater in Korean women (37.3%) when compared to men (19.6%). As for the symptoms, the female sex was significantly associated with a higher prevalence of fatigue ($p = 0.008$), hypersomnia ($p = 0.001$), noticeable psychomotor retardation ($p = 0.029$) and suicide attempts ($p = 0.016$). In the same analysis, men with depression were more vulnerable to decreased libido than women ($p = 0.009$).
16. Reasons for living, meaning in life, and suicide ideation: investigating the roles of key positive psychological factors in reducing suicide risk in community-residing older adults/ Aging Ment Health/ Pubmed	Investigate the reasons for living and the meaning of life among the elderly in the community, considering the promotion and well-being of mental health and the psychometric properties of the Reasons for Living Scale.	It was identified that the elderly who have reason and meaning to live have a lower occurrence of suicidal ideation, aspects that should be considered in psychological assistance. The Reasons for Living Scale obtained a satisfactory assessment of the psychometric characteristics.

To be continued

Chart 1

Title / Journal / Database	Objectives	Main results
17. Investigating the psychometric properties of the Geriatric Suicide Ideation Scale (GSIS) among community-residing older adults/ Aging Ment Health/ PubMed	To investigate the psychometric properties of the geriatric suicidal ideation scale (GSIS) in the elderly in the community.	The scale presented a statistically significant psychometric evaluation regarding the suicidal ideation of the elderly in the community.
18. Overview of community-based studies of depression screening interventions among the elderly population in Japan/ Aging Ment Health/ PubMed	Build a literature review on the impact of community interventions in tracking depression for suicide prevention among the elderly.	Screening interventions were associated with lower suicide rates. Added to this, the need for communication between different levels of care for the success of interventions.
19. Depression, frailty, and all-cause mortality: a cohort study of men older than 75 years/ J Am Med Dir Assoc/ PubMed	To determine mortality in men over 75 years of age with a history of depression (previous and current), considering the frailty.	The mortality risk was 4.26 for men with depression, compared to men who were never depressed, and 1.79 after adjusting for frailty. For this reason, aspects related to improving frailty should be considered in the treatment of depression, with a view to reducing mortality.
20. Suicide risk in primary care: identification and management in older adults/ Curr Psychiatry Rep/ PubMed	This is a literature review on the risk of suicide in Primary Care, considering risk factors and assessment instruments.	There was a need to conduct research on the risk of suicide in the elderly in communities assigned to PHC units, given its fundamental role in preventing it, by tracking risk factors and interventions.
21. Passive suicide ideation: an indicator of risk among older adults seeking aging services?/ Gerontologist/ PubMed	Assess the presence of suicidal ideation, death and psychological distress in vulnerable elderly.	The ideation of death is rarely present in vulnerable elderly people in the absence of significant risk factors for suicide, such as psychological distress or suicidal ideation. In addition, it was concluded that aging does not constitute, in isolation, a risk factor for suicidal ideation.
22. Depressive symptoms and hospital readmission in older adults/ J Am Geriatr Soc/ PubMed	Assess the risk of unplanned hospital readmission in elderly people with depressive symptoms.	The prevalence of depressive symptoms was 19%, as well as the incidence of unplanned hospital readmission in 30 days. Depressive symptoms were not significantly associated with hospital readmission (relative risk = 1.20, 95% confidence interval CI = 0.83-1.72). Age, scores on the Charlson Comorbidity Index and number of hospitalizations in the last six months were significant predictors of unplanned hospital readmission within 30 days in the study population.
23. Prevalence of depression and associated risk factors among the elderly in Middle Anatolia, Turkey/ Geriatr Gerontol Int/ PubMed	To determine the prevalence of depression and its relationship with degree of dependence for activities of daily living in the elderly.	Depression affects 46% of the elderly, with the following risk factors: sex (female), presence of chronic disease and living alone. In addition, it is emphasized that PHC actions must seek integrated actions and the early diagnosis of depression.
24. Suicide risk assessment received prior to suicide death by Veterans Health Administration patients with a history of depression/ J Clin Psychiatry/ PubMed	Evaluate the care provided to depressive individuals who committed suicide between 1999 and 2004.	It was identified that the majority (74%) of depressed individuals received some assessment regarding the risk of suicide. The importance of developing evaluation and prevention strategies is emphasized, in addition to medical consultations.
25. Suicide among the elderly and associated factors in South Korea/ Aging Ment Health/ PubMed	To determine the relationship between physical and mental health, socio-environmental condition and suicidal behavior in elderly individuals.	An independent relationship between the state of physical health and suicidal behavior in the elderly was evidenced.
26. Approaches to decrease the prevalence of depression in later life/ Curr Opin Psychiatry/ PubMed	Evidence of strategies to reduce depression in the elderly.	The review suggests that decreasing the appearance of a depressive disorder in vulnerable individuals is a way to reduce its prevalence in the community. Added to this, the need for a more systematic approach to risk factors to reduce depression in the elderly.
27. A review of social isolation: an important but underassessed condition in older adults/ J Prim Prev/ PubMed	Evidence the state of the art on social isolation and provide practical suggestions for its evaluation in the elderly.	The results show negative effects on physical, behavioral and physiological health and possible risk factors (age, sex, marital status, living alone, decline in cognitive status, health and functional health, life satisfaction and family losses) related to isolation Social. PHC professionals should take measures to increase the early assessment of social isolation and refer individuals at risk to available resources in order to avoid social isolation or further isolation.
28. Discrimination, family relationships, and major depression among Asian Americans/ Immigr Minor Health/ PubMed	To verify the association between social discrimination and family dynamics with depression among Asian Americans.	Discrimination (odds ratio = 2.13) and negative interactions with relatives (odds ratio = 1.28) were associated with depression; while the presence of family support, the lower occurrence of depression (odds ratio = 0.73).

