
Depression And Social Involvement Among Elders

H Abu-Rayya

Citation

H Abu-Rayya. *Depression And Social Involvement Among Elders*. The Internet Journal of Health. 2005 Volume 5 Number 1.

Abstract

The present study has two aims: first, to explore how social involvement changes by age among European elders, and second, to disclose the relationship by age between social involvement and depression among study participants. The study used data from the Ageing and Retirement in Europe database (SHARE; 2004), subjecting a sample of 10207 elders aged 65 or older (Mean age = 73.84, SD = 6.84) to analysis in terms of the study questions. About 45% of the participants (n = 4601) were males and the remainder females (n = 5606). Study results determined that, without notable gender differences, European elders participate less in social activities with increasing age to statistically significant degrees; younger elders tend to be more socially involved and older elders less so. Symptoms of depression also emerged as negatively correlated with social involvement to statistically significant degrees when age was partialled out for both males and females. The study's findings imply that by increasing their social participation, European elders might be able to stave off feelings of depression.

INTRODUCTION

People's later years can be a time of rest, relaxation and retirement, as elders enjoy life with their spouses, children and grandchildren. Ageing, on the other hand, is understood to bring with it an abundance of emotional challenges. More specifically, late life depression has been identified as one of the most common mental health problems affecting elders. It is estimated that by the year 2020 depression will have risen from fourth to second amongst health conditions worldwide, taking into consideration associated disability and premature mortality (1). The prevalence of depression in the U.S. total population, for instance, has been measured at 1% (1.4% in females, 0.4% in males) (2). However, nearly 16% (5 out of 31 million) Americans who are 65 years or older are estimated to be clinically depressed (3). Comparable figures have been offered for European elders (4). Depression tends to last longer in elderly adults; it increases the risk to death and constitutes the most common diagnosis in elders who commit suicide (5, 6). It is estimated that individuals age 65 or older account for 19% of all such deaths (5, 6).

Additionally, elderly adults with depression are more likely to commit suicide than younger people who may be so characterized (7).

Depression in later life frequently coexists with other medical illnesses and disabilities. It can be triggered by a range of long-term illnesses to which later life is particularly prone, such as diabetes, stroke, heart disease, cancer, chronic lung disease, Alzheimer's, Parkinson's, and arthritis (3, 8).

Alongside physical conditions that accompany depression or conduce to it, multiple social factors may worsen elders' psychological conditions. Such factors include the loss of family members, friends, work, and social status—all changes that emphasize the relative lack or loss of control associated with this stage of life (9). A decline in social involvement and in getting support, however, may be the most prominent factor in the deteriorating psychological life of elders (10). Unlike other social factors, though, elders' degree of social involvement is susceptible to alteration. Contact with others, whether at social clubs, religious associations and assemblies, or friends' get-togethers, may provide purpose and meaning in elders' life. Further, sharing interests, thoughts, and enthusiasms with others may help elders to maintain strong connections to the community, expose them to new people of different age groups, and stimulate them mentally. Social support and involvement can in this way help combat loneliness and depression and keep elders physically and psychologically active, conducing to their feelings of having a lot to offer and to the amelioration of their sense of confidence, self-worth and wellbeing.

Much progress has been made in understanding the prevalence, diagnosis, aetiology, and psychiatric treatment of later life depression in primary care settings. Less research, however, has examined social involvement in later life and its impact on elders' feelings of depression. The first goal of the present study was to explore changes in social

involvement by age among European individuals aged 65 or over. In this way, the study set out to investigate the common hypothesis that involvement declines with increasing age. Second, the study examined the relationship between social involvement and depression by age among participants. This question set out to determine the nature and extent, if any, of the correlation between declining participation and feelings of depression. Finally, it tested its results for consistency across the males and females of the study cohort.

METHOD

PARTICIPANTS

The study used data from the Cross-European Survey of Health, Ageing and Retirement in Europe (SHARE; 2004). Available data code information for 22,777 continental European individuals over the age of 50 distributed across 10 European countries. This multidisciplinary survey asked a number of multi-faceted questions to participants, including those of an emotional and psychosocial nature. For the purposes of the present study, only individuals aged 65 or over (N = 10207) were included in the analysis. The average age of the actual participants was 73.84 (SD = 6.84), with participants falling in a range of between 65 and 104. As summarized in Table 1, about 45% of the participants (n = 4601) were males and the remainder females (n = 5606). Table 2 further shows, that for the total sample after categorizing age, the most frequent age categories were 65-69, 70-74, and 75-79. The categories 80-84 and 85+ were less common. This held true for male and female participants.

