LETTER TO THE EDITOR (CC BY-SA)



UDC: 614:616.89-053.9 https://doi.org/10.2298/VSP1912260132R

## Prevalence of depression in people over 65 years of age in Serbia – public health significance

Prevalencija depresije kod osoba starijih od 65 godina u Srbiji – javnozdravstveni značaj

To the Editor:

Depression, with 350 million affected people worldwide, is one of the leading mental health issues and a great public health concern. Depression is the second top medical condition among all illnesses and injuries based on Disability-Adjusted Life Year (DALY) <sup>1</sup>. It currently contributes to about 12% of the total number of years lived with disabilities, and if this trend continues, by 2030, depressive disorders will become the leading global diagnosis among the disease burden causes <sup>2</sup>.

Depression is manifested as low mood, loss of interest and satisfaction, with feelings of guilt and inferiority, sleep and appetite disorders, loss of energy, and poor concentration<sup>3</sup>. In contrast to the "normal" feeling of sadness that can occur in any person, depression in its strength, duration, and degree of dysfunction deviates from everyday mood swings<sup>4</sup>.

Depression, with its severe impacts on the personal, interpersonal, and social lives of the affected individuals, has been recognized as the most frequent mental health issue in the elderly (aged 65 and older) <sup>5</sup>. In addition to being a great source of disturbances in life quality and social functioning, depression increases morbidity, mortality, and disability; hence, it has significant social and economic outcomes <sup>6</sup>. Moreover, depressive symptoms among the elderly increase the risks of suicide <sup>7</sup>. Depressive episodes had been present in about 60% to 90% of those aged 65 and over who committed suicide <sup>8</sup>.

According to the World Health Organization (WHO) data, total depression prevalence among the elderly ranges from 10%-20%<sup>9</sup>. The prevalence rates of late-life depression are estimated at 8%-23% in Europe <sup>10</sup>, 13%-25% in India <sup>6</sup>, 15%-19% in America <sup>11</sup>, 23.6% in China <sup>12</sup>, 30% in Brazil <sup>13</sup> and 8% in Australia <sup>14</sup>, with more frequent occurrences in older women <sup>15</sup>.

There are very few studies of late-life depression in African countries, thus the issue remains largely under-

studied <sup>16</sup>. Huge variations in the prevalence of depression among the elderly stem from regional, racial, sociodemographic, and cultural diversity. However, they can also be seen as a result of the fact that the current surveys and studies have used different methods of data collection and geriatric depression assessment <sup>9</sup>.

The results presented were obtained through the evaluation of depression prevalence during the third Serbian Population Health Survey conducted by the Ministry of Health of the Republic of Serbia in 2013. The questionnaires used as instruments in this study were created in accordance with the questionnaires of the European Health Interview Survey (EHIS) - Second Wave (EHIS wave 2) 17. Depression was evaluated with the 8item Patient Health Questionnaire Depression (PHQ-8) scale <sup>18</sup>. The target population for this particular analysis were the individuals aged 65 and over who lived in private households in Serbia at the time of the data collection. The number of participants who fulfilled this age criterion was 3,540. The final sample of this study thus comprised 3,540 elderly adults. Based on the PHQ-8 score, 10% of the Serbian population aged 65 and over had a depressive episode. The results showed that the depression prevalence was twice higher in women (12.7%) than in men (6.5%). Mild depression symptoms were present in every fifth woman (21.2%) and every eighth man (12.7%). The average PHQ-8 value in the population aged 65 and over was 3.5 and was higher in the female (4.1) than in male (2.6) respondents (Table 1).

These results indicate the urgency of solving the issues of depression among the elderly as one of the priorities of public health in order to reduce the burdens of disability and enhance the overall health of the elderly. Thus, identifying the elderly population as a subpopulation that is at significant risk of developing depression is crucial. Therefore, early diagnosis and early treatment are vital factors in reducing the negative consequences that depression leaves on individuals and the community as a whole.

**Correspondence to:** Marija Sekulić, University of Kragujevac, Faculty of Medical Sciences, Department of Hygiene and Ecology, Svetozara Markovića 69, 34 000 Kragujevac, Serbia. E-mail: msekulic82@gmail.com

Table	1
Lanc	

PHQ-8 score	Sex		_	
	women	men	Total	p
	n (%)	n (%)	n (%)	
0–4 (no symptoms)	1,330 (66.1)	1,235 (80.8)	2,656 (72.5)	< 0.001
5–9 (subsyndromal depression)	427 (21.2)	194 (12.7)	621 (17.5)	
10–24 (depression)	255 (12.7)	99 (6.5)	354 (10.0)	
10–14 (moderate)	149 (7.4)	56 (3.7)	205 (5.8)	
15–19 (moderately severe)	65 (3.2)	28 (1.8)	93 (2.6)	
20–24 (severe)	41 (2.1)	15 (1.0)	56 (1.6)	
Total	2,012 (12.7)	1,528 (6.5)	3,540 (10.0)	
Average PHQ-8 score	4.1	2.6	3.5	< 0.001

PHQ – Patient Health Questionnaire.