To be continued

Chart 1 (concluded)

Title / Journal / Database	Objectives	Main results
29. Prevalence of exposure to suicide: a meta-analysis of population based/ J Psychiatr Res/ PubMed	Estimating the prevalence of suicide exposure by age group.	It is estimated that 22% of the population is exposed to suicide during their lifetime. There was no statistically significant difference (p = 0.681) regarding the prevalence of exposure to suicide and the age group.
30. Major depression in primary care: making the diagnosis/ Singapore Med J / Web of Science	Describe the approach to the treatment of depression in PHC.	The diagnosis of depression made in PHC services was associated with the presence of chronic disease, increased age and coexisting mental illnesses. Screening (screening) is an important tool in addressing depression in PHC. Furthermore, the assessment of risk factors for suicide in depressed individuals should be performed.
31. Assessing suicide risk in older adults/ Nurse Pract/ Web of Science	Analyze factors related to suicide in the elderly.	There was an association of demographic factors (male gender, older age, change in housing or daily routine, social isolation); history of mental health (previous suicide attempt, substance abuse, abuse and self-mutilation); presence of somatic disease and decreased autonomy with the risk of suicide in the elderly. The training and availability of specific assessment tools are essential for the effective and qualified performance of the PHC team in preventive actions against suicide.
32. Late-life depression, suicidal ideation, and attempted suicide: the role of individual differences in maximizing, regret, and negative decision outcomes/ J Behav Decis Mak/ Web of Science	Assess the association between feelings of regret in decisions made and suicidal ideation.	There was a statistically significant association between the feeling of regret in decisions made and suicidal ideation.
33. Suicide in older people: revisiting new approaches/ Int J Ment Health Nurs/ Web of Science	Conducting a bibliographic survey on approaches to suicide in the elderly.	The protective factors for suicide in the elderly are: positive social support network, marital status (married) and religiosity. While those at risk: presence of depression, physical illness, social isolation and marital status (single). The need for research on this theme is emphasized, seeking to substantiate the interventions of health professionals and, thus, promote more effective preventive actions.
34. Trajectories of suicidal ideation in depressed older adults undergoing antidepressant treatment./ J Psychiatr Res./ Web of Science	To analyze the influence of the cognitive aspects of the depressed elderly, undergoing drug treatment, on suicidal ideation.	There was a positive association between low levels of attention and cognitive status with suicidal ideation.
35. Assessment and management of major depressive disorder in older adults./ Psychiatr Danub/ Web of Science	Briefly address clinical aspects of depression in the elderly.	Drug treatment of depression in the elderly should be carefully performed, given the risks of iatrogenesis; in the non-medicated, the insertion of psychotherapy and encouraging social participation are strategies that must be considered.
36. The ABC's of Suicide Risk Assessment: applying a tripartite approach to individual evaluations./ Plos One/ Web of Science	Assess the psychometric characteristics of the SABCS scale	The scale showed a satisfactory assessment of psychometric abilities.
37. Assessment of the person with late-life depression/ Psychiatr Clin N Am/ Web of Science	Understand the characteristics of depressive disorders in the elderly.	Depression in the elderly is characterized by anhedonia, irritability and social withdrawal. Somatic complaints and neuro-vegetative changes, such as fatigue, changes in appetite, sleep disorders, low concentration and psychomotor retardation, are often prominent. In addition, they have agitation, somatic complaints (mainly gastrointestinal symptoms), hypochondria and loss of sexual interest compared to younger adults.
38. Development of the Risk Assessment Suicidality Scale (RASS): A population-based study/ J Affect Disord/ Web of Science	Develop suicide risk assessment scale.	The scale obtained satisfactory psychometric indicators.