Figure 1

Table 1: Demographic characteristics of the sample by gender

Variable		p-value
Sex*		
Male	54.93% (n = 5606)	.001
Female	45.07% (n = 4601)	
Mean age**		
Male	73.24 (SD = 6.44)	.001
Female	74.33 (SD = 7.11)	

*. Chi-square test showed that the number of elder females in the sample was statistically significantly higher than the number of male participants, $\chi^2_{(1)} = 98.95, p < .001$. **. T-test showed that age was statistically significantly higher for females, $t_{(10205)} = 8.08, p < .001$.

Figure 2

Table 2: Distribution of the sample by age category and gender

Age category*	Gender**		Total
	Male	Female	
65-69	15.70% (n = 1605)	17.20% (n = 1753)	32.90% (n = 3358)
70-74	12.60% (n = 1284)	14% (n = 1430)	26.60% (n = 2714)
75-79	9.20% (n = 938)	11% (n = 1122)	20.20% (n = 2060)
80-84	5% (n = 513)	7.40% (n = 751)	12.40% (n = 1264)
85+	2.56% (n = 261)	5.34% (n = 550)	7.90% (n = 811)

*. Chi-square test revealed that the most frequent age categories for the total sample were the first three (65-69, 70-74, 75-79), $\chi^2_{(4)} = 2108.55, p < .001$. **. Chi-square test showed that, compared to females, males were statistically significantly more common in the first two age categories (65-69, 70-74) and less common in the last two categories (80-84, 85+), $\chi^2_{(4)} = 80.43, p < .001$, i.e. the sample had more younger males and more elder females. Frequency of males and females was statistically non-significant in the age category 75-79.

MEASURES

DEPRESSION

Levels of depression among participants in the SHARE survey were measured using the EURO-D 12-item scale, as this has been validated in earlier cross-European studies of depression prevalence (9, 11). Respondents were asked questions with reference to presence of feelings of depression, pessimism, wishing death, guilt, irritability, tearfulness, fatigue, sleeping troubles, loss of interest, loss of appetite, reduction in concentration, and loss of enjoyment over the last month. Answers of respondents were coded either 1 = 'presence of feeling' or 0 = 'absence of feeling'. The sum of depression symptoms can thus range between 0 and 12, with a higher sum indicative of higher degrees of depression. The Cronbach's alpha reliability of the EURO-D scale in the present study was .73.

SOCIAL INVOLVEMENT

The SHARE survey did not feature a unified or explicitly designated scale intended to measure the social involvement of participants. Instead, participants were asked seven yes/no questions relating to their possible involvement in different social activities over the last month. Participants' answers were again coded in binary fashion by either 1 = 'presence of involvement' or 0 = 'absence of involvement'. The questions referred to participation in voluntary or charity work, caring for a sick or disabled person, providing help to family/friends/neighbours, attendance of an educational or training course, going to a sport or social club, taking part in a religious organization, and taking part in a political or community organization. The present study used the sum of answers to indicate the level and diversity of participants' social involvement.

RESULTS

CHANGE IN SOCIAL INVOLVEMENT BY AGE

Results showed participants to be socially involved to only a low degree. About 58% did not show any sort of involvement, 28% showed involvement in one activity, 9% showed involvement in two different activities, and just 5% were involved in three or more different social activities. Spearman's correlation between age and sum of social involvement activities was statistically significantly negative, $r_s = -.18, p < .001$. This held true for both males, $r_s = -.16, p < .001$, and females, $r_s = -.19, p < .001$. A 2 (gender) X 5 (age category) ANCOVA, in which the sum of depression symptoms was partialled out, revealed that the social involvement of the participants differed statistically significantly as a function of age category, $F(4, 10196) = 55.43, p < .001$, but not by gender or gender X age category interaction. Specifically, Tukey paired comparisons revealed that participants in the age category 65-69 showed consistently statistically significantly more social involvement compared to those in each subsequent age category. The social involvement of participants in the age categories 70-74 and 75-79, while was statistically significantly lower than involvement among elders in the age category 65-69, came out statistically significantly greater than social involvement among participants in the subsequent age categories, 80-84 and 85+. Participants in the higher age categories, 80-84 and 85+, showed non-different degrees of social involvement, although these remained statistically significantly lower than the involvement of the other age categories. Mean social involvement scores and standard deviations for each age category are presented in Table 3.

