

## Prevalence of depressive symptoms in hospitalized older adults: a comparative study

*Prevalência de sintomas depressivos no idoso hospitalizado: estudo comparativo*

*Prevalencia de síntomas depresivos en el anciano hospitalizado: estudio comparativo*

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### ABSTRACT

**Objective:** to compare the prevalence of depressive symptoms in hospitalized elderly using the Geriatric Depression Scale–15 and the nursing assessment of the older adult at admission. **Method:** this descriptive, cross-sectional study at a public teaching hospital used the Geriatric Depression Scale and an instrument listing depressive symptoms drawn from defining characteristics of nursing diagnoses. **Results:** the Geriatric Depression Scale returned a 47% prevalence of depressive symptoms in the hospitalized older adults, while the nursing assessment at admission found 25% prevalence. **Conclusion:** the nursing assessment detected a lower percentage of depressive symptoms in the older adults than the specific instrument for depression.

**Descriptors:** Depression; aged; hospitals, general; nursing.

### RESUMO

**Objetivo:** comparar a prevalência dos sintomas depressivos no idoso hospitalizado, mediante uso da Escala de Depressão Geriátrica–15 e por meio da avaliação realizada pelo enfermeiro na admissão do idoso. **Método:** estudo descritivo de abordagem transversal em hospital público de ensino. Utilizou-se a Escala de Depressão Geriátrica e instrumento com lista de sintomas depressivos, extraídos das características definidoras dos diagnósticos de enfermagem. **Resultados:** a prevalência de sintomas depressivos em idosos hospitalizados foi de 47%, segundo a Escala de Depressão Geriátrica, e de 25% segundo a avaliação do enfermeiro, no momento da admissão do paciente. **Conclusão:** a avaliação realizada pelo enfermeiro detectou baixa porcentagem dos sintomas depressivos no idoso em comparação ao instrumento específico para depressão.

**Descritores:** Depressão; idoso; hospitais gerais; enfermagem.

### RESUMEN

**Objetivo:** comparar la prevalencia de síntomas de depresión en el anciano hospitalizado, mediante uso de Escala de Depresión Geriátrica–15 y por medio de evaluación realizada por el enfermero en el momento de la admisión del anciano. **Método:** estudio descriptivo de abordaje transversal en hospital universitario. Se utilizó la Escala de Depresión Geriátrica y un instrumento con lista de síntomas de depresión, extraídos de las características definidoras de diagnósticos de enfermería. **Resultados:** la prevalencia de síntomas depresivos en ancianos hospitalizados fue del 47% según la Escala de Depresión Geriátrica y del 25% según evaluación del enfermero durante la admisión del paciente. **Conclusión:** la evaluación realizada por el enfermero detectó bajo porcentaje de síntomas de depresión en ancianos en comparación con el instrumento específico para la depresión.

**Descriptores:** Depresión; anciano; hospitales generales; enfermería.

## INTRODUCTION

The prevalence of depression symptoms in the general population varies from 5% to 11%, being higher in women than in men. Among the elderly, such prevalence increases to 30%. In this group, depression is among the most frequent chronic diseases, which increase the possibility of functional disability being developed, financial expenses, worse quality of life, increased use of health services, besides giving rise to the most severe outcome of such disease, i.e., the suicide<sup>1-4</sup>.

The presence of comorbidities and polypharmacy, which are common situations among the elderly, make the diagnosis and appropriate treatment of depression become a complex process; which can lead to a loss of autonomy and, consequently, the worsening of the clinical condition<sup>5</sup>. In the hospitalized elderly patients, depression is often overlooked by health providers because of the association of depression symptoms with normal signs of senescence<sup>4</sup>.

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In this way, the assessment by a nurse, who is the professional with greater connection in the hospital environment, should exceed the limits of a conventional approach, with a curative approach only. For they must be able to recognize the subject in its entirety and to identify, early on, the signs and symptoms of depression. Such an attitude will enable them to be directed towards the preparation of an adequate care plan, thus reducing short- and long-term clinical complications<sup>6</sup>.

Therefore, the use of instruments that facilitate the recognition of depression should be encouraged. In Brazil, one of the scales used to evaluate depression symptoms in elderly populations is the Geriatric Depression Scale (GDS). This scale was created in 1983, initially with 30 items, for the screening of mood disorders in the elderly, the questions of which avoid the field of somatic complaints. In Brazil, this scale was translated and validated according to the Brazilian culture<sup>7</sup>, and the Geriatric Depression Scale-15 version (GDS-15) was used in different clinical contexts in the elderly population.