Chart 2 – Suicide risk assessment instruments with psychometric measures and level of evidence, according to authors, title, journal and year of publication, indexed in the Databases (PubMed, Web of Science, CINAHL, SCOPUS), from 01/01/2012 to 12/31/2019, Botucatu, São Paulo, Brazil, 2019

Reference	Instrument	Objective	Psychometric measures	Level of scientific evidence ⁽¹³⁾
Heisel MJ, Duberstein PR, Lyness JM, Feldman MD. Screening for suicide ideation among older primary care patients. J Am Board Fam Med. 2010; 23 ⁽²⁾ .	5-item GDS subscale	Identifying suicidal ideas among the elderly in Primary Health Care	Sensitivity: 0.796 Specificity: 0.804 AUC: Not available/found VPP ^{***} : 0.335 VPN ^{***} : 0.970 Internal consistency: 0.68 (Cronbach's alpha)	4

To be continued

Chart 2 (concluded)

Reference	Instrument	Objective	Psychometric measures	Level of scientific evidence ⁽¹³⁾
Ntountoulaki E, Guthrie E, Kotsis K, Paika V1, Tatsioni A, Tomenson B, Fountoulakis KN, Carvalho AF, Hyphantis T. Double RASS cutpoint accurately diagnosed suicidal risk in females with long-term conditions attending the emergency department compared to their male counterparts. <i>Compr Psychiatry</i> . 2016 ⁽¹⁸⁾ .	Risk Assessment Suicidality Scale (RASS)	Assessment of suicidal behavior in the general population.	Sensitivity: 0.813 Specificity: 0.818 AUC: 0.89 VPP: 0.0446 VPN: 0.0023 Internal consistency: 0.79 (Cronbach's alpha)	6
Trivedi MH, Wisniewski SR, Morris DW, Fava M, Gollan JK, Warden D, Nierenberg AA, Gaynes BN, Husain MM, Luther JF, Zisook S, Rush AJ. Concise Health Risk Tracking scale: a brief self-report and clinician rating of suicidal risk. <i>J Clin Psychiatry</i> . 2011; 72 ⁽⁶⁾ .	Concise Health Risk Tracking Self-Report (CHRT)	Assess the risk of suicide in patients with unipolar major depressive disorder.	Internal consistency: 0.78 (Cronbach's alpha)	4
Posner K, Brown GK, Stanley B, Brent DA, Yershova KV, Oquendo MA, Currier GW, Melvin GA, Greenhill L, Shen S, Mann JJ. The Columbia-Suicide Severity Rating Scale: initial validity and internal consistency findings from three multisite studies with adolescents and adults. <i>Am J Psychiatry</i> . 2011; 168 ⁽¹²⁾ .	Columbia – Suicide Severity Rating Scale (C-SSRS)	Assess severity and track changes in suicidal ideation and behavior.	Not available	4
Keith M.H, Jia-Jia Syu, Owen D. Lello, YLEC, Christopher HW, Roger HMHo. The ABC's of Suicide Risk Assessment: Applying a Tripartite Approach to Individual Evaluations. <i>PLOS ONE</i> . 2015; 10 ⁽⁶⁾ .	Suicidal Affect-Behavior-Cognition Scale (SABCS)	Develop incremental improvement in SABCS.	Internal consistency: 0.86 – 0.91 (Cronbach's alpha)/ Split-Half = 0.90- 0.94 Variance: 0.617 – 0.766	4
