DEPRESSION AMONG HOSPITALIZED OLDER ADULTS: A MIXED METHODS STUDY

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ABSTRACT

Objective: to identify the presence of signs and symptoms of depression among hospitalized older adults and their self-perception about this health problem. Methods: convergent parallel mixed method research with qualitative emphasis. Twelve older adults hospitalized during the period from October 22 to 27, 2021, in a hospital in Southern Brazil were selected by convenience. The participants were interviewed and answered the Beck Depression Inventory-II, and demographic and clinical variables were extracted from medical records. Data were analyzed descriptively and presented in thematic categories, with a joint display format and interpretive integration. Results: results were organized into three thematic categories: Signs and symptoms of depression among older adults in hospitalization; Challenges faced by hospitalized older adults that affect mental health; Elements of mental health support and conception of depression among hospitalized older adults. Conclusion/Final Considerations: the study identified signs and symptoms of depression and the challenges faced by older adults, which include hospitalization, their conception about depression, and mental health support mechanisms, with emphasis on faith. It provided an opportunity for speaking and active listening within the hospital setting, shedding light on the topic.

Keywords: Health of older adults. Depression. Mental health. Psychiatric nursing. Hospital care.

INTRODUCTION

According to the World Health Organization (WHO), depression is currently a public health issue, affecting more than 300 million people worldwide(1). In Brazil, in 2019, the Brazilian Institute of Geography and Statistics (IBGE) evaluated depression among people over the age of 18 and found, in the analysis by age group, a higher prevalence among people aged 60-64, which corresponds to 13.4% of the total number of cases(2). In this population, depressive disorders mainly relate to reduced autonomy and independence, changes in daily life, incidence and aggravation of chronic diseases, and mourning for the death of loved ones(3-8). In Brazil, in the 60-69 age group, there were 7.7 deaths by suicide per 100,000 inhabitants and, for people over 70 years old, this indicator was 8.9(9), a fact that reinforces depression—already well accepted as strongly associated with the suicide outcome—as a public health issue.

A Brazilian study evaluated depression among 388 older adults from the central-west region of the country and found mild/moderate depression in 38.4% and severe depression in 3.1% of the sample(7). Another study showed that 54.8% of older adults (n=42) living in a long-term care facility in São Paulo had depression(10). In the South, older people with a poor self-perception of health and who took more than two medications on a regular basis had a higher rate of depression(11). Loss of autonomy/self-care ability, comorbidities, and lower income/education are factors associated with signs of depression in older individuals in Brazil(7,8), as well as in China(12,13), the United States(13), the United Arab Emirates(14), India, and Indonesia(15,16).

The context of life and health directly influences depression among older, including the
setting of hospitalization\(^{(10)}\). Along these lines, the literature points out that the prevalence of depression is high among hospitalized patients, reaching 23%\(^{(17)}\). In this scenario, the acute or chronic diagnosis of the “organic” condition that led to hospitalization (primary cause) often becomes the sole focus of attention for hospital professionals, and issues involving mental health are only considered in patients who present severe conditions\(^{(18)}\).

Given the evident public health issue that is depression among the older population, and the potential for frailty imposed by the context of hospitalization, it is understood that investigations with this population and setting have social and scientific relevance and, therefore, this research was based on the following question/problem: what is the perception of hospitalized older adults about signs of depression? The aim of this study is to identify the presence of signs and symptoms of depression among hospitalized older adults and their self-perception about this health problem.

**METHODS**

Mixed methods research with convergent parallel design and qualitative weight assignment (QUAL + quan)\(^{(10)}\). The weight assignment and the data combination procedure are important elements to be stated in a mixed methods research\(^{(20)}\). In this study, qualitative emphasis (QUAL) was chosen over quantitative emphasis (Quan), based on the understanding that the data from the first approach would give greater density to the achievement of the objective, and because there is no purpose of reaching statistical inferences.

The study site was a reference inpatient unit for older adults in a university hospital in southern Brazil. The population included older patients hospitalized in the unit during the period from October 22 to 27, 2021. The data collection period was defined by convenience, based on the feasibility of the research and in compliance with the deadlines imposed for its completion. To compose the consecutive and convenience sampling, the following inclusion criteria were considered: being 60 years of age or older; being able to communicate verbally (which was verified by clinical assessment during the research presentation); and reaching a minimum score of 14 points, corresponding to signs of mild depression, in the Beck Depression Inventory-II. Patients with a recent record of dementia, delirium, and/or other neurological conditions, or those taking psychotropic or pain medicines in dosages that would impair their lucidity, comprehension, and communication during the interviews; and older patients who were under the legal guardianship of a third party were excluded. Based on the time frame and eligibility criteria, the sample consisted of 12 older adults.