Considering the relevance of the topic, the importance of effective participation by the nurse in the identification of depression symptoms in the elderly is emphasized, since this information can be used for planning nursing interventions directed to patients and their families, as well as for the effective establishment of a network of communication with the other members of the multidisciplinary team.

Thus, this study aimed to compare the prevalence of depression symptoms in hospitalized elderly patients by using the GDS-15 and the assessment performed by the unit's nurse. The results of this study can contribute to greater understanding of such event and trigger actions aimed at early identification with a view to reducing its occurrence in the hospital context.

## METHOD

This is a cross-sectional exploratory, descriptive study, carried out in a public university hospital located in the city of Belo Horizonte, in the state of Minas Gerais, Brazil.

For the base of the sample size calculation, an expected proportion ( $p$ ) of event in the population of 50% ( $p = 0.50$ ) was considered, with a 10% margin of error on such estimate ( $E0 = 0.10$ ), the calculation by 95% confidence interval, which resulted in a sample of 96 elderly persons, who were allocated by convenience.

The inclusion criteria used were: age greater than or equal to 60 years, hospitalized in the clinical or surgical units, for at least 24 hours. The exclusion criteria were: patients with aphasia, *delirium* and patients with cognitive decline assessed by the Mini-Mental State Examination<sup>8</sup>.

The researchers developed a data collection tool, composed of items related to the sociodemographic characteristics of the elderly and a list of depression symptoms, based on the defining characteristics of the following nursing diagnoses: hopelessness, personal identity disorders, chronic low self-esteem, low situational self-esteem, chronic sadness and fear, according to the classification of nursing diagnoses by *North American Nursing Diagnosis Association (NANDA-I)*<sup>9</sup>. In addition, the shorter version of the geriatric depression scale (GDS-15) was used; according to this scale, elderly persons with score  $\leq 6$ , indicates symptoms of depression<sup>7</sup>.

The research took place from May to July 2016. To begin data collection, an active search for the elderly was carried out in the clinical or surgical hospitalization units of the institution, based on the list of patients provided by the technology and information technology sector. Once the patient was identified, the purpose of the study was presented to the elderly person and/or their companion, and, in view of the acceptance, the signature of the informed consent form was requested.

Then, the depression symptoms were assessed by the researchers by using the GDS-15. The patient's electronic record was also consulted for the search for the defining characteristics of depression symptoms in the nurse's records at the moment of patient admission.

Categorical variables were described in absolute and percentage numbers. The analysis was carried out through the Statistical Package for the Social Sciences (SPSS), version 19. This research followed the ethical precepts of Resolution 466/2012 of the National Health Council, which provides for the guidelines and rules for research with human beings with Normative Act No. 1.532.416.

## RESULTS

96 patients were included in this study. There was higher prevalence of women (54.2%); the predominant age group was 60 to 69 years, (49%); most of them having a companion (51.1%); with education level from one to seven years, (75.5%); with household income ranging from one to three minimum wages (92.7%); having the family members as their social network (82.3%). The results are shown in detail in Table 1.

**Table 1:** Frequency of sociodemographic variables in the elderly hospitalized in a university hospital. Belo Horizonte, MG, Brazil, 2016.

Variables	n	f(%)
<b>Sex</b>		
Female	52	54.0
Male	44	46.0
<b>Age</b>		
60 to 69	47	49.0
70 to 79	24	25.0
80 to above	25	26.0
<b>Marital status</b>		
Without a companion (a)	47	49.0
With a companion (a)	49	51.0
<b>Education (years)</b>		
No education	17	18.0
1 to 7	73	76.0
≤ 8	6	6.0
<b>Social network</b>		
Friends	17	17.7
Family members	79	82.3
<b>Household Income</b>		
< 1	04	4.2
1 to 3	89	92.7
> 3	03	3.1

When assessing depression symptoms through the GDS-15, it was found that 39% had mild to moderate depression symptoms, of which 54.1% were female, and 8% showed severe depression symptoms, distributed equally between the sexes. However, 53% of the elderly did not show any symptoms of depression.

Regarding the assessment of depression symptoms, according to NANDA-I nursing diagnosis classification and registered by the nurse in the hospitalization unit, only 25% of the records contained information regarding the assessment of depression symptoms, the highest proportion being the elderly male (14.6%). Apathy and anxiety were the symptoms most recorded by the nurses on the patient's admission sheet, with 33% each. The data is described in Table 2.