Heisel MJ1, Flett GL. The development and initial validation of the geriatric suicide ideation scale. <i>Am J Geriatr Psychiatry</i> . 2006; 14 ⁽⁹⁾ .	Geriatric Suicide Ideation Scale (GSIS)	Multi-dimensionally assess suicidal ideation and related factors in the elderly.	Not available	4

Note: *Area under the concentration curve; **Positive Predictive Value; ***Negative predictive value.

The Columbia - Suicide Severity Rating Scale has a high level of scientific evidence, but there are no studies with psychometric assessment data needed for assessment instruments.

About the 5-item GDS subscale, it consists of five questions extracted from the Geriatric Depression Scale (items 3, 7, 11, 12 and 14), which consists of 30 items, according to the psychometric data presented in the Chart 1. It can be concluded that it presents regular psychometric aspects, mainly considering its internal consistency (Cronbach's alpha - 0.68), which does not guarantee the measurement quality of the object to be measured. In addition, this scale has not been validated for assessing suicide risk in Brazil⁽³⁵⁾.

The Geriatric Suicide Ideation Scale aims to multi-dimensionally assess suicidal ideation and related factors in the elderly. The evaluation of psychometric indices was not accessible, and the referred instrument is not translated into Portuguese nor validated for use in Brazil⁽³⁶⁾.

DISCUSSION

Suicide-specific prevention and care actions are still scarce in Brazil, requiring measures to expand and qualify health professionals. In addition, there is a need for social change with a break of paradigms about the theme, in order to reduce the stigma and prejudice still present⁽³⁷⁾.

Nowadays, suicide is a worldwide phenomenon, representing 1.4% of all deaths. Despite the low investigation of the theme in Brazil, the records of suicide attempts in individuals aged 60 years or over represent 2.9% in women and 5.7% in men, with the highest rates in the age group of 70 years or more⁽³⁸⁾.

The scenario highlights the need for investment in hospitality, psychosocial therapies, conversation circles, among other strategies, which work as a protective measure against suicide, through the

space of listening and welcoming the elderly⁽³⁹⁾. Study emphasizes the importance of therapeutic actions, showing that individuals who receive psychosocial intervention and monitoring by the health team have up to ten times less chance of new attempts⁽⁴⁰⁾.

The professionals who make up primary care need to receive better qualification and professional preparation, so that they can identify suicidal behaviors and ideation; in addition, there is a need to expand and strengthen the care network through the previously mentioned therapeutic strategies. Finally, it is necessary to strengthen the care network through matrix support and systematic action, involving the user, family and home context⁽⁴¹⁻⁴²⁾.

