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Assessment of the Risk of Depression in Neurogeriatric Patients

Ocena ryzyka występowania depresji u pacjentów neurogeriatrycznych

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Abstract

Introduction. Specific factors predisposing to depression in the elderly are: widowhood, loss of employment, deterioration of the financial situation, loss of physical fitness, dependence on others, the use of institutional care. Early detection and treatment of depressive disorders is a determinant of modern geriatric care.
Aim. The aim of the study was to evaluate the risk of depression among elderly patients hospitalized in the neurological departments.
Material and Methods. The study was conducted in a group of 113 patients aged over 65 years of age, residing in neurological departments of hospitals in Lublin. Assessing patients was made using the Geriatric Depression Scale in the abbreviated version (Geriatric Depression Scale-Short Form — GDS-SF).
Results. Assessing the patients with the Geriatric Depression Scale no risk of depression in 75.22% of patients, and 24.88% showed depressive symptoms. In assessing the patients with the scale of depression, it was stated that the mean for the entire group was at the level of 4.15±3.57 points.
Conclusions. In the group of elderly patients hospitalized in the neurological departments we found a fairly low risk of depression. More than 3/4 of respondents did not show symptoms of depression. The age of respondents had a significant effect on their risk of depression. **(JNNN 2016;5(3):104–108)**
Key Words: depression, Geriatric Depression Scale, a neurogeriatric patient

Streszczenie

Wstęp. Specyficznymi czynnikami predysponującymi do depresji w wieku podeszłym są: wdowieństwo, utrata zatrudnienia, pogorszenie sytuacji materialnej, utrata sprawności fizycznej, uzależnienie od innych, korzystanie z opieki instytucjonalnej. Wczesne wykrywanie i leczenie zaburzeń depresyjnych stanowi wyznacznik współczesnej opieki geriatrycznej.
Cel. Celem badań była ocena ryzyka występowania depresji wśród pacjentów w podeszłym wieku hospitalizowanych w oddziałach neurologicznych.
Materiał i metody. Badania przeprowadzono w grupie 113 pacjentów w wieku powyżej 65 roku życia, przebywających na oddziałach neurologicznych lubelskich szpitali. Oceny stanu pacjentów dokonano za pomocą Geriatrycznej Skali Depresji w wersji skróconej (Geriatric Depression Scale-Short Form — GDS-SF).
Wyniki. Oceniając badanych Geriatryczną Skalą Depresji stwierdzono brak ryzyka wystąpienia depresji u 75,22% pacjentów, a 24,88% wykazywało objawy depresyjne. Oceniając pacjentów skalą depresji stwierdzono, że średnia dla całej badanej grupy kształtowała się na poziomie 4,15±3,57 pkt.
Wnioski. W badanej grupie pacjentów w podeszłym wieku hospitalizowanych w oddziałach neurologicznych stwierdzono dość niskie ryzyko wystąpienia depresji. Ponad 3/4 badanych osób nie wykazywało objawów depresji. Wiek badanych istotnie wpływał na ryzyko wystąpienia u nich depresji. **(PNN 2016;5(3):104–108)**
Słowa kluczowe: depresja, Geriatryczna Skala Depresji, pacjent neurogeriatryczny

Introduction

Depression is a disease that often occurs in patients over 65 years of age It is estimated that sufferers range from 10 to 20% of older people [1]. Suicide attempts which are due to depression in this age group are more effective than suicide attempts among younger people. It is important, therefore, to make an early diagnosis and to attempt to treat the disorder [2].

Specific factors predisposing to depression in the elderly are: widowhood, loss of employment, deterioration of the financial situation, loss of physical fitness, dependence on others, the use of institutional care. Older people often suffer from chronic diseases, which are inconvenient for them, result in unpleasant symptoms and difficulties in everyday functioning, which cause depressed mood, bad mood and consequently predispose to depression [3].