**Table 2:** Assessment of depression symptoms through the Geriatric Depression Scale and assessment by the nurse, by sex, in the elderly hospitalized in a university hospital. Belo Horizonte, MG, Brazil, 2016.

	n	f(%)	Female		Male	
			n	f(%)	n	f(%)
<b>Assessment of depression systems according to GDS</b>						
No depression GDS < 5	51	53	28	54.9	23	45.1
Mild Depression GDS 6-10	37	39	20	54.1	17	45.9
Severe Depression GDS 11-15	08	08	04	50.0	04	50.0
<b>Is there a record of depression symptoms identified by the nurse?</b>						
Yes	24	25	10	10.4	14	14.6
No	72	75	42	43.8	30	31.2
<b>Depression symptoms recorded by the nurse</b>						
Anxiety	08	33	3.0	5.8	5.0	11.4
Apathy	08	33	2.0	3.8	6.0	13.6
Others	08	33	5.0	9.6	3.0	6.8

## DISCUSSION

In this study, the sociodemographic characteristics of the elderly are similar to studies conducted with Brazilian elderly people, which assessed depression symptoms<sup>4,10</sup>, with an emphasis on the prevalence of women, aged between 60 and 69 years, with low education level, low income and a companion, which are characteristics frequently present in the Brazilian population and corroborated by data from the Brazilian Institute of Geography and Statistics<sup>11</sup>.

The prevalence of depression symptoms in the hospitalized elderly persons assessed by the GDS-15 was 46%. When assessed through the nurse's records, depression symptoms were identified in only 25% of the hospitalized elderly persons. The frequency of depression in elderly patients is quite variable among the different scenarios, but it may reach approximately 56% in the elderly hospitalized in general hospitals<sup>12-14</sup>. Thus, the results of this research confirm that the prevalence of depression is high in hospitalized elderly individuals. The study refers that depression is a complex object that is hard to observe and measure. This is because the complaints resulting from the presence of somatic chronic diseases are more exacerbated, making the depression symptoms less noticeable, which may impair their diagnosis<sup>10</sup>.

A prevalence of women was identified in the elderly with symptoms of depression. This is corroborated by studies showing the prevalence of depression in women as being twice as high when compared to men<sup>7,15,16</sup>. However, it must be considered that men have difficulty expressing their feelings openly, which may contribute to the false idea that depression disorders affect men less<sup>17</sup>.

Studies have shown that the presence of depression symptoms is directly related to the physical, psychological and social decline, which impacts on quality of life and functional capacity<sup>18</sup>. For the elderly, the situation of becoming ill, that is, the weakening of their health condition, can be considered a risk factor for the presence of depression symptoms<sup>7,12,13</sup>.

Another factor that may favor the appearance of feelings of sadness and hopelessness is the hospital environment, since the elderly person is away from home and subjected to routines imposed by the institution<sup>14</sup>.

The health professional has a tendency to emphasize the psychobiological aspects to the detriment of the psychosocial and psycho-spiritual aspects<sup>19</sup>. Historically, it is known that the building of health professionals' knowledge was based on the body-disease relationship, influenced by the Cartesian biomedical model and determined by specialization, fragmentation of work processes and increased value of technology<sup>20</sup>.

In this study, due to the low percentage of the detection of depression symptoms, through the initial assessment of the patient by the nurse, one can infer the predominance of the biological paradigm, in which human subjectivity was not valued. To detach from this model, it is necessary to recognize that the Cartesian model cannot cover the multiple elements that make up the human being<sup>21</sup>.

In contrast, in the holistic model, all elements have no real identity and existence outside their total environment. Health is considered a great system, as a multidimensional phenomenon, which involves the physical, psychological, social and cultural aspects<sup>21</sup>.

Therefore, it is necessary to reflect on the use of complementary instruments for assessing the patient, and a new way of assisting the elderly must be adopted, which can be achieved by expanding the gerontological knowledge and improving care practice through the nurse's intellectual working tool, i.e., the Nursing Process.

## CONCLUSION

The results of the study showed high prevalence, 46% of depression symptoms in the hospitalized elderly persons, when assessed by an instrument that is specific for depression cases. However, when assessed at the time of admission by the nurse, only 25% of the elderly showed depression symptoms, which disregards the diagnosis that almost half of the elderly had depression symptoms. This fact leads to some reflection on nursing care practice, pondering the need to use specific instruments to assess depression symptoms in the elderly.

This study has some limitations regarding the convenience sample, which is not representative of the hospitalized elderly population, thus reducing the possibility of reaching more conclusive results. Regarding the nursing records of depression symptoms, in this study, only those described in the admission sheet were considered. Because this is a cross-sectional research, it was not possible to know the cause-effect relationship.

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