Loneliness in senescence and its relationship with depressive symptoms: an integrative review

Abstract

The increase in life expectancy and the percentage increase in the older population are related to the reduction in quality of life and social life due to the biopsychosocial changes inherent to the aging process. The present study aimed to verify scientific evidence on the relationship between loneliness and depressive symptoms among older adults. An integrative review was carried out using the following databases: SCOPUS, PubMed, Medline, Web of Science, CINAHL and PsycINFO, applying the descriptors indexed in the Mesh Terms and DeCS “aged”, “loneliness”, “depression”. The PICOS strategy was used to prepare the title and guiding question and the PRISMA methodological guidelines were used to write the report of this review. A total of 827 articles were identified, of which 23 were selected, 16 from the database and seven through a reverse search. Loneliness and depression have some characteristics in common, so that when one of these conditions develops in older adults, another is stimulated. Thus, loneliness is a major risk factor for the development of depression, just as depression is an aggravating factor for loneliness in older adults.

Keywords: Aging. Health of the Elderly. Loneliness. Depression.
INTRODUCTION

Senescence is characterized as a natural process of human aging, and its percentage increase has arisen from the exodus of the population from rural areas and the reduction in the infant mortality rate. However, the growth of the older population and increased life expectancy has resulted in psychological consequences, examples of which are depression and feelings of loneliness.

According to PAHO/WHO data, depression is the main cause of social disability, affecting approximately 300 million people worldwide. In terms of its prevalence among the older population, a study found that about 30% of participants exhibited signs and symptoms of depression.

Depression is diagnosed when the individual has at least five specific symptoms of the disease for a minimum of two weeks, including: depressed mood, decreased interest in most activities, weight gain or loss equivalent to 5% of body weight, insomnia or hypersomnia, fatigue, feelings of worthlessness or guilt, reduced concentration and suicidal ideation, without an association with mourning or a medical condition.

Loneliness can manifest itself through the following aspects: absence of purpose and meaning in life, emotional reactions, undesirable and unpleasant feelings, feelings of isolation and separation, deficiency in relationships and a lack of intimacy, and detachment. A study showed that 35.7% of older adults surveyed said they felt loneliness at different levels of intensity, varying from some to many times.

Given the prevalence of depressive symptoms and feelings of loneliness in the older population, the present study sought to consider the following question: what is the relationship between loneliness and depressive symptoms in older adults? Therefore, the objective was to verify the scientific evidence on the relationship between loneliness and depressive symptoms in older adults.

METHOD

An integrative literature review was performed using articles that addressed the theme of the relationship between loneliness and depressive symptoms in older adults.

The databases used were: SCOPUS, PubMed, Medline, Web of Science, CINAHL and PsycINFO, as these are considered important scientific bases of international scope. It was decided not to limit based on the year of publication of the articles, expanding the results of the study, in which articles published between the years 2000 and 2019 were included.

The inclusion criteria for the sample were: articles that addressed the theme of loneliness and depressive symptoms. The exclusion criteria were literature review articles. The following descriptors indexed in Mesh Terms and DeCS were used: “Aged” AND “Loneliness” AND “Depression”.

The process of eligibility of articles for the sample of the present review followed three stages: reading of titles, to assess if meets theme of depression and loneliness in older adults; reading of abstract to investigate the suitability of the article for answering the research question; and reading of the full articles in order to extract the data for summarization of the outcomes. All articles included in the sample addressed loneliness and depressive symptoms in older people and the data were analyzed using the results.

In addition, a reverse search, consisting of searching for articles based on a survey of the references of the articles selected for the sample, was performed in order to broaden the search and diversify the results.

The study was prepared using the PRISMA method, which contains 27 criteria that must be applied in bibliographic reviews. The PRISMA diagram shows the step-by-step selection in a summarized manner, from the retrieval of articles in the databases to their subsequent inclusion (Figure 1).
RESULTS

The searches in the databases retrieved a total of 817 publications, with 23 articles selected for the sample, of which 16 came from the databases and seven were retrieved through reverse search. The general panorama of publications shows the majority of articles were published in journals specializing in mental health. There has also been an increase in research on this topic in recent years, with 14 articles published between 2010 and 2019 addressing depressive symptoms and loneliness in aging.