Depression contributes to the deterioration of the quality of life of older people. It also has a negative impact on the course and results of treatment of somatic diseases. It is one of the "great geriatric problems" (in addition to dementia, mobility disorders, falls, incontinence, impaired sensory organs) [4,5].

Aging of the population and the number of cases of depression among seniors is a major challenge for medical care. Early detection and treatment of depressive disorders is a determinant of modern geriatric care [6].

The aim of the study was to evaluate the risk of depression among elderly patients hospitalized in the neurological departments.

Material and Methods

The study was conducted in a group of 113 patients aged over 65 years of age, residing in neurological departments of hospitals in Lublin. Patients gave their voluntary consent to participate in research. The detailed characteristics of the study group are presented in Table 1.

Assessing patients was made using the Yesavage Geriatric Depression Scale in the shorter version (Geriatric Depression Scale-Short Form — GDS-SF) to measure the degree of risk of occurrence of depressive symptoms (15 yes/no questions). Interpretation of the short version is based on the number of points scored: 0–5 points no risk of depression, 6–10 points moderate depression, 11–15 points. severe depression. It is widely used around the world screening tool, allowing the evaluation of the intensity of the symptoms of depression in the elderly. Questions answered by the respondents relate to the assessment of both positive and negative aspects of life. The higher the score point, the greater the intensity of depressive symptoms [7–9].

Table 1. Socio-demographic characteristics of the research pool

Variable	%
Gender	
Female	51.00
Male	49.00
Age	
65–74 years old	59.00
75–90 years old	41.00
Marital status	
Single	34.00
Married	66.00
Education	
Elementary	12.00
Vocational	25.00
Secondary	36.00
Higher	27.00
Lives	
With family	90.00
Alone	10.00
Place of residence	
City	57.00
Village	43.00

The collected material was analyzed statistically. The level of significance $p<0.05$ indicating the existence of statistically significant differences or dependencies was assumed.

Results

Assessing the studied group with Geriatric Depression Scale no risk of depression in 75.22% of patients was confirmed, and 24.88% showed depressive symptoms. Table 2 shows the percentage distribution of depression or lack thereof according to socio-demographic variables of the examined. It shows that depressive symptoms were less frequent in women (22.81%). Also, a very small group of respondents (2.99%) in the youngest age range had symptoms of depression. Less frequently depressive symptoms were observed in respondents who were unmarried (23.68%) with high school education (21.95%). Persons living alone were much less likely to have depression (9.09%) compared to living with family (26.47%). People living in rural areas had less depressive symptoms compared with those of living in the city (24.49% vs 25.00%).

Table 2. Evaluating patients with Geriatric Depression Scale

Variable	Lack of depression %	Depression %
Gender		
Female	77.19	22.81
Male	73.21	26.79
Age		
65–74 years old	97.01	2.99
75–90 years old	86.96	13.04
Marital status		
Single	74.67	25.33
Married	76.32	23.68
Education		
Elementary	73.16	26.84
Vocational	73.17	26.83
Secondary	78.05	21.95
Higher	74.19	25.81
Lives		
With family	73.53	26.47
Alone	90.91	9.09
Place of residence		
City	75.00	25.00
Village	75.51	24.49

In the next stage of the research determining the relationship between the assessment of the risk of depression and analyzed variables was carried out. In assessing patients with the scale of depression, it was stated that the mean for the entire group was at 4.15±3.57 points.

Table 3 presents the average values of the evaluation with Geriatric Depression Scale, depending on the analyzed sociodemographic variables. A significant significant relationship was found only between the age and the risk of depression ($p<0.05$).