Firstly, for data collection, the patients’ electronic medical records were searched for assessment whether their participation in the research was feasible according to the inclusion and exclusion criteria mentioned above. The signs of depression in the previously eligible patients were then evaluated through the Beck Depression Inventory-II (BDI-II)\(^{(21)}\).

The BDI-II is a 21-item self-report scale for measuring the presence and intensity of depressive symptoms. It evaluates symptoms experienced over the past two weeks in a Likert-type scale with one of four alternatives for each situation, with each item rated in severity from zero to three points. Total scores range from 0 to 63 points and the results are graded as follows: 0-13 indicates no or minimal depression; 14-19 indicates mild depression; 20-28 indicates moderate depression; and 29-63 indicates severe depression. The Portuguese version of the BDI-II was validated in Brazil in 2012 and, according to the validation study, the Cronbach’s alpha coefficient of internal consistency was 0.93, the cut-off point of 10/11 was the best threshold for detecting depression, yielding a sensitivity of 70% and a specificity of 87%, and the overall predictive ability of cases correctly classified was more than 65%\(^{(22)}\).

A structured, audio-recorded interview was conducted with the consent of each participant and guided by the following questions: “What is the reason for your hospitalization? How long have you been hospitalized and how do you feel about your stay?”; “Do you feel sad? If so, in which moments?”; “How would you describe your mental health at the moment? Can you talk about it?”; “In the past three years, have you talked to anyone about your mental health? If so, with whom and where did these conversations take place?”; “What do you understand about depression? What is your view on it?”; “What do you do to improve your mental health?” and “What makes your mental...
health worse?”. In addition, a form was applied for the identification of demographic and clinical variables. The interviews were subsequently transcribed and analyzed to form the metatext of the study. The total recording time among the 12 participants was 7 hours, 29 minutes, and 30 seconds.

Following data collection, the signs and symptoms of depression were interpreted according to the psychiatric nursing framework(22). Data from the BDI-II, the sociodemographic and clinical characterization, and the objective questions asked to participants were analyzed through descriptive statistics with the Microsoft Office Excel® software. The metatext material from the interviews was printed and submitted to thematic content analysis, following the stages of pre-analysis, exploration, and treatment of results (inference and interpretation)(23). In the treatment of results, thematic categorization was carried out through the agglutination of cores of meaning or subthemes. After the thematic categorization of qualitative data, they were articulated with the scores found in the application of the BDI-II, with a joint display format to enhance data integration. Joint display is a technique/strategy that can be used to illustrate both qualitative and quantitative data together, which improves the insight of findings obtained in a mixed methods study(19).

All ethical aspects regarding research with human subjects were respected, including Resolutions No. 466/2012, No. 510/2016, and No. 580/2018 of the Ministry of Health. The project that comprises this study was submitted and approved on August 25, 2021, by the Research Ethics Committee under protocol No. 2021-0229/2021 and Certificate of Ethical Appraisal Submission No. 48521921.00000.5327.

RESULTS

Regarding the profile of the study participants: eight (66.7%) were female; five were (41.7%) married, four (33.3%) were widowed, and three (25%) were separated or divorced. The average age was 68 years, ranging between 62 and 81. The majority (75%) of participants identified themselves as Catholic.

The average length of hospitalization of the participants was 6.5 days, ranging from one to 28 days. As for the reason for hospitalization, five (41.66%) participants were admitted for complications or acute cases caused by one of the chronic diseases indicated in the electronic medical records. The figure below shows the process of selection of research participants (Figure 1).

Figure 1. Flow diagram of selection of research participants. Designed by the authors. Brazil, 2021.

Concerning the medical diagnoses and/or health conditions indicated in the electronic medical records of the study participants, chronic conditions stand out, such as systemic arterial hypertension (83.3% of participants), type 2 diabetes mellitus (58.3%), heart failure (58.3%), atrial fibrillation (41.7%), and alcoholism (33.3%).

As for the number of long-term medications used per day by the study participants, seven was the lowest number recorded and nine was the average number found. Six (50%) participants had a record of long-term use of at least one psychiatric medication in their electronic medical records.