As for the origin of the studies, the articles used for the sample were from Europe (n=09), Asia (n=07), North America (n=05), Oceania (n=01) and South America (n=01).

Table 1 summarizes the general information contained in the articles included in the sample.
Loneliness and its relationship with depressive symptoms in senescence

Table 1. Overall characteristics of articles selected for sample, (n=28). Paraíba, 2019.

<table>
<thead>
<tr>
<th>Author/Year</th>
<th>Methodological design</th>
<th>Sample</th>
<th>Main Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chou, K. L.; Chi, I.; Boey, K. W.</td>
<td>Cross-sectional study.</td>
<td>1,106 older adults.</td>
<td>Older adults living alone (social loneliness) report more depressive symptoms.</td>
</tr>
<tr>
<td>Alpass, F. M.; Neville, S.</td>
<td>Cross-sectional study.</td>
<td>217 older adults.</td>
<td>Lonely men have higher scores on the GDS scale.</td>
</tr>
<tr>
<td>Chou, K. L.; Chi, I.</td>
<td>Cross-sectional study.</td>
<td>1,903 older adults.</td>
<td>Loneliness was associated significantly and positively with depression.</td>
</tr>
<tr>
<td>Adams, K. B.; Sanders, S.; Auth, E.</td>
<td>Cross-sectional study.</td>
<td>Older adults aged between 60 and 98 years.</td>
<td>Not everyone who is lonely is depressed. Loneliness is not a determinant of depression, but it is a risk.</td>
</tr>
<tr>
<td>Stek, M. L.</td>
<td>Longitudinal study.</td>
<td>476 older adults aged 85.</td>
<td>Those who suffered from depression and feelings of loneliness had a 2.1 times greater risk of mortality.</td>
</tr>
<tr>
<td>Tiikkainen, P.; Heikkinen, R. L.</td>
<td>Longitudinal study.</td>
<td>207 older adults aged 80 and 133 aged 85.</td>
<td>In women, depressive symptoms predict greater loneliness than in men; those who were lonely were more depressed and had less social interaction.</td>
</tr>
<tr>
<td>Paul, C.; Ayis, S.; Ebrahim, S.</td>
<td>Cross-sectional study.</td>
<td>999 older adults.</td>
<td>People who live alone or feel lonely had higher rates of psychological distress.</td>
</tr>
<tr>
<td>Barg, F. K. et al.</td>
<td>Cross-sectional study.</td>
<td>102 older adults.</td>
<td>Older adults participating in the study reported that loneliness is a precursor to depression and anxiety.</td>
</tr>
<tr>
<td>Aylaz, R., et al.</td>
<td>Descriptive study.</td>
<td>17,080 older adults.</td>
<td>There was a positive correlation between geriatric depression and loneliness.</td>
</tr>
<tr>
<td>Tsai, F. J.; Motamed, S.; Rougemont, A.</td>
<td>Longitudinal study.</td>
<td>Individuals aged 50 and above.</td>
<td>Older people who live without a partner, without children or who do not provide care to their grandchildren are at greater risk of feeling lonely and depressed.</td>
</tr>
<tr>
<td>Dahlberg, L., et al.</td>
<td>Longitudinal study.</td>
<td>Older adults aged 76 and above.</td>
<td>The increase in depression and recent widowhood were significant predictors of loneliness.</td>
</tr>
<tr>
<td>Houtjes, W., et al.</td>
<td>Longitudinal study.</td>
<td>Older adults with depressive symptoms.</td>
<td>Depression has been associated with higher levels of loneliness over time, especially in men and older adults.</td>
</tr>
<tr>
<td>Kvaal, K.; Halding, A. G.; Kvigne, K.</td>
<td>Comparative study.</td>
<td>101 older adults.</td>
<td>18% of older adults who felt lonely were diagnosed with depression. Loneliness was related to the feeling of emptiness and negative emotions.</td>
</tr>
<tr>
<td>Navarro, J. R.; Benito-Leon, J.; Olazaran, K. A. P.</td>
<td>Cross-sectional study.</td>
<td>1,126 older adults.</td>
<td>Lack of social support and loneliness were identified as factors that favor the onset of depressive symptoms. Widowhood and living alone are risk factors for depression.</td>
</tr>
<tr>
<td>Li, J.; Theng, Y. L.; foo, S.</td>
<td>Cross-sectional study.</td>
<td>162 older adults.</td>
<td>Among the main psychosocial factors, loneliness has a stronger association with geriatric depression.</td>
</tr>
</tbody>
</table>