Figure 3

Table 3: Social involvement scores by age category

Age Category	N	%	Mean
65-69	3358	32.90	.80 _a
70-74	2714		
75-79	26.60	.67 _b	.95
80-84	2060		
85+	20.20	.58 _b	.87
	1264		
	12.40	.42 _c	.73
	811		
	7.90	.30 _c	.65

Note. Based on Tukey paired comparisons, means having different subscripts differed significantly ($p < .001$).

LINKS BETWEEN SOCIAL INVOLVEMENT AND DEPRESSION BY AGE

Depression emerged as statistically significantly negatively correlated with social involvement when age was controlled for, $r_s = -.13, p < .001$. This result was replicated for both males, $r_s = -.13, p < .001$, and females, $r_s = -.12, p < .001$. As summarized in Table 4, the relationships were consistently statistically significantly negative in each gender X age category. Depression showed a statistically significant positive correlation with age after partialling out social involvement, $r_s = .14, p < .001$. This result again held true both for males, $r_s = .15, p < .001$, and females, $r_s = .12, p < .001$. ANCOVA analysis, in which social involvement and age were controlled for, revealed that female elders reported statistically significantly higher levels of depression (Mean = 2.81, SD = 2.41) than did males (Mean = 1.84, SD = 2.01), $F(1, 10204) = 469.91, p < .001$.

Figure 4

Table 4: Spearman's correlations among social participation and depression by age category

	65-69	70-74	75-79	80-84	85+
Total sample	-.11*	-.14*	-.15*	-.12*	-.16*
Male	-.11*	-.12*	-.20*	-.14*	-.13*
Female	-.11*	-.17*	-.12*	-.11*	-.16*

*. Correlation was significant at $p < .001$ (2 tailed).

DISCUSSION

The first purpose of the present study was to disclose how social involvement changes by age among European elders of the age 65 or over. Findings generally suggest that

European elders were socially involved only to slight degrees, with almost equal numbers being observed reporting and not reporting any degree of social participation. This finding, however, cannot precisely explain elders' social activities without reference to elders' different ages. The study found that, without notable gender differences, European elders tend to participate less socially with increasing age, suggesting the observance of a greater measure of social involvement among younger elders and a lesser among older. A closer look at this relationship, after controlling for symptoms of depression which interfered with the correlation of variables, revealed that elders in the age category 65-69 showed the highest degrees of social involvement; this degree of involvement was higher than for any other age category. The social involvement of European elders remains stable across the age categories 70-74 and 75-79, thereafter declining with elders' transition to the age categories 80-84 and 85+, across which it again remains unaltered. Gender did not seem to mediate this relationship.

As far as the pattern of change of depression by age is concerned, the analyses in this study revealed a positive correlation of depression symptoms with age for both genders after controlling for social involvement. In this respect, the finding accords with multiple research findings confirming a tendency for depression symptoms to increase with increasing age (9, 11,12). Female elders in the present study reported higher levels of depression compared to males when social involvement and age were partialled out. This finding confirms previous research results. Indeed, gender differences in reported depression symptoms and syndromes in favour of females are among the most robust findings in psychiatric epidemiology research (9,11,13). Prince et al (9), for instance, have reported a greater incidence or preponderance of depression symptoms among women in 10 out of 14 European centres, with no tendency for gender differences to attenuate with increasing age across the age range of 65 to 90 years.

The second central purpose of the study was to examine the relationship between social involvement and depression by age among study participants. In this respect, depression symptoms emerged as being negatively correlated with social involvement when age was controlled for; the same conclusion held true for both males and females. The relationships were consistently negative in each gender X age category (65-69, 70-74, 75-79, 80-84, 85+). It would be suggested, therefore, that it might be possible to combat feelings of depression in elders through taking steps to

(encourage them to) increase their levels of social participation. Even though it was found that elder women are more subject to depression than men, this suggestion may be of equal value to elder men and women of any age. The number of elders of the age of 65 or older is expected to increase substantially in many countries within the next 50 years, meaning that there is a clear need to reflect on how the quality of life of elder citizens may be improved. The present study proposes, in this regard, that a diverse and intense program of social involvement, in the form of participation in voluntary or charity works, educational or training, sport or social clubs, and religious, civic and political activity etc., may offer some scope for the primary prevention of later life depression in elders.