Depression in the elderly can be controlled by providing opportunities for the elderly to be more involved and active in social events and activities. Besides, the financial support to the elderly and their financial independence would have a positive impact on their mental well-being. Moreover, raising public awareness of the mental struggles affecting older populations, early diagnostics, and the appropriate management of the most vulnerable groups would reduce their grief, enhance their life quality, and would eventually be beneficial for whole societies <sup>19</sup>.

We expect the results of this research to be the starting point for decision-makers and health policy-makers in our country in creating strategies to improve mental health and reduce depressive disorders in the elderly population. This can be done by promoting active and healthy aging, which involves creating conditions and environments that encourage well-being and enable people to lead integrated, healthy, and high-quality lives.

> Snežana Radovanović\*, Sanja Kocić\*, Marija Sekulić<sup>†</sup>, Gordana Ristić<sup>‡</sup>, Svetlana Radević\*, Katarina Janićijević\*

University of Kragujevac, Faculty of Medical Sciences, \*Department of Social Medicine, <sup>†</sup>Department of Hygiene and Ecology, <sup>‡</sup>Department of Dermatovenerology, Kragujevac, Serbia

## REFERENCES

- 1. *World Health Organization.* Depression and other common mental disorders: global health estimates. Geneva: World Health Organization; 2017.
- Buvneshkumar M, John KR, Logaraj M. A study on prevalence of depression and associated risk factors among elderly in a rural block of Tamil Nadu. Indian J Public Health 2018; 62(2): 89–94.
- 3. *World Health Organization*. The World Health Report 2001. Mental Health: New Understanding, New Hope. Geneva: World Health Organization; 2001.
- European Brain Council (EBC). Depression Fact Sheet. 2011 [cited 2019 February 14]. Available from: <u>http://ebcbrussels.org/wp-content/uploads/2015/07/Depressionfact-sheet-July-2011.pdf</u>
- Mirkena Y, Reta MM, Haile K, Nassir Z, Sisay MM. Prevalence of depression and associated factors among older adults at ambo town, Oromia region, Ethiopia. BMC Psychiatry 2018; 18(1): 338.
- Behera P, Sharan P, Mishra AK, Nongkynrih B, Kant S, Gupta SK. Prevalence and determinants of depression among elderly persons in a rural community from northern India. Natl Med J India 2016; 29(3): 129–35.
- Wright PP, Thorpe CW. Triple Threat Among the Elderly: Depression, Suicide Risk, and Handguns. J Emerg Nurs 2016; 42(1): 14–8.
- Kopp-Bigault C, Walter M. Prevention of suicide of the elderly in France. To a multimodal strategy against depression and isolation: CQFDi. Encephale 2019; 45 (Suppl 1): S35–7. (French)

- 9. *Rangaswamy SM*. World Health Report: Mental Health: New understanding New Hope. Geneva, Switzerland: World Health Organization; 2001.
- Barua A, Ghosh MK, Kar N, Basilio MA. Prevalence of depressive disorders in the elderly. Ann Saudi Med 2011; 31(6): 620-4.
- Li D, Zhang DJ, Shao JJ, Qi XD, Tian L. A meta-analysis of the prevalence of depressive symptoms in Chinese older adults. Arch Gerontol Geriatr 2014; 58(1): 1–9.
- 12. *Caboon CG*. Depression in Older Adults. Am J Nurs 2012; 112(11): 22–30; quiz 31.
- Nogueira EL, Rubin LL, Giacobbo Sde S, Gomes I, Cataldo Neto A. Screening for depressive symptoms in older adults in the Family Health Strategy, Porto Alegre, Brazil. Rev Saude Publica 2014; 48(3): 368–77. (England, Portuguese)
- Pirkis J, Pfaff J, Williamson M, Tyson O, Stocks N, Goldney R, et al. The community prevalence of depressionin older Australians. J Affect Disord 2009; 115(1-2): 54-61.
- 15. He G, Xie JF, Zhou JD, Zhong ZQ, Qin CX, Ding SQ. Depression in left-behind elderly in rural China: Prevalence and associated factors. Geriatr Gerontol Int 2016; 16(5): 638–43.
- 16. Reynolds CF 3rd, Dias A, Cohen A, Morse J, Anderson SJ, Cuijpers P, et al. Preventing Late-Life Depression: Lessons in Intervention Development From Goa, India. Innov Aging 2018; 1(3): igx030.
- 17. European Health Interview Survey (EHIS wave 2) Methodological manual 2013. Available from:

http://ec.europa.eu/eurostat/documents/3859598/592672 9/KS-RA-13-

- Kroenke K, Strine TW, Spritzer RL, Williams JB, Berry JT, Mokdad AH. The PHQ-8 as a measure of current depression in the general population. J Affect Disord 2009; 114(1-3): 163-73.
- 19. *Mitchell PB, Harvey SB*. Depression and the older medical patient--when and how to intervene. Maturitas 2014; 79(2): 153–9.

Received on December 26, 2019. Revised on August 26, 2020. Accepted on December 7, 2020. Online First December, 2020.