THE PREVALENCE OF DEPRESSION IN ELDERLY LIVING AT HOME IN EASTERN TURKEY: ERZURUM

Mine Ekinci, Ph.D[a], Gülbu Tortumluoğlu, Ph.D[b*], Ayşe Okanlı, Ph.D[a]

Serap Sezgin, Msc[a]

[a] Department of Psychiatric Nursing, Atatürk Universty, Erzurum, Turkey

[b] Department of Public Health Nursing Atatürk Universty, Erzurum, Turkey

Abstract

Objective: To assess the prevalence of depressive symptoms among elderly people who live at home.

Design: This research was carried out as cross-sectional between March 2001 and September 2002 so as to determine the depression prevalence in the elderly people living in Abdurahman Gazi Primary Health Care Region in Erzurum.

Method: The study population consisted of 1097 elderly people (65 and over) who live in Abdurahman Gazi Primary Health Care Region. At the selection of the samples, the formula which is used in known population frequency researches was practiced and samples were found as 300.

Results: The prevalence of depression symptoms was found to be 58.3 % (n=175) in the total study population 45.1% (n=79) in male subjects and 54.9% (n=96) in female subjects).

Conclusion: In the light of these data, multidisciplinary approach is required for preparing social arrangements enhancing family and community support and home car efor elderly subjects.

Key words: elderly people, living at home, the prevalence of depression, Turkey

*Corresponding author, E-mail: gulbut@atauni.edu.tr, gtortumluoglu@ yahoo.com
Lecturers, Nursing College, Atatürk University, 25240, Erzurum, Turkey.

Introduction

The population in Turkey, over 60 years of age showed an increase of 23% between 1985 and 1990 whereas the total population of the country was increased by 11%. The number of those years of age increased by 42.9, and the number of those older than 65 rose by 13.7% in the same period. [1] Turkey has a younger population than the industrialized countries, and traditional relationships and family structure have been maintained. The most of the problems of the elderly people are solved at home. Old people's homes, where elderly people live together, increased in number in Turkey in the past few years.[2]

We assume that the situation may have different aspects in our country, due to the traditional social relationships and protective role of the family in Turkey. It is well known that most of problems of the elderly subjects are solved at home. [2] A total of 6.5 % of the population is over 60 years old in Turkey. [1] Among the studies carried out in our country, Yamlı et al. [3] have investigated 52 elderly people and reported that depression is at normal levels in 41% , slight in 27%, medium in 19% and severe in 13%. On the other hand, Önal et al. [4] defined depression at 47.3% elderly people as well.

Since depression is an important and common mental problem in late life, there are many epidemiological investigations on depression and depressive symptoms in the elderly. Geriatric depression is one of the most frequent and debilitating mental disorders in older populations.[2,5-7] In fact, depression is a disease rather than a normal party of aging In late life, it is often difficult to identify, as some depressed individuals may not have sad mood or present prominent anhedonia. [8]

This will probably make depression in the elderly an important health problem in the near future. Little is known about depression in Turkish elderly people.[9] We believe that this and other studies will contribute to health planning for the future.

Background

Many people are familiar with all symptoms that characterize depression, and they may not know that people of different cultures can report or express depression differently. Depression also can go undetected among health care professionals.[7,10,11] Unrecognized and inadequately treated depression can increase mortality, and cause disability and suffering to patients and their families.[8]

© International Journal of Human Sciences ISSN: 1303-5134
www.InsanBilimleri.com

3

Mine Ekinci, Gülbu Tortumluoğlu, Ayşe Okanlı: *The Prevalence Of Depression In Elderly Living At Home In Eastern Turkey: Erzurum*

The frequency of depression is estimated to be between 1-60 % depending on characteristics of the groups being investigated, the purpose of a study and study methods being utilized.[5-7] On the other hand, other researchers have reported that the prevalence of affective disorders in elderly people has been estimated to range between 5% and 60%.[2,5-7] At least 4% of elderly subjects living in the community suffer from a major depressive disorder and some 15% from less severe forms of depressive illness.[12] Kirby et al.,[13] found this ratio to be 10.3% of elderly people in Ireland and Ambo et al.,[14] found it was 6.4% in Japan.

