

## ***Risk of depression among geriatric patients***

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### **Abstract**

**Introduction.** Depression is the most common mental disorder occurring in the elderly population. This is a clinical syndrome whose diagnosis requires a special approach. Depression is too rarely diagnosed due to erroneous beliefs about old age and a less typical clinical picture. **Objective.** The aim of the research was to determine risk of depression in the group of geriatric patients. **Material and method.** The research was conducted in a group of 122 elderly patients hospitalized in the Lublin Voivodeship. Seniors were aged 60-89. Women constituted 50.8% of the respondents. The study used a standardized research tool, the Yesavage Geriatric Depression Scale-Short Form (GDS-SF). **Results.** The results obtained indicate that the majority of the group struggles with depression - these people constitute 54.9% of the surveyed patients, of which 34.4% of respondents had moderate depression, and 20.5% of people indicated symptoms of severe depression. People who did not show symptoms of depression constituted 45.1% of the respondents. **Conclusions.** Most of the elderly patients examined showed symptoms of depression. Variables such as: marital status, education, housing situation and place of residence significantly influenced the risk of depression in the studied group of seniors. *Geriatrics 2023;17:189-193. doi: 10.53139/G.20231725*

*Keywords: depression, geriatric patients, geriatric assessment*

### **Introduction**

Depression is the most common mental disorder occurring in the elderly population. This is a clinical syndrome whose diagnosis requires a special approach. Depression is too rarely diagnosed due to erroneous beliefs about old age and a less typical clinical picture. Although curable, it is treated too rarely. It leads to the development of negative consequences and geriatric syndromes: frailty syndrome, disability, cognitive disorders, loss of independence, and also increases the risk of other diseases and death and contributes to the increase in health care costs. Most importantly, depression is a major risk factor for suicide in old age [1]. The somatic health condition of the patient has a significant impact on the occurrence of depression. Any chronic disease, mainly related to pain, may predispose to the occurrence or recurrence of depression [2]. Research shows that hospitalization may increase depressive symptoms in older people. The incidence of depressive symptoms among hospitalized elderly people is approximately 50%.

At the same time, it may decrease 3-12 months after discharging from the hospital [3,4].

### **Objective**

The aim of the study was to determine the risk of depression in a group of geriatric patients.

### **Material and methods**

The study was conducted in a group of 122 elderly patients hospitalized in the Lublin Voivodeship. The research was conducted in accordance with ethical principles, and the patients gave informed and voluntary consent to participate in the research. Consent from the hospital management was also obtained to conduct research on the hospital premises. Seniors were aged 60-89. Women constituted 50.8% of the respondents.

Table I presents detailed characteristics of the studied group of patients.

Table I. Characteristics of the research pool

Variable		%
Gender	Female	50.8
	Male	49.2
Age	60-69 years old	46.7
	70-79 years old	45.1
	80-89 years old	8.2
Marital status	Single	9.8
	Married	52.5
	Divorced	12.3
	Widow/widower	25.4
Education	Primary	17.3
	Occupational	35.2
	Middle	37.7
	Higher	9.8
The way of living	With family	67.2
	By oneself	32.8
Place of residence	City	54.1
	Village	45.9

The study used a standardized research tool, the Yesavage Geriatric Depression Scale-Short Form (GDS-SF). This scale is used to measure the degree of risk of developing symptoms of depression (15 yes/no questions). It is a screening tool commonly used around the world to assess the intensity of depression symptoms in the elderly. The questions answered by respondents concern the assessment of both positive and negative aspects of life. The interpretation of the short version is based on the number of points obtained, the higher the score, the greater the intensity of depression symptoms: 0-5 points. no risk of depression, 6-10 points. moderate depression, 11-15 points. severe depression [5,6].

The obtained results were subjected to statistical analysis. The values of the analyzed measurable parameters were presented using the mean value and standard deviation, and for non-measurable parameters, using the number and percentage. The significance level of  $p < 0.05$  was adopted, indicating the existence of statistically significant differences or relationships.

## Results

The results obtained indicate that the majority of the group struggles with depression - these people con-

stitute 54.9% of the surveyed patients, of which 34.4% of respondents had moderate depression, and 20.5% of people indicated symptoms of severe depression. People who did not show symptoms of depression constituted 45.1% of the respondents.

Table II presents the average values of the GDS scale depending on the analyzed sociodemographic variables. When analyzing the risk of depression depending on the gender of the respondents, it was found that the result was slightly worse in the group of women (average 6.52 points). However, this difference did not have statistical significance. The highest risk of depression was found in respondents aged 70-79 (average 7.22 points). People aged 60-69 were least likely to suffer from depression (5.72 points). Age also did not clearly affect the risk of depression in the study group.

Analyzing the marital status of the respondents, it was found that the lowest risk of depression occurred in married people (4.80 points). However, the highest risk of depression was found among widowed people (9.06 points). The analysis showed a statistically significant difference between the analyzed groups ( $p = 0.0002$ ).