It must be noted that this study is limited insofar as it only notes correlation between results, rather than causality. Second, the relations it made out between age, levels of social involvement, and depression were not strong. Lastly, the interference or effect of cognitive impairment and other factors on depression symptoms and social involvement among the participants were not estimated.

ACKNOWLEDGMENT

This study used data from the early release 1 of SHARE 2004. The SHARE data collection was primarily funded by the European Commission through the 5th framework programme (project QLK6-CT-2001-00360 in the thematic programme "Quality of Life"). Additional funding came from the US National Institute on Ageing (U01 AG09740-13S2, P01 AG005842, P01 AG08291, P30 AG12815, Y1-AG-4553-01 and OGH04-064). Data collection in Austria (through the Austrian Science Fund, FWF), Belgium (through the Belgian Science Policy Office) and Switzerland (through BBW/OFES/UFES) was nationally funded in each case. The SHARE dataset is introduced in Börsch-Supan et al. (2005); methodological details may be found in Börsch-Supan and Jürges (2005).

CORRESPONDENCE TO

Hisham Motkal Abu-Rayya, Åbo Akademi University, PB 311, FIN-65101 Vasa, Finland, Fax: +358 6 3247 491. ahisham@abo.fi or abu_rayyahisham@hotmail.co.uk

References

1. Murray CJL, Lopez AD. Global mortality, disability, and the contribution of risk factors: Global burden of disease study. *Lancet* 1997; 349: 1436-42.
2. Alexopoulos GS, Katz IR, Reynolds CF, Carpenter D, Docherty JP. The expert consensus guideline series. Pharmacotherapy of depressive disorders in older patients.

Postgrad Med 2001. Accessed April 21, 2004, at: <http://www.psychguides.com/Geriatric%20Depression%20LP%20Guide.pdf>.

3. Boswell EB, Stoudemire A. Major depression in the primary care setting. *Am J Med* 1996; 101: 3S-9S.
4. Copeland JRM, Beekman ATF, Dewey ME, Hooijer C, et al. Depression in Europe: Geographical distribution among older people. *Br J Psychiatry* 1999; 174: 312-21.
5. Suicide among older persons--United States, 1980-1992. *MMWR Morb Mortal Wkly Rep* 1996; 45: 3-6.
6. Ganzini L, Smith DM, Fenn DS, Lee MA. Depression and mortality in medically ill older adults. *J Am Geriatr Soc* 1997; 45: 307-12.
7. Alexopoulos G. *Pharmacotherapy of depressive disorders in older patients*. Minneapolis: McGraw-Hill Healthcare Information, 2001.
8. Callahan CM, Dittus RS, Tierney WM. Primary care physicians' medical decision making for late-life depression. *J Gen Intern Med* 1996; 11: 218-25.

9. Prince MJ, Harwood RH, Thomas A, Mann AH. A prospective population-based cohort study of the effects of disablement and social milieu on the onset and maintenance of late-life depression. The Gospel Oak Project VII. *Psychol Med* 1998; 28(2): 337-50.
10. Richard B, Birrer MD, Sathya P, Vemuri MD. Depression in later life: A diagnostic and therapeutic challenge. *Am Fam Physician* 2004; 69, 10, May 15.
11. Prince MJ, Reischies F, Beekman ATF, Fuhrer R, et al. Development of the EURO-D scale- a European Union initiative to compare symptoms of depression in 14 European centers. *Br J Psychiatry* 1999a; 174: 330-38.
12. Ernst C, Angst J. Depression in old age: Is there a real decrease in prevalence? A review. *Eur Arch Psychiatry Clin Neurosci* 1995; 245: 272-87.
13. Jorm AF. Sex and age differences in depression: A quantitative synthesis of published research. *Aust N Z J Psychiatry* 1987; 21: 46-53.

Author Information

Hisham Motkal Abu-Rayya, Ph.D.

The Unit of Psychology, Åbo Akademi University