DEPRESSION IN ELDERLY WITH DIFFERENT COMORBIDITIES - JUST A SMALL PROBLEM OR SOMETHING MORE?

Miletić, Bojan; Lekić, Andrica; Courteney, Udo

Psychiatria Danubina, 2021; Vol. 33, Suppl. 4, pp 471-474 *Conference paper*

Brief report

DEPRESSION IN ELDERLY WITH DIFFERENT COMORBIDITIES - JUST A SMALL PROBLEM OR SOMETHING MORE?

Bojan Miletic[1,2], Andrica Lekic[2] & Udo Courteney[1,2]

[1]Department of Rehabilitation and Geriatrics, Luzerner Kantonsspital Wolhusen, Wolhusen, Switzerland
[2]Faculty of Health Studies, Rijeka, Croatia

SUMMARY

Background: *Depression is the most common mental disorder in old age with a major impact on quality of life, morbidity and mortality. In daily work, various tests are used in terms of screening to detect suspected depressive disorder. One of the most commonly used tests is the so-called Geriatric Depression Scale-15 (GDS-15). The aim of our study was to determine the incidence of depressive symptoms in patients hospitalized in the geriatric ward.*

Subjects and methods: *A retrospective analysis included a total of 473 subjects (170 men and 303 women), with an average age of 83.8 years (minimum 65 years, maximum 101 years). GDS-15 was tested in all subjects (a positive test implies a GDS-15 score of ≥6). The results obtained were then statistically processed.*

Results: *Of the total of 473 subjects, 105 (22.2%) were positively tested for depressive symptoms (34 men and 71 women). Most of these live in the usual domestic setting (79.4% men and 74.6% women). In women, the symptoms are mostly present (49 women - 69.0%) in women living alone (widowed, divorced or unmarried. The male respondents were mostly men living in a partner community (22 men - 64.7%)*

Conclusion: *The results obtained confirm the high incidence of depressive symptoms in the patients hospitalized in the geriatric ward. Depression is not a normal part of ageing and must be considered as a serious medical problem. Therefore, routine screening is necessary to identify the depressive symptoms, to detect and diagnose depression to begin treatment for such patients on time in order to improve the quality of life of the elderly.*

Key words: *depression - Geriatric Depression Scale - elderly*

* * * * *

INTRODUCTION

Depression is one of the most common mental disorders, equally prevalent in both developed and developing countries (Riedel-Heller et al. 2012). According to the World Health Organization, approximately 4-6% of the population (about 322 million people) suffer from some form of depression. This percentage increases notably in old age, especially in persons hospitalized for acute illness or exacerbation of the chronic disease. It is generally accepted that old age, with many accompanying comorbidities and social status, significantly influences the occurrence of depressive symptoms. However, data varies significantly across countries, indicating that the extent of the prevalence of depressive symptoms in the general population is still not sufficiently well known. Very often, therefore, the depressive disorder remains unrecognized and untreated, with possibly fatal consequences. The proportion of elderly people in the general population is continuously growing and the frequency of chronic diseases with accompanying complications is also increasing. At the same time, the incidence of depression is growing and is becoming an increasingly important element in treatment, especially in geriatric patients. Screening of the elderly to the presence of depressive symptoms in primary health care, and especially in hospitalized people, is becoming increasingly important, as the quality of life of the elderly can be significantly improved by timely recognition and treatment of the depressive disorder.

For the purpose of screening, various tests are used in practice, but the geriatric depression scale-15 (GDS-15) has proven to be especially useful in daily work with the elderly. The aim of our study was to determine the frequency of depressive symptoms in patients hospitalized in the geriatric ward, which is important so that, regardless of the primary reason for hospitalization, depressive symptoms can be identified in time and an interdisciplinary approach undertaken to begin treatment and prepare patients for outpatient treatment, including discharge from the hospital.

SUBJECTS AND METHODS

We included 473 patients older than 65 (range 65-101 years) and hospitalized in the geriatric ward of the Luzerner Kantonsspital Wolhusen in Switzerland during the period from 01.01.2018 to 31.12.2020. The basic sociodemographic data of the respondents is shown in table 1. The respondents were divided into four age groups: 65-70, 71-80, 81-90 and over 90. The research was approved by the Ethics Commission for Northwestern and Central Switzerland in Basel, number 2020-01051 dated 26.05.2020.

GDS-15 was used for screening purposes. The test was created as a GDS-30 test in 1982 by Yesavage and co-authors, and modified four years later by Sheikh and Yesavage into the GDS-15 scale still in use today (Sheikh & Yesavage 1986). Based on the specific "yes" or "no" answers to a total of 15 questions (maximum

score is 15), the presence of depressive symptoms in the subjects is assessed. A score of 6 points or more is considered positive. GDS-15 has confirmed its value compared to other tests in numerous studies and is therefore recommended for use in the elderly in an analysis done by Smarr & Keefer (2011).