to be continued
Continuation of Table 1

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<tr>
<td>Holvast, F., et al.34 2015</td>
<td>Cohort study.</td>
<td>Individuals between 60 and 90 of age with major depression, dysthymia or minor depression.</td>
<td>Lonely respondents had fewer social networks and experienced more severe depressive symptoms.</td>
</tr>
<tr>
<td>Holwerda, T. J., et al.21 2016</td>
<td>Cohort study.</td>
<td>2,878 individuals between 55 and 85 years old.</td>
<td>Women suffer more emotional loneliness and men, more social loneliness. Depression was associated with premature death in men, with higher mortality in the group of lonely people.</td>
</tr>
<tr>
<td>Wong, N. M. L., et al.25 2016</td>
<td>Cross-sectional study.</td>
<td>54 older adults.</td>
<td>Loneliness was a determinant of the negative affective processing of delayed depression.</td>
</tr>
<tr>
<td>Fernandes, S.; Davidson, J. G. S.; Guthrie, D. M.35 2016</td>
<td>Cohort study.</td>
<td>2,499 severely ill older adults.</td>
<td>Worsening symptoms of depression, declining social activities and not living with a primary caregiver increase the risk of loneliness.</td>
</tr>
<tr>
<td>Wang, G. et al.13 2017</td>
<td>Cluster trial.</td>
<td>814 older adults with at least one child.</td>
<td>Loneliness from empty nest syndrome leads to symptoms and major depressive episodes.</td>
</tr>
<tr>
<td>Conde-Sala, J. L. et al.31 2019</td>
<td>Cohort study.</td>
<td>31,491 older adults.</td>
<td>One of the risk factors associated with depressive symptoms was loneliness and the female gender.</td>
</tr>
</tbody>
</table>

Regarding the method used and the type of study, there was a predominance of quantitative studies that evaluated the depressive symptoms and loneliness of older adults through depression and/or loneliness scales, in addition to interviews or questionnaires. Among the scales most used in the articles were the Geriatric Depression Scale (GDS)\(^{8-15}\) and the Center for Epidemiological Scale Depression scale (CES-D) \(^{16-21}\) for depression, and the scale of the University of California, Los Angeles (UCLA)\(^{8-10,13,15}\) for loneliness.

The minimum age of the participants in most articles included in the sample was 60. However, some articles studied people below this age group, but were not excluded from the sample of this review because they included older adults in their sample.

**DISCUSSION**

The analysis of the results on the scientific evidence on the relationship between loneliness and depressive symptoms in older adults shows a positive relationship between the two phenomena. In other words, when feelings of loneliness are more evident and social interaction is reduced, the reporting of symptoms of depressive disorders is greater, and levels of psychological distress are higher. In addition, women and older adults were considered more susceptible to feeling lonely and to depressive symptoms.

The results of this review corroborate findings in literature, which show a prevalence of emotionally...
and socially lonely older adults with high scores on the depression scales used\(^8,^9,^16\), with higher rates of psychological distress\(^22\), which indicate possible depression or a depressive episode, predicting social and emotional loneliness\(^23\). Loneliness and depressive symptoms are therefore found in directly proportional quantities\(^24\).