There is a relationship between the prevalence and severity of depression and some variables. Some studies have documented that the prevalence of depression was higher among the physically ill, in widowhood, lack of social support and social ties, loneliness, women, and older people.[2,15-19] On the other hand, Fernandez et al.,[20] reported that variables such as less income, less educated, chronic health conditions and retirement were determinants in levels of depression symptomatology. Furthermore, Pahkala[15] revealed that weakness of family ties and other social relationships increase the prevalence of depression.

Old age can not be prevented, but living this period healthy, happily and satisfied can be facilitated. Family is the most important powerful source for elderly people. It is claimed that close family relationships around elderly people may be an important protective factor for depression.[21,22]

Aims

The study had the following aims:

- To assess the prevalence of depressive symptoms among elderly people who live at home.

- To investigate relationships between the prevalence of depression and some variables (age, gender, education, marital status, chronic illness, and family environment and living arrangements).

Material and methods

Design

This research was carried out as a cross-sectional study between March 2001 and September 2002 so as to determine the depression a prevalence in elderly people living in Abdurahman Gazi Primary Health Care Region in Erzurum.

Sample

The study population consisted of 1097 elderly people (65 and over) who live in Abdurahman Gazi Primary Health Care Region. The reason why the sub- level of old age is 65 is both there is not a generally accepted way of thought about the beginning of old age, and 65 is the most frequently used old age sub- level. In the literature the old are classified as old aged who are between 60-75 and as advanced old aged who are 75 and over.[23]

At the selection of the samples, the formula which is used in known population frequency researches was practiced and samples were found as 300. The formula:

$(n= N . t^2 . pq / y2 .(N-1) + t^2 . pq).$

Ethics

Before the study, permissions from the related institutions had been taken, voluntary attendance of the old had been obtained and the ones who chose not to attend were not included in this study.

Measurement

In the collection of data related to demographic characteristics of elderly subjects, Geriatric Depression Scale (GDS) [24] and a socio demographic information form were used. Socio-demographic information form is used in face to face interviews to determine socio- demographic features such as age, gender, education, marital status, chronic illness, satisfied about their family environment, and living arrangements in the study subjects.

Data on depressive symptoms were collected by using the Turkish version of GDS. A questionnaire especially developed as screening instrument of depressive symptoms for elderly populations.

GDS was developed by Yesavage et al. [24] and adapted to the Turkish by Ertan and Eker .[24] Tis scale' cut off score is 14 (sensivity 80%, specifity 100%). The GDS is a 30-item questionnaire to which subjects respond by indicating yes or no to questions about depressive symptoms.[9]

Procedure

Questionnaires were completed by researchers; and the period (10-15 min.) suitable for elderly people's condition was fixed for each questionnaire. All the subjects were interviewed by 3 psychiatric nurses and 1 public health nurse.

Mine Ekinci, Gülbu Tortumluoğlu, Ayşe Okanlı: *The Prevalence Of Depression In Elderly Living At Home In Eastern Turkey: Erzurum*

Variables

Demographic features (age, gender, education, marital status, chronic illness, and family environment and living arrangements) are the independent variables of the research. The score of the GDS is the dependent variable.

Data analysis

Analysis of data was done on computer. For the statistical evaluation of the data, mean, chi-squre and independent-samples t test were used. A p value less than 0.05 was accepted as significant.

Limitations

Formal diagnosis of depression was not available. The data were collected a cross- sectionally. Future studies should include larger samples from different regions in Turkey. The findings therefore cannot be generalized to all elderly people in Turkey.