The data that we collected was statistically analyzed with the TIBCO software Statistica 13.3. Chi-square analysis was performed to test the difference between two or more groups, with the significance of the p-value of <0.05. Student-t-test was used to ascertain the significance of differences between mean values.

Table 1. General sociodemographic data of respondents

Variables	Number of participants	
Gender		
men	170	35.9%
women	303	64.1 %
Age	65-101 (mean 83.8)	
Age distribution		
65-70	19	4.0 %
71-80	113	23.9%
81-90	274	57.9%
> 90	67	14.2%
Civil status		
married	174	36.8%
not married	36	7.6%
divorced	26	5.5%
widowed	237	50.1%
Home situation		
home environement	397	83.9%
institution	76	16.1%

RESULTS

A total of 473 patients, mean age 83.8 years (170 men and 303 women), were included in the analysis. The sociodemographic data of the patients are presented in tabla 1. A total of 105 patients (22.2%) had a score of ≥6 in the GDS-15 test. Of these, 34 were men and 71 were women. The statistical analysis showed no significant difference (p=0.455) in the incidence of depressive symptoms between women and men (Table 2). Respondents were also divided into four age groups. Depressed symptoms were the least pronounced in subjects older than 90 years, but the difference between the expressed depressive symptoms in certain age groups did not show any statistical significance. Similar results were obtained when the subjects were classified by gender into individual age groups - there was no statistically significant difference between the incidence of depressive symptoms in men and women in different age groups. The housing situation of all respondents was then analyzed. The majority of respondents, 397 of them (83.9%), had previously been in their domestic environment. In 82 (20.7%), testing for depressive symptoms was positive. At the same time, as many as 23 of the 76 respondents (30.3%) placed in care institutions had depressive symptoms, which is a statistically significant difference (Table 3). Data on the civil status of the respondents was also compared. In total, there was no difference in the incidence of depressive symptoms concerning civil status, but the difference became significant when respondents with a positive test were classified according to gender. Depressive symptoms are most pronounced in women living alone, primarily widows, unmarried and divorced women (a total of 50 or 70.4%). At the same time, 22 (or 64.7%) of married men, ie men living in a partnership, are the persons who most often express depressive symptoms (Figure 1). Finally, the average duration of hospitalization of the subjects was compared with the GDS test, but no statistically significant difference was shown concerning the incidence of depressive symptoms.

Table 2. GDS-test results in a men and women

Gender	GDS ≥ 6	GDS <6	Chi	p
Men	34	136	0.56	0.455
Women	71	232		

Table 3. Resident housing situation

Habitation	GDS ≥ 6	GDS <6	Chi	p
Home	82	315	3.59	0.044
Institution (nursing home)	23	53		

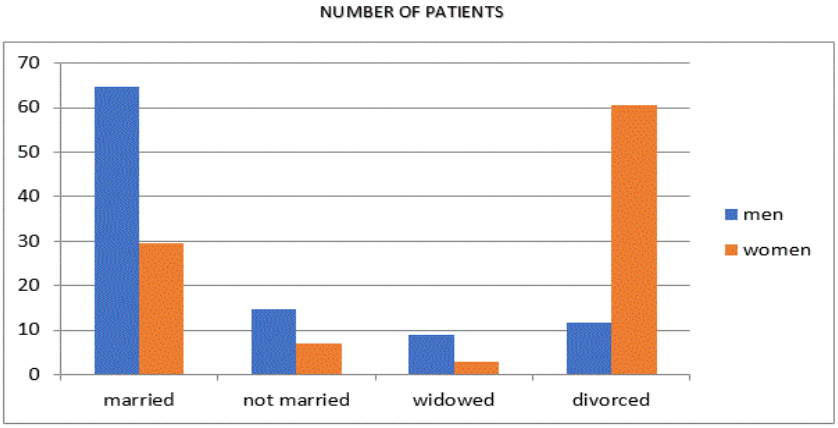

Figure 2. Civil status of the patients

DISCUSSION

Although ageing was previously considered to be a time for slowing down, today ageing is accepted as a very dynamic period with numerous changes that can positively, but also negatively, affect the quality of life of each person individually (Ismail et al. 2013). Depression is one of the most common mental disorders and significantly affects the mortality and daily functioning of all people, especially the elderly (Jongenelis et al. 2004). In the elderly, it is often associated with the occurrence of an acute illness such as myocardial infarction, hip fracture or stroke, but an acute exacerbation of a chronic disease such as diabetes contributes to the development of depressive symptoms and thus leads to a rapid and significant deterioration in the quality of life (Fiske et al. 2009). Depression in itself also increases the risk of cardiovascular events (Almeida et al. 2019). It is also the most common cause of emotional suffering in old age and, according to the World Health Organization in 2017, it is responsible for about a quarter of elderly suicides (Blazer 2003, Harbottle 2019). Depression also increases the risk of malnutrition in the elderly population, another major problem of the elderly that depends not only on social but also on mental state (Chen 2019). Therefore, recognizing depressive symptoms is extremely important in the treatment of the elderly.