The analysis of the results corroborated results in literature by identifying loneliness as one of the main psychosocial risk factors for the development of depressive symptoms in older adults\(^10,^11\) processing negative stimuli\(^25\). In addition, it revealed mediating factors between emotional loneliness and obtaining a high score on the depression scales, where life events that cause loneliness predispose the individual to depressive symptoms, while depressive symptoms result in social isolation, causing loneliness. Other risk factors identified by the results and evidenced in literature were: loss of spouse\(^12,^17,^26\), isolation or helplessness and separation from family members, as in the empty nest syndrome\(^13\), the absence of a partner and not providing care to grandchildren\(^18\). All of these are factors that cause emotional loneliness, which results in depressive symptoms, which in turn causes social loneliness through the deprivation of social contacts. However, an increase in social relationships leads to a reduction in depressive symptoms\(^27\).

Social and emotional loneliness have significant effects on depressive symptoms, as older adults who do not receive visits have higher loneliness scores\(^28\), contributing to depressive symptoms\(^29\). Older adults themselves characterize loneliness as a precursor to depression and anxiety\(^30\), and are related to feelings of emptiness and negative emotions\(^30\).

In addition, women had higher average levels of psychological distress, revealing a greater tendency to develop depressive symptoms than men\(^31\), which in turn is related to their experiences of loneliness\(^30\). Increased mortality rates, meanwhile, were related to depression combined with feelings of loneliness\(^4,^21\), especially in men\(^21\). The scientific evidence confirmed by the results of this review shows that these phenomena are not time-related and are more related to the psychosocial conjuncture of older adults\(^32\). Furthermore, they can be predictive aspects of suicidal behavior\(^33\).

In addition, it was found in literature that only the most severe and persistent depressive symptoms are associated with loneliness\(^34\). It is understood that these are associated and complex phenomena, and so the research team behind this review stress the importance of long-term evaluations and follow-up for a better understanding of these phenomena and their relationships.

It can therefore be said that loneliness does not necessarily cause depressive symptoms, as there are older adults who feel lonely and do not have depression\(^35\). However, it can be stated that older depressive adults have a higher risk of feeling lonely\(^35\).

The contributions of this review are related to its presentation of the relationship between loneliness and depressive symptoms, common phenomena in the existential reality of older adults, which contribute to the understanding of this scenario and can serve as guidelines for planning and implementing actions to promote mental health and the prevention of harm to the general health of this population, based on the premises listed. It is also believed that scientific evidence has been produced that is capable of collaborating with decision-making in healthcare practices for older adults through the interdisciplinary and interprofessional approach of the observation and active identification of lonely older adults and/or those who present depressive symptoms.

As a limitation of the present study, some articles in the sample carried out their analyzes considering the older population combined with middle-aged adults. Thus, it is suggested that further investigations are carried out on the relationship between loneliness and depression comparing the two populations.

**CONCLUSION**

The present integrative review provides an overview of the relationship between loneliness and depressive symptoms in older adults. Scientific evidence shows that lonely older adults have more depressive symptoms, and loneliness is associated with a feeling of emptiness and negative emotions. Thus, the relationship between these variables is
that loneliness is considered a high risk factor for depressive symptoms, and therefore for depression. It was also found that women and long-lived older adults are more susceptible to feeling lonely and depressive symptoms.

In addition, loneliness and depressive symptoms can be considered factors that develop jointly due to the similarities of the symptoms that cause them, so when exhibiting depressive symptoms, loneliness can develop, and vice versa. Furthermore, it can be said that there is a cycle between the variables, in which emotional loneliness predisposes the individual to depressive symptoms, which in turn stimulates loneliness.

Thus, the present study shows how important the duty of primary care health professionals is in observing and actively identifying older adults who meet one of the conditions described, in addition to encouraging greater social participation in the community, implementing activities to monitor the health of older adults in care units, while contributing to reducing their social isolation.

Given the above, the scientific evidence produced can contribute to the improvement of activities for older adults living in the community, focusing on the mental health of the older population.

REFERENCES


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