Results

The mean age and standard deviation of the study group was 69.60 $\pm$5.6 years; the ages of 83% (n=249) of the subjects were between 65-74 years. 54.7% (n=164) were males, 32.7% (n=98) were widows, 43.7% (n=131) were illiterate, 81.3 % (n=244) had a health assurance and 65.3% (n=196) had a history of chronic diseases. About 39.7% (n=119) have been living with their children and 63.3% (n=190) stated that they were satisfying from their family environment (Table 1).

The mean monthly income of the elderly people was 245.1$\pm$82.6 million Turkish Liras (making approximately 150 ($\pm$50) U.S. dollars).

The prevalence of depression symptoms was found to be 58.3 % (n=175) in the total study population. The prevalence of depression was found to be 45.1% (n=79) in male subjects and 54.9% (n=96) in female subjects (Table 1).

In the prevalence of depression in the elderly population, some parameters a such as gender (x^2= 15.372, p<0.001), education (x^2= 32.869, p<0.001) monthly income (t = 5.179, p <0 .000), marital status (x^2=7.317, p<0.01), the presence of chronic disease, (x^2= .8.242, p<0.01), satisfaction from the family environment (x^2= 13.093, p<0.001) and living arrangements (x^2=14.014, p<0.01) have statistically significant effect on depression prevalence. Nevertheless,

different age groups (x^2= 1.745, p>0.05) and social assurance status (x^2=0.161, p>0.05) did not have any significant effect on the prevalence.

The prevalence of depression was found to be significantly high in the subjects who where illiterate (57.1%), married (61.1%), had chronic disease (72.0%), where living together with children (48.6 %) and unsatisfied with the family environment (54.9%). On the other hand, various age groups and presence of assurance status did not produce a statistically significant difference in terms of depression prevalence.

Discussion

In the present study, our aim was to determine the prevalence of depression among cognitively normal elderly individuals living at home one region of Turkey. At the end of this study, we have observed that 58.3% (n=175) of the total study population were suffering from depressive symptoms (45.1% in males and 54.9% in females). The prevalence of the depression in elderly subjects as shown by this study was comparatively higher than those of previous studies. A number of investigators have estimated the prevalence of depressive symptoms among community–dwelling elderly people to be between 6.4% and 22.3 % .[14,25-29] However, some studies from various regions of Turkey reported similar prevalence rates to our own. [2-4,30,31] Since the measurements of depressive symptoms were different; we can make no conclusion as to the similarity of these results. Turkish elderly people, tend to somatize their psychological distress. Use of health care services is further limited by other barriers, including access problems, preference for folk treatments, and problems in the process of assurance systems.

In this study, although different age groups did not have any significant effect on depression prevalence, it increased with age. Depression is commonly found among elderly subjects as shown in previous studies reporting age effect [17,27,32] although a study has not shown any age effect.[33]

In the prevalence of depression in the elderly population, gender was found to have on effect. As for gender difference, we found that elderly females were more depressed than elderly males. Some studies have reported the same gender difference. [2-4,10,14,26,29,30,32,34]

The prevalence of depression was found to be significantly high in the subjects who where illiterate (57.1%) Less education was a risk factor for depression in some studies.[7,10,35,36]

Marital status is another factor. Depression was significantly higher among married people. However in many studies, widowhood and loneliness have been considered as risk factors for

Mine Ekinci, Gülbu Tortumluoğlu, Ayşe Okanlı: *The Prevalence Of Depression In Elderly Living At Home In Eastern Turkey: Erzurum*

depression in both sexes.[2,4,7,16,30,34,35] Our findings were not in agreement with the previous studies. This condition may be attributed to different family structure and culture seen in eastern Turkey.

Depression prevalence was found to be higher in elderly people suffering from a chronic illness. Various studies have reported that the prevalence of depression was higher among physically ill and disabled elderly people.[2,3,7,10,14,17,28,30,35,37,38]

As expected elderly people who are satisfied with their family environment had a lower depression prevalence.