Our results showed a very high incidence of depressive symptoms in elderly patients and thus confirmed that, despite the high standard of living and high quality health system, there is a great need for improvement in the care of the mental health of the population. Although numerous studies to date have shown conflicting results in the sexual distribution of depressive disorders, our analysis has shown that depression is significantly present among the elderly, both men and women, regardless of their age.

This means that one of the preconditions for reducing the incidence of depression in old age is its early detection and treatment, already at a younger age. The expected higher incidence of depressive symptoms in women living alone (widows, unmarried, divorced women) is probably related to the influence of social factors, house environment, and feelings of abandonment. Some studies have shown a higher incidence of depressive disorders in women than in older men, probably due to poorer socioeconomic status during working life. Women are often less employed, more likely to lose a spouse earlier and more prone to depressive disorders at a younger age, but the results of these studies also depended on the type of test used and issues that often affect the emotional life of respondents (Acciai & Hardy 2017). Our analysis showed that depressive symptoms are present in men to the same extent as in women, but surprisingly especially in married men. Is the condition for this still the prevailing patriarchal way of life with the dominant role of men, which nowadays, especially in old age with the weakening of psychophysical functions, is slowly disappearing as women in old age are taking an equal, if not leading, role in family life? Certainly, this issue remains the subject of discussion, a source of differing opinions and a topic of future analyses.

Our research draws attention to another important aspect of the occurrence of depressive symptoms, independent of the social environment in which an elderly person finds himself. Namely, a high proportion of depressive symptoms was confirmed in persons accommodated in care institutions (nursing homes). In general, the prevalence of clinically significant symptoms of depression in the elderly is between 8% and 16%, but the numbers vary considerably and range in nursing homes up to 50% (Casey 2013). On the one hand, this tells us that the domestic environment is certainly the healthiest environment for the life of every elderly person. On the other hand, this analysis also sends us a warning that, despite the high standard of living, it is necessary to continuously improve and enhance the social system and enrich the programs of residence of the elderly in various institutions. Certainly, the elderly receive the support they need in their daily activities through institutional care.

But at the same time, they thereby lose some of their independence and focus instead on the daily schedules predefined in each institution. People placed in an institution very often have significant functional limitations that prevent them from living a normal life in their home, they are often victims of negative life experiences, and thus their sense of loneliness grows (Glaesmer et al. 2011). With the continuous prolongation of life expectancy due to rising standards, improved medical care and quality of life, and the simultaneous decline or stagnation of birth rates in developed countries, the share of older people is growing, and with it the need to increase accommodation capacity in nursing homes.

But at the same time, with the "industrialization" of such social institutions, depression is becoming less and less recognized among the residents of such institutions, so that far too few patients are treated for depressive symptoms - estimates suggest less than 25% (Snowdon 2010, Tiong et al. 2013). Medication is certainly a way to fight depressive disorders. Antidepressants also have some positive side effects, such as reducing the risk of cardiovascular events, probably by improving mood (Almeida et al. 2019). But the long-term use of antidepressants also increases the risk of adverse events such as falls, electrolyte imbalance or cardiac arrhythmias (Almeida 2014). Many studies have already confirmed a complex interaction between depression and cardiovascular disease, cerebrovascular disease, cancer, chronic obstructive pulmonary disease, Parkinson's disease or chronic kidney disease (Mitchell & Harvey 2014).

Non-pharmacological measures that primarily affect the social system, better social care, active ageing programs and adequate physical activity can contribute to better control of depressive disorders in the elderly (Sjöberg et al. 2017). There is a growing need to provide better mental health care in Europe, which puts increasing pressure on national health systems (Lehmann et al. 2018).

This analysis also showed how complex and special the medicine of old age is and that it depends on the interdisciplinary work of general practitioners and hospital specialists, psychologists and psychiatrists, nurses, community health services and social services to improve the lives of the elderly. Every test used today to identify depressive disorders in the geriatric population has its advantages and disadvantages, but GDS-15 is simple and easy to apply in the daily routine (Zhang et al. 2019). The true extent of depression is still unknown and depression is expected to be the leading cause of disability in 2030.

Depression is not a normal part of ageing and must be viewed as a serious medical disorder (Casey 2017). Therefore, in order to reduce the prevalence of depression, it is necessary to conduct timely screening as a means of primary prevention in patients at increased risk, thus enabling a timely diagnosis of depressive disorder and subsequent early treatment, as well as to treat other diseases that can lead to depression.

