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## **Symptoms of depression and associated factors in persons aged 50 and over in Europe and Israel: Analysis of data from the SHARE project**

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### **Introduction**

It is estimated that by 2020 depression will be the second most common health problem affecting older people. Depressive disorders among the elderly, are often under-diagnosed and under-treated despite being one of the main causes of disability, resulting in an increased use of health services, poorer physical health and greater medical costs. The mean prevalence of depressive syndromes among elderly people has been reported to be 13.5% (Beekman *et al.*, 1999).

The objective of this study was to identify the variables associated with the presence of depressive symptoms in non-institutionalized individuals aged 50 and over.

## Method

### Design and study population

Cross-sectional study using data from Wave 5 (2013) of the Survey of Health, Ageing and Retirement in Europe (SHARE) (Börsch-Supan *et al.*, 2013). A total of 62,182 participants were included.

### Variables and instruments

Participants of 14 European countries and Israel, provided information about sociodemographic data (age, gender, marital status, education and employment status), self-rated physical health, frequency of physical exercise, performed activities, symptoms of depression using the EURO-D scale (Prince *et al.*, 1999), and quality of life using the CASP-12 (Hyde *et al.*, 2003).

### Statistical Analysis

The descriptive study of the participants' clinical and sociodemographic characteristics involved calculating measures of central tendency and dispersion for quantitative variables and absolute and relative frequencies for qualitative variables.

We studied the influence of each independent variable in relation to symptoms of depression calculating the effect sizes. We also performed a multiple linear regression analyses to determine the influence of the independent variables on existence of depressive symptoms.

The level of significance for comparisons was  $p < 0.05$ . The statistical analysis was performed using SPSS v22.0 for Windows (SPSS Inc., Chicago).

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### Results

The mean age of the participants was  $65.8 \pm 10.6$  years. The 30.4% scored above cut-off for depression ( $\geq 4$ ), with the mean score for the whole sample being  $2.5 \pm 2.3$ .

Symptoms of depression increased with age, were more frequently reported by women, widowed, those with less education and retired people. Poor perceived physical health, a lack of exercise and not engaging in activities were also associated with higher scores on the EURO-D. Quality of life was negatively correlated with symptoms of depression.

The predictor variables for symptoms of depression, based on the total EURO-D score, were poor perceived quality of life ( $\beta = 0.446$ ), poor self-perceived physical health ( $\beta = 0.204$ ), female gender ( $\beta = 0.162$ ), and not engaging in activities ( $\beta = -0.007$ ) (Table 1). Estonia (38.3%), Italy (36.5%), France (36.0%) and Spain (30.5%) had a frequency of depression ( $\geq 4$  Euro-D) higher than the average (30.4%), while the Nordic countries, Denmark (17.8%), Netherlands (20.7%) and Sweden (23.8%) had a lower frequency.

### Discussion

The analysis showed that the variables most strongly related to depressive symptoms were poorer self-perceived physical health, female gender, not engaging in activities and poor perceived quality of life.

Research has found that women reported more symptoms of depression than do men with different explanations for this circumstance. Some studies highlight the importance of biological factors related with the response to stress, while others focus on the fact that women are more likely to have impaired functioning as they get older (Buber and Engelhardt, 2011).

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Our findings regarding self-perceived physical health are consistent with studies showing that better general health is associated with fewer symptoms of depression among older adults. Physical health has also been shown to be positively correlated with social activity), whereas inequalities and/or financial difficulties have been linked to poor self-perceived health and more symptoms of depression. Research also shows that engaging in activities is associated with increased psychological wellbeing, since it leads to improved cognitive functioning and/or greater social involvement.

With respect to better quality of life, this not only helps prevent the emergence of depressive symptoms but also attenuates processes of functional decline. Similarly, better self-perceived quality of life has been directly related to increased activity and social involvement.

Finally, the results of depressive symptoms are in the same line than the findings of other authors, who also found a higher prevalence in Italy, France and Spain highlighting more pessimism and economic difficulties.

### **Conflict of interest**

None declared

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## References

- Beekman ATF, Copeland JRM, Prince MJ. 1999. Review of the community prevalence of depression in later life. *Br J Psychiatry* **174**: 307–11. DOI: 10.1192/bjp.174.4.307
- Börsch-Supan A, Brandt M, Hunkler C, *et al.*, on behalf of the SHARE Central Coordination Team. 2013. Data Resource Profile: The Survey of Health, Ageing and Retirement in Europe (SHARE). *Int J Epidemiol* **42**(4): 1-10. DOI: 10.1093/ije/dyt088.
- Buber I, Engelhardt H. 2011. The association between age and depressive symptoms among older men and women in Europe. Findings from SHARE. *Comparative Population Studies* **36**(1): 103-125. DOI: 10.4232/10.CPoS-2011-02en.
- Hyde M, Wiggins RD, Higgs P, Blane DB. 2003. A measure of quality of life in early old age: the theory, development and properties of a needs satisfaction model (CASP-19). *Aging Ment Health* **7**: 86-94. DOI: 10.1080/1360786031000101157.
- Prince MJ, Reischies F, Beekman ATF, *et al.* 1999. Development of the EURO-D scale – a European Union initiative to compare symptoms of depression in 14 European centers. *Br J Psychiatry* **174**(4): 330-338. DOI: 10.1192/bjp.174.4.330.

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Table 1. EURO-D and factors: Multiple linear regression

EURO-D	$r^2 = 0.359$	$\beta$	$p$	$r$	CC
Quality of life (CASP)		-0.446	< <b>0.001</b>	-0.54	24.3
Physical health	(Poor)	0.204	< <b>0.001</b>	0.39	8.2
Gender	(Female)	0.162	< <b>0.001</b>	0.20	3.3
Activities last year	(No)	-0.007	< <b>0.001</b>	-0.18	0.1
$F$ (df), $p$		(4-60,497)	< <b>0.001</b>		
Collinearity: Tol. / VIF.		0.75-0.99 /	1.00-1.33		

$F$  = ANOVA;  $r^2$ , coefficient of determination;  $\beta$ , standardized beta coefficient;  $r$ , Pearson correlation (zero-order); CC, contribution coefficient (%),  $[(\beta \cdot r) \times 100]$ . Tol, tolerance; VIF, variance inflation factor;  $p$ -values <0.05 are shown in bold.

EURO-D = Depression scale; CASP-12 = Quality of life