In our study, depression was more prevalent among elderly people living with children. However, various studies found higher values in the elderly people living alone.[18,19,28,36,39,40] This situation emphasizes the importance of loneliness as a risk factor for depression. This discrepancy between our study and the literature may be explained by a small number of alone cases (n=13) included in the present study.

Monthly income is another important factor determining the depression prevalence financial problems in later life are associated with increased depressive symptoms.[20,26,34,35,41,42] Wilson et al.,[43] found that socio-economic deprivation among older community residents was associated with high prevalence and incidence of depression. Our results confirm this condition.

Conclusion

The results of the study, depression prevalence was found to be 45.1% (n=79) in male subjects and 54.9% (n=96) in female subjects. The prevalence of depression was found to be significantly high in the subjects with illiterate, married, chronic disease, living together with children and unsatisfied from family environment. On the other hand, various age groups and presence of assurance status did not produce a statistically significant difference in terms of depression prevalence.

In the light of these data, multidisciplinary approach is required for preparing social arrangements enhancing family and community support and home care for elderly subjects.

References

1. STATISTICAL YEARBOOK OF TURKEY. Ankara: State Institute Of Statistics, Printing Division, 1999.

2. BEKAROĞLU M,ULUUTKU N, TANRIOVER S, KIRPINAR I. Depression in an elderly population in Turkey. Acta Psychiatr Scand, 1991;84:174-178.

3. YAMLI , MIHOGLU A, H KESKINTAS N. Kurumda yaşayan yaşlılarda beck ve cornell depresyon envanterleri sonuçlarının değerlendirilmesi. Ulusal Yaşlılık Sempozyumu 23-26 Mart 2000. (in Turkish).

4. ONAL E, TUMERDEM Y, ARI D. Istanbul Halkalı sağlık ocağı bölgesinde yaşlılarda depresyon prevalansı. Ulusal Yaşlılık Sempozyumu 23-26 Mart 2000. (in Turkish).

5. BLAZER DG, KESSLER RC, McGONAGLE KA, SWARTZ MS. The prevelance and distrubition of major depression in a national comunity sample: The National Comorbidity survey. Am. J. Psychiatry, 1994;151: 979-986.

6. WU L, ANTONY JC. The estimated rate of depressed mood in US adults. Recent evidence for a people in later life. J Affect Disorder, 2000; 60:159-171.

7.ALEXOPOULOS GS. Mood disorders. In: KAPLAN HI, SADOCK BJ, eds. Comprehensive Textbook of Psychiatry/6. Lippincott Williams and Wilkins, Baltimore. 1995: 2566-2568.

8. ALEXOPOULOS GS, BUCKWALTER K, OLIN J, MARTINEZ R, WAINSCOTT, KRISHNANR. Comorbidity of late life depression: an opportunity for research on mechanism and treatment. Biol Psychiatri. 2002;52: 543-558.

9. ERTAN T, EKER E. Reliability, validity of the geriatric depression scale in Turkish elderly :are there different factor structures for different cultures? Int Psychogeriatr. 2000;12: 163-172.

10. EKER E. Yaşlılık dönemi depresyonları. Psikiyatri Dünyası 1998;2:45-51. (in Turkish).

11.GUERRERO-BERROA E, PHILIPS RS. Health care paraprofessionals' awareness of the symptoms of geriatric depression. J.Psychosoc Nurs Ment Healr Serv. 2001;39:14-20.

12. STRNAD J, BAHRO M. Depression in old age. Schweiz Med Wochenschr. 1999;21: 1162-70.

13. KIRBY M, BRUCE I, RADIC A, COAKLEY D, LAWLOR BA. Mental disorders among the community-dwelling elderly in Dublin. Br J Psychiatry, 1997;171:369-372.

14. AMBO H, MEGURO K, ISHIZAKI J. Depressive symptoms and associated factors in a cognitively normal elderly population: the Tajiri Project. Int J Geriatr Psychiatry, 2001; 16: 780-788.