Regarding the incidence of depressive signs and symptoms, all participants reported weight loss (100%), 91.7% reported fatigue/discouragement to perform activities, insomnia or other sleep problems, and loss of appetite. More than half of
the sample (66.7%) reported loss of libido and depressed mood (58.3%). The feeling of guilt was indicated by 33.3% of participants and anxiety by 25%. Memory changes, apathy, low self-esteem, difficulty concentrating, anger or irritability, and motor retardation were reported separately by 16.7% of participants. Anhedonia and agitation were reported by 8.3% of participants. No participants reported suicidal ideation or hopelessness. Among the factors that improve the participants’ mental health, the following stood out: religiosity and faith (75%); the presence of a support network and family members (58.3%); performing activities that bring pleasure or stimulate the brain (41.6%); and positive thoughts (41.6%). As for the factors that worsen their mental health, the most prominent were loss of autonomy (83.3%), mourning for the death of a family member or friend (75%), and the process of becoming ill or aggravation of previous medical conditions (50%).

Four (33.3%) participants reported difficulty in talking about their emotions and expressing feelings during the interviews. Among the participants, only three (25%) had received mental health care prior to the time of the interview, and seven (58.3%) reported that they had never talked to anyone about their mental health. In addition, among the three participants who reported receiving assistance to address mental health issues, only one had received it recently, about a month earlier. For the other two, the last assistance had taken place more than five years earlier.

The mean score on the Beck Depression Inventory-II was 20.5 points, with a minimum of 14 and a maximum of 35 points. In the qualitative analysis, three thematic categories emerged: Signs and symptoms of depression among older adults in hospitalization; Challenges faced by hospitalized older adults that affect mental health; Elements of mental health support and conception of depression among hospitalized older adults. The following chart articulates, in a joint display format, the classification of scores obtained in the BDI-II with symptoms and signs of depression and the participant’s statements.

**Chart 1. Context of depression among hospitalized older adults, according to scores obtained in the Beck Depression Inventory-II (BDI-II) and the participant’s statements. Brazil, 2021**

<table>
<thead>
<tr>
<th>Thematic Category</th>
<th>Signs and symptoms of depression among hospitalized older adults</th>
<th>Anxietty</th>
<th>Depressed mood</th>
<th>Grief</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI-II Score</td>
<td>Mild depression (0-13)</td>
<td>Moderate depression (14-19)</td>
<td>Severe depression (20-63)</td>
<td></td>
</tr>
<tr>
<td>6 (16%)</td>
<td>I don't feel like eating anymore. I feel like I have no appetite.</td>
<td>I feel sad most of the time.</td>
<td>I feel like I don't want to live anymore.</td>
<td></td>
</tr>
<tr>
<td>4 (33%)</td>
<td>I have trouble concentrating.</td>
<td>My mind is cloudy.</td>
<td>I feel like I'm living in a dark hole.</td>
<td></td>
</tr>
<tr>
<td>2 (66%)</td>
<td>I don't have a purpose in life.</td>
<td>I feel like I'm a burden.</td>
<td>I feel like I'm going to die soon.</td>
<td></td>
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</tbody>
</table>
Depressão entre pessoas idosas hospitalizadas: Estudo de métodos mistos

DISCUSSION

The Beck Depression Inventory-II was effective to start the conversation with people who often had never talked about their mental health. This is relevant because the action of expressing and talking about feelings, fears and concerns can be a protective factor against depression(24).

Regarding the medical diagnoses/health conditions identified, systemic arterial hypertension, type 2 diabetes mellitus and heart failure were the most prominent, which are chronic diseases with high incidence and associated with aging(4). The literature points out that the incidence of depression among hospitalized older adults reaches up to 23% of this population(17). The present study, despite being limited to a small sample size obtained by convenience at a single assessment site, contributes to a clearly measurable diversity of depressive signs in this population, especially because only three previously recruited patients had scores lower than signs of mild depression, and half of the participants showed signs of moderate or severe depression.

As described in the literature, the main causes of the feeling of sadness reported by the participants were: grief for the loss of friends and family; hospitalization and distance from family, friends and pets; changes in daily life and becoming ill. Also as indicated by the literature, there was an association between the feeling of being a burden to the family with the change from the role of caregiver to the person who now depends on care and support(5).