CONCLUSION

The results obtained confirm the high incidence of depressive symptoms in the patients hospitalized in the geriatric ward. Depression is not a normal part of ageing and must be considered as a serious medical problem. Therefore, routine screening is necessary to identify the depressive symptoms, to detect and diagnose depression and to begin the treatment on time to improve the quality of life of the elderly.

Acknowledgements:

We are very thankful towards the linguistic assistance of the native English speaking Person Mr. Stuart Courteney.

Conflict of interest: None to declare.

Contribution of individual authors:

Bojan Miletic wrote the article.
Andrica Lekic made the statistical analysis.
Udo Courteney made the literature searches.

References

1. *Acciai F, Hardy M: Depression in later life: A closer look at the gender gap. Soc Sci Res 2017; 68:163-75*
2. *Almeida OP, Ford AH, Hankey GJ, Golledge J, Yeap BB, Flicker L: Depression, antidepressants and the risk of cardiovascular events and death in older men. Maturitas 2019; 128:4-9*
3. *Almeida PO: Prevention of depression in older age. Maturitas 2014; 79:136-4*
4. *Blazer DG: Depression in Late Life : Review and Commentary. J Gerontol A Biol Sci Med Sci 2003; 58:249-65*
5. *Casey DA: Depression in older adults: A treatable Medical Condition. Prim Care 2017; 44:499-510*
6. *Chen CT, Tung HH, Chen YC, Lee HF, Wang CJ, Lin WH: Depressive symptoms and nutritional status in the frail older adults. Arch Gerontol Geriatr 2019; 83:96-100*
7. *Fiske A, Wetherell JL, Gatz M: Depression in older adults. Annu Rev Clin Psychol 2009; 5:363-89*
8. *Glaesmer H, Riedel-Heller S, Braehler E, Spangenberg L, Luppa M: Age- and gender- specific prevalence and risk factors for depressive symptoms in the elderly: a population-based study. Int Psychogeriatr 2011; 23:1294-300*
9. *Harbottle L: The effect of nutrition on older people's mental health. Br J Community Nurs 2019; 24: S12-S16*
10. *Ismail Z, Fischer C, McCall WV: What Characterizes Late-Life Depression? Psychiatr Clin N Am 2013; 36:483-96*
11. *Jongenelis K, Pot AM, Eisses AMH, Beekman ATF, Kluiter H, Ribbe MW: Prevalence and risk indicators of depression in elderly nursing home patients. The AGED Study. J Affec Disord 2004; 83:135-42*
12. *Lehmann I, Chisholm D, Hinkov H, Höschl C, Kapocs G, Kurimay T et al.: Development of quality indicators for mental healthcare in the Danube region. Psychiatr Danub 2018; 30:197-206*
13. *Mitchell PB, Harvey SB: Depression and the older medical patient - when and how to intervene. Maturitas 2014; 79:153-9*
14. *Riedel-Heller SG, Weyerer S, Luppa M. Depression in old age: challenge for aging societies. Nervenarzt 2012; 83:1373-1378*
15. *Sheikh JL, Yesavage JA: Geriatric depression scale (GDS): recent evidence and development of a shorter version. Clin Gerontol:.Aging Ment Health 1986; 5:165-73*
16. *Sjöberg L, Karlsson B, Atti AR, Skoog I, Fratiglioni L, Wang HX: Prevalence of depression: Comparisons of different depression definitions in population-based samples of older adults. J Affect Disord 2017; 221:123-31*
17. *Smarr KL, Keefer AL: Measures of depression and depressive symptoms: beck depression inventory_II (BDI-II), Center for Epidemiologic Studies Depression Scale (CES-D), geriatric depression scale (GDS), hospital anxiety and depression scale (HADS), and patient health Questionnaiere-9 (PHQ-9). Arthrit Care Res 2011; 63(S11):454-66*
18. *Snowdon J: Depression in nursing homes. Int Psychogeriatr 2010; 22:1143-8*
19. *Tiong WW, Yap P, Koh GCH, Fong NP, Luo N: Prevalence and risk factors of depression in the elderly nursing home residents in Singapore. Aging Ment Health 2013; 17:724-31*
20. *Zhang H, Wang S, Wang L, Yi X, Jia X, Jia C: Comparison of the Geriatric Depression Scale-15 and the Patient Health Questionnaire-9 for screening depression in older adults. Geriatr Gerontol Int 2020; 20:138-43*

Correspondence:
Bojan Miletic, MD
Department of Rehabilitation and Geriatrics, Luzerner Kantonsspital Wolhusen
Spitalstrasse 50, 6110 Wolhusen, Switzerland
E-mail: bojan.miletic@luks.ch