15. PAHKALA E. Social and environmental factors and depression in old age. Int J Geriatr Psychiatry , 1990:5.

16. HENDRIE HC, CROSETT JHW. An overview of depression in the elderly. Psychiatry Ann, 1990;20:64-70.

17. BAKER EM, OKWUMABUA J, PHILIPOS V, WONG S. Depression among elderly for the presence of depressive symptoms: A preliminary investigation. Journal of Geriatric Psyciatry and Neurology, 1996;9:127-132.

18. HAGERTY BM, WILLIAMS RA. The effects of sense of belonging, social support, conflict, and loneliness on depression. Nurs Res, 1999;48:215-219.

19. CORNMAN JC, GOLDMAN N, GLEI DA, WEINSTEIN M, CHANG MC. J Aging Health. 2003;15: 616-644.

20. FERNANDEZ ME, MUTRAN FJ, REITZES DC, SUDHA S. Ethnicity, gender,and depressive symptoms in older workers, The Gerontologist, 1998;38:71-79.

21. COPELAND JR.M, BEEKMAN ATF, DEWEY ME, et al. Depression in Europe. Gegraphical distrubition among older people. British Journal Of psychiatry. 1999;174: 312-321.

22. OZTEK Z, KUBILAY G. Toplum Sağlığı ve Hemşireliği. Somgür Yayıncılık, Ankara. 1996.

Mine Ekinci, Gülbu Tortumluoğlu, Ayşe Okanlı: *The Prevalence Of Depression In Elderly Living At Home In Eastern Turkey: Erzurum*

23. ÖRNEK T, BAYRAKTAR E, ÖZMEN E. Geriatrik Psikiyatri. 1.Baskı, Saray Tıp Kitapevleri, Izmir, 1992:64-72.

24. YESAVAGE JA, BRINK TL, ROSE TL et al. Development and validation of geriatric depression screening scale: a preliminary report. J Psychiatr Res, 1983:17.37-49.

25. BAIYEWU O, ADEYEMI JD, OGUNNIYI A. Psychiatric disorders in Nigerian nursing home residents. Int J Geriatr Psychiatry, 1997;12: 1146-1150.

26. SCHOVERRS RA, GEERLINGS MI, BEEKMAN ATF et al. Association of depression and gender with mortality in old age . Br J Psychiatri 2000;177: 336-342.

27. PENNIX BW, DEEG DJH, JACQUES TM, BEEKMAN ATF, GURALNIK JM. Changes in depression and phsical decline in older. A. Longitudinal perspective. J Affect Disord 2000; 61: 1-12.

28. STEK ML, GUSSEKLOO J, BEEKMAN ATF, TILBURG WV, WESTENDORP RGJ. Prevalence, correlates and recognition of depression in the oldest old: the Leiden 85-plus study. J Affective Disorders I.2002.

29. NIINO N, IHARA K, SUZUKI T, SHIBATA H. Prevalence of depressive syptoms among the elderly: a longitudinal study. Geriatrics and Gerontology International, 2003;3: 527-530.

30. MARAL I, ASLAN S, ILHAN N, YILDIRIM A, CANDANSAYAR S, BUMIN MA. Depresyon yaygınlığı ve risk etkenleri; Huzurevinde ve evde yaşayan yaşlılarda karşılaştırmalı bir çalışma. Türk Psikiyatri Dergisi, 2001;12: 251-259. (in Turkish).

31. KOCATAŞ S, GÜLER G, GÜLER N. 60 Yaş ve üzeri bireylerde depresyon durumu. I. Ulusal Geriatri Kongre Kitabı. 2002;184. (in Turkish).

32. DEWEY ME, CAMARA C, COPELAND JRM, LOBO A, SAZ P. Cross-cultural comparison of depression and depressive symptoms in older people. Acta Psychiatr Scand. 1993; 87: 369-73.