The research analyzed the risk of depression depending on the level of education of seniors. Patients with higher education showed the lowest risk of depression (4.17 points). As the level of education decreased, the risk of depression increased, and the highest risk was found in respondents with primary education (8.00 points). The difference between the groups was found to be statistically significant ( $p = 0.034$ ).

The housing situation also statistically significantly differentiated the risk of depression among patients ( $p = 0.0001$ ). The highest risk was found in people living alone (8.82 points), and a lower risk occurred in seniors living with their family (5.26 points).

The last issue analyzed was determining the risk of depression depending on the place of residence. Respondents from rural areas showed a greater risk of depression (7.50 points) compared to people from cities (5.61 points). This difference was statistically significant ( $p = 0.039$ ).

## Discussion

Depression contributes to the deterioration of health and quality of life of older people. It also adversely affects the course and results of treatment of somatic diseases. This is one of the "big geriatric problems" [7].

WHO estimates indicate that 322 million people worldwide suffer from depressive disorders, representing

Table II. Evaluating with the Geriatric Depression Scale and sociodemographic variables

	Variable	M	SD	Statistic analysis
Gender	Female	6.52	4.38	Z=0.218 p=0.828
	Male	6.43	4.73	
Age	60-69 years old	5.72	4.34	H=2.903 p=0.340
	70-79 years old	7.22	4.59	
	80-89 years old	6.75	5.50	
Marital status	Single	7.33	3.58	H=19.440 p=0.0002
	Married	4.80	3.83	
	Divorced	7.60	5.33	
	Widow/widower	9.06	4.53	
Education	Primary	8.00	4.62	H=8.670 p=0.034
	Occupational	7.37	4.99	
	Middle	5.54	3.61	
	Higher	4.17	4.75	
The way of living	With family	5.26	3.88	Z=3.835 p=0.0001
	By oneself	8.82	4.77	
Place of residence	City	5.61	4.09	Z=-2.065 p=0.039
	Village	7.50	4.85	

M-mean; SD-standard deviation; Z -Mann-Whitney U test; H- Kuskal-Wallis test

4.4% of the total population, with the disease affecting women (5.1%) more often than men (3.6%). In Europe, symptoms characteristic of this nosological entity occur in approximately 4.9% of women and 2.8% of men, while in Poland they are diagnosed in 8.2% of the population - twice as often in women than in men [8].

Our study found that most geriatric patients had symptoms of moderate to severe depression. Also, research conducted among geriatric patients hospitalized in internal medicine departments showed a high risk of depression in this group of patients [9]. Similar results were also obtained by Ponczek et al. examining patients of the Clinical Department of Emergency Medicine, in which 40.00% obtained results indicating mild depression, and 12.67% - severe depression [10].

Our own research indicated a greater risk of depression among women than men. Also, research by Babiarczyk et al. [11] showed that women had significantly more symptoms of depression. Studies conducted among hospitalized patients in India also revealed a higher risk of depression among older women [12]. Also in the study by Chang-Quan et al. conducted among people over 90 years of age. depression was found in 29% of women and 20% of men [13]. The results of the PolSenior project showed that in early old age, depressive symptoms occur in 31% of women and 20.7% of men, while in late old age in over 40% of women and

about 30% of men [14]. Much greater differences in the incidence of depression between genders were shown by a study by Mamplekou et al. [15], which found depressive symptoms in 70% of women and 54% of men.

Our own research showed that the highest risk of depression was in the group of seniors aged 7-79. However, most studies indicate that the risk of depression increases with age, and the oldest people are most at risk [9,16].

Our own research showed that an important risk factor for depression was the marital status and type of residence of the respondents. These observations were confirmed by Bhamani et al., showing that people not living with their spouses were more vulnerable to depression than people living with their spouses [17]. A similar finding was found in the study by Mokhber et al., which showed that people with family support were less likely to be diagnosed with depression [18]. In the study by Shin et al., a statistically significant relationship was found between the loss of loved ones and symptoms of depression [19].

In our studies, the highest risk of depression was found in patients with primary education. As the level of education increased, this risk decreased. Research conducted by other researchers also indicates a relationship between the level of education and the risk of depression [9,14].

In our own research, place of residence also turned out to be a significant risk factor for depression. Seniors from rural areas were more susceptible to depression. Different results were obtained in studies by Sengupta and Benjamin, and Feng et al. stating that seniors from urban environments were at greater risk [20,21].

It's impossible to prevent depression in old age without maintaining a "healthy lifestyle" in middle age. What is important here is not only the prevention of chronic diseases of the cardiovascular system, respiratory system and diabetes, but also regular physical activity, lack of smoking or stopping smoking, giving up bad eating habits and taking care to maintain family ties and an appropriate network of social contacts [2].

## Conclusions

Most of the elderly patients examined showed symptoms of depression. Variables such as: marital status, education, housing situation and place of residence significantly influenced the risk of depression in the studied group of seniors.

Conflict of interest

Brak/None

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