Hospitalization was considered an uncomfortable situation because it took the participants away from home and family, but it was necessary at the time for the improvement of physical health and the return of their quality of life, even if partial. Becoming ill and the consequences related to this process were the main reasons mentioned for the decline in quality of life and worsening mental health of the participants. These findings are in accordance with what is indicated in the literature(3). Positivity, hope for the future, religiosity, and distractions in the form of hobbies and interactions with friends and family were mentioned as methods used by the participants to improve their mental health. These findings highlight the importance of a support network and the continuous offer of activities as factors associated with a lower incidence of depression in older adults(3).

Hospital stay, comorbidities and loss of physical abilities were pointed out as factors that hindered the performance of such activities, which may suggest the need for a greater use of alternative therapies during hospitalization when signs and symptoms of depression are identified in older adults, countering healthcare practices that focus exclusively on the diagnosis that originally led to the patient’s hospitalization.

As for the limitations of the study, some difficulty was found, as mentioned in the literature, in identifying the difference between depressive signs and symptoms and common characteristics of older adults, which required the use of interpretation based on the psychiatric nursing framework to distinguish between the two possibilities(22). Another challenge found during the
CONCLUSION

Through the integration of quantitative and qualitative data, it is concluded that the presence of signs and symptoms of depression among older adults in hospitalization was evident and multifaceted. The hospital setting and the illness/reason for hospitalization accentuate these signs. However, older adults have coping mechanisms, especially those related to faith and hope. It is suggested that further studies be conducted to expand the topic, including different settings and samples, as well as clinical studies to address the issue and develop nursing interventions focused on the mental health of hospitalized older adults.

DEPRESSÃO ENTRE PESSOAS IDOSAS HOSPITALIZADAS: ESTUDO DE MÉTODOS MISTOS

RESUMO

Objetivo: identificar a presença de sinais e sintomas de depressão em pessoas idosas hospitalizadas e sua autopercepção sobre este problema de saúde. Métodos: pesquisa de métodos mistos do desenho paralelo convergente e ênfase qualitativa. Doze idosos internados durante o período de 22 a 27 de outubro de 2021 em um hospital do Sul do Brasil, selecionados por conveniência, responderam à entrevista e ao Inventário de Depressão de Beck-II, além da extração documental de variáveis demográficas e clínicas. Os dados foram analisados de forma descritiva e apresentados em categorias temáticas, com articulação em joint display e integração interpretativa. Resultados: os resultados foram organizados em três categorias temáticas: Sinais e sintomas de depressão entre idosos na hospitalização; Desafios enfrentados por idosos hospitalizados que implicam na saúde mental; Elementos de aporte à saúde mental e concepção da depressão entre idosos hospitalizados. Conclusão/Considerações finais: o estudo identificou sinais e sintomas de depressão e os desafios que as pessoas idosas enfrentam, que incluem a própria hospitalização; a sua concepção sobre a depressão e os mecanismos de aporte à sua saúde mental, com destaque à fé. Oportunizou um espaço de fala e escuta ativa dentro do cenário hospitalar, lançando luz sobre a temática.


DEPRESIÓN ENTRE PERSONAS MAYORES HOSPITALIZADAS: ESTUDIO DE MÉTODOS MIXTO

RESUMEN

Objetivo: identificar la presencia de signos y síntomas de depresión en personas mayores hospitalizadas y su autopercepción sobre este problema de salud. Métodos: investigación de métodos mixtos con diseño paralelo convergente y énfasis cualitativo. Doce ancianos ingresados durante el período del 22 al 27 de octubre de 2021 en un hospital del Sur del Brasil, seleccionados por conveniencia, contestaron a la entrevista y al cuestionario de depresión de Beck-II, además de la extracción documental de variables demográficas y clínicas. Los datos fueron analizados de forma descriptiva y presentados en categorías temáticas, con articulación en joint display e integración interpretativa. Resultados: los resultados fueron organizados en tres categorías temáticas: Señales y síntomas de depresión entre personas mayores en la hospitalización; Desafíos enfrentados por personas mayores hospitalizadas que implican en la salud mental; Elementos de ayuda a la salud mental y concepción de la depresión entre personas mayores hospitalizadas. Conclusión/Consideraciones finales: el estudio identificó signos y síntomas de depresión y los desafíos que las personas mayores enfrentan, que incluyen la propia hospitalización; su concepción sobre la depresión y los mecanismos de ayuda a su salud mental, con destaque a la fe. Proporcionó un espacio de habla y escucha activa dentro del escenario hospitalario, aclarando sobre la temática.


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Depression among hospitalized older adults: A mixed methods study

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