In view of this scenario, since 2014 the suicide attempt has become an item of mandatory notification in Brazil, by Ordinance 1271, to trigger the monitoring of the case and ensure the reception and provision of necessary care. It is worth mentioning the creation of the Psychosocial Care Network (Ordinance 3088/2011), with the objective of expanding access to psychosocial care, promoting coordination between services and regulating / organizing the demands and flows of assistance⁽³⁸⁾.

In 2019, the Ministry of Health launched an agenda of strategic actions, with the objective of improving notifications and expanding and qualifying assistance. This agenda is composed of three axes: I - Monitoring and qualification of information; II - Suicide prevention and health promotion and III - Management and care. These actions are expected to reduce suicide attempts and deaths⁽¹¹⁾.

There was a shortage of instruments constructed and validated, even internationally, for tracking the risk of suicide in elderly people with depression in the community; and there is no version with cross-cultural translation into Brazilian Portuguese.

The lack of assessment instruments makes it difficult for professionals, especially PHC, to act as ordering agents within the Health

Care Networks, causing failures in comprehensive health care for this vulnerable population. About this, there is a study reiterating the importance of questionnaires and interviews in order to detect early depressive symptoms in the elderly, which are important in clinical practice⁽⁴¹⁾.

Despite the inexistence in Brazil of a specific and validated instrument for assessing suicide risk among elderly people in the community, a study proposes a method for assessing ideation. This consists of four cards and / or scripts: 1 - Identification sheet; 2 - Interview script; 3 - Complete interview with family member; 4 - Script of interview with professionals who work in care and care for the elderly. To use the method, it was necessary to train a team of researchers, who evaluated it positively as a strategy, but suggesting other studies to confirm its effectiveness⁽⁴³⁾.

In this same perspective, in 2014, the Brazilian Association of Psychiatry (BAP) started to guide the use of a series of questions for assessing and screening the risk of suicide in the elderly, however there is no information on their effectiveness for identification and tracking of suicide. It should also be noted that such questions are of use for the general population, not covering any specific population group⁽⁴⁴⁾.

Research in emergency service records concluded that investments are needed in the construction of suicide risk assessment instruments in order to obtain a more systematic assessment, comprising the various points related to ideation⁽⁴⁵⁾. Another study corroborates the importance of instrumentalization of professionals, in order to guarantee the early detection of the risk of suicide, guaranteeing the elderly security and comfort to deal with the transformations arising from this phase of life⁽⁴⁶⁾.

Study limitations

The integrative review is an important scientific method and capable of showing the state of the art of the studied theme, although some study may not have been included in the research, taking into account the inclusion criteria.

Contributions to the field of Nursing

Considering the role of Nursing in PHC for the prevention of suicide of the elderly in the community, this research points to the need to build and validate an instrument capable of supporting nurses and other members of the health team in tracking elderly at risk.

To the satisfaction, as well as Nursing, the other professionals of the inter-professional team in the health area must be trained and instrumentalized with regard to the theme, due to the signs and symptoms of depression for the risk of suicide, in an elderly population, go unnoticed in PHC services, preventing, in turn, diagnosis and effective actions in a timely manner.

FINAL CONSIDERATIONS

Suicide is growing every day in the world, in all population groups, including the elderly, associated with several factors (sociocultural, presence of chronic diseases, previous and current mental health status, physical health status and degree of autonomy). In this context, the importance of the performance of health teams, especially PHC, is highlighted, with greater proximity and spaces for preventive strategies for suicide.

Therefore, the present study showed that the instruments for assessing the risk of suicide in the elderly are an object of little exploration, both at the national and international levels. In addition, there was an absence of research from Brazil or from other countries in South America, which signals a knowledge gap and, therefore, reinforces the importance of research and studies in the area.

Finally, considering the national population aging and its epidemiological profile, it is recommended to cross-culturally adapt, for the Brazilian Portuguese language, one of the two specific scales for assessing the risk of suicide in the elderly in the community: 5-item GDS subscale e Geriatric Suicide Ideation Scale.

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