Table 3. Average values of the assessment with the Geriatric Depression Scale and sociodemographic variables

Variable	Mean	SD	Statistical analysis
1	2	3	4
Gender			
Female	4.01	3.50	t=-0.397 p=0.691
Male	4.28	3.66	
Age			
65–74 years old	3.98	3.42	t=-0.592 p=0.044
75–90 years old	4.39	3.79	
Marital status			
Single	4.21	4.07	Z=-0.334 p=0.738
Married	4.12	3.31	
Education			
Elementary	4.26	3.79	F=0.035 p=0.965
Vocational	4.10	3.82	
Secondary	4.09	3.65	
Higher	4.06	3.20	
Lives			
With family	4.34	3.65	Z=0.382 p=0.083
Alone	2.36	2.01	
Place of residence			
City	4.25	3.16	t=0.337 p=0.736
Village	4.02	4.06	

t — test t-Student; F — variation analysis; Z — Mann–Whitney U test

Discussion

A characteristic feature of a depression in the elderly is its diversity. There is a depression of a somatogenic etiology, endogenous and psychogenic etiology. The causes of endogenous depression result from a malfunction of the nervous system, genetic diseases, organic changes in the brain. Among the social factors that influence the development of depression, the loss of the loved ones, the deterioration of the economic situation, reduced self-esteem are mentioned [5].

The diagnosis of depression in the elderly is often quite difficult even to medical personnel. The symptoms reported by the patient or caregivers may indicate depression, as well as dementia. Changes of dementia may mask the symptoms of depression or aggravate it [10].

The relationship between the symptoms of depression and physical disease is very complex. They often modify each other's progress. Many studies showed the diagnosis or observations of its individual symptoms in certain somatic diseases. Depression can also cause the intensity of the symptoms of disease [11].

In our study we found that the risk of depression occurred at approx. 25.00% of the respondents. In studies of Knurowski et al. [12] the mild (15.00%) or severe depression (15.00%) in elderly residents of Cracow was confirmed. Similar results were received by Broczek [13] where approx. 30.00% of people over 65 had signs of depression. Wilmańska and Gułaj [14], where 67% were people with normal GDS. The research of the Bujnowska-Fedak [15] showed that the problem of depression concerned 17% of the patients. Higher incidence of depression was found in the studies of Babiarczyk et al. [16], where more than half of the respondents showed symptoms of depression. Whereas, the studies conducted in the care home environment by Traczyk et al. [17]

and Płaszewska-Żywko et al. [18] confirmed that the vast majority of older people shows the risk of depression.

The literature reports that the depression occurs more often in women than men in the general population. However, in the elderly, these results are not conclusive [13]. Our study showed that women presented a lower risk of depression compared to men. Most studies show different results. The results of other researchers suggest that women had significantly more symptoms of depression [13,16]. The age of a man may be a risk factor of depression, in particular in combination with the negative social factors and the presence of somatic diseases (including the diseases of the nervous system) [19,20]. Our study showed that the risk of depression increases with age, the older the people the greater the risk of depression. The research of the Pacian et al. [21] confirmed that with age there is an increase in the risk of depression.

Single people showed a higher risk of depression compared to those married. This is consistent with the results of other authors where in the married seniors the depression symptoms were less frequently observed than in the unmarried people [13].

Our research also found that the risk of depression decreased with the education level, although this was not statistically significant. The greatest risk showed people with primary education, and the least prone to depression were people with higher education. Similar results were obtained by Broczek et al. [13], but among them there was a statistically significant relationship.

In our study we found that people living alone showed much less risk of depression. Quite different results were obtained by Broczek and et al. [13]. Their studies found a significant correlation between the occurrence of depression and the fact of who lives an elderly person with. People who live alone definitely more often presented symptoms of depression.

Our study also confirmed the findings of other authors about the risk of depression and the environment in which the patient lives. Both in our and other studies [13], there was no difference in the risk of depression in people from the city or from the countryside, and the results of the assessment were at a similar level.

Conclusions

In the group of the elderly patients hospitalized in the neurological wards we found fairly small risk of depression. More than 3/4 of respondents did not show symptoms of depression. The age of the respondents had a significant effect on their risk of depression.

Implications for Nursing Practice

Elements of the comprehensive geriatric assessment, including an assessment of the risk of depression, should be the determinant of modern nursing geriatric care. Such actions will contribute to improving of the quality of nursing care, improving of the effectiveness of the therapy and care, and thus to improving of the quality of life of the patient.

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