33. MORGAN K, DALLOSSO HM, ARIE T, BRYNE EJ, JONES R, WAITE J. Mental health and psychological well being among the old and very old living at home. Br J Psychiatry 1987;150:801-807.

34. YÜKSEL N. Birinci Basamakta Depresyon. Çizgi Tıp Yayınevi. Ankara, 2000;72-77.

35. TAMAM L. ÖNER S. Yaşlılık Çağı Depresyonları. Demans Dergisi, 2001;1:50-60.

36. PALLSON S, OSTLING S, SKOOG I. The incidence of firstonset depression in a population followed from the age of 70 to 85. Psychol. Med. 31:1159-1168.

37. OZMEN M. Depresyon El Kitabı. I.Ü: Cerrahpaşa Tıp Fakültesi Konsültasyon- Liyezon Psikiyatrisi Bilim Dalı. Prozac. Istanbul. 2000.

38.BAGLEY H, CORDINGLEY L, BURNS A, MOZLEY CG, SUTCLIFFE C, CHALLIS D, HUXLEY P. Recognition of depression by staff in nursing and residential homes. J Clin Nurs, 2000;9: 445-450.

39. COMMERFORD MC, REZNIKOFF M. Relationship of religion and perceived social support to self-esteem and depression in nursing home residents. J Psychol,1996;130:35-50.

40. ZUNZUNEGUI MV, BÉLAND F, OTERO A. Support from children, living arrangements, self-rated health and depressive symptoms of older people in Spain. Int J Epidemiology, 2001;30:1090-1099.

41. KRAUSE N, JAY G, LIANG J. Financial strain and psychological well-being among the American and Japanese elderly. Psychol Aging.1991; 6: 170-81.

42. DEMET MM, TAŞKIN EO, DENIZ F, KARACA N, IÇELLI I. Manisa Huzurevlerinde Kalan Yaşlılarda Depresyon Belirtilerinin Yaygınlığı ve Ilişkili Risk Etkenleri. Türk Psikiyatri Dergisi 2002;13: 290-299. (in Turkish).

43.WILSON KC, CHEN R, TAYLOR S, MCCRACKEN CF, COPELAND JR. Socio-economic deprivation and the prevalence and prediction of depression in older community residents. Br J Psychiatry. 1999 Dec;175:549-53.

Mine Ekinci, Gülbu Tortumluoğlu, Ayşe Okanlı: *The Prevalence Of Depression In Elderly Living At Home In Eastern Turkey: Erzurum*

Table 1. Distribution the prevalence of depression elderly people

Characteristics (n=300)	Depressed (n=175)	Undepressed (n=125)	
Age Groups (years)	n(%)	n(%)	X2 (p)
65-69	105 (60.0)	66 (52.8)	
70-74	40 (22.9)	36 (28.8)	1.745(>0.05)
≥75	30 (17.1)	23 (18.4)	
Sex			
Male	79 (45.1)	85 (68.0)	15.372(<0.001)
Female	96 (54.9)	40 (32.0)	
Education			
Illiterate	100 (57.1)	31 (24.8)	
Literate	34 (19.4)	34 (27.2)	32.869(<0.001)
Primary school	36 (20.6)	50 (40.0)	
Secondary school	5 (2.9)	10 (8.0)	
Marital status			
Married	107 (61.1)	95 (76.0)	7.317(<0.01)
Widowed	68 (38.9)	30 (24.0)	
Health insurance			
Yes	141 (80.6)	103 (82.4)	
No	34 (19.4)	22 (17.6)	0.161(>0.05)
Chronically Illnesses			
Yes	126 (72.0)	70 (56.0)	
No	49 (28.0)	55 (44.0)	8.242(p<0.01)
Living Arrangement			
By their mate	45 (25.7)	44 (35.2)	
By their mate and children	39 (22.3)	40 (32.0)	14.014(p<0.01)
By their children	85 (48.6)	34 (27.2)	
Alone	6 (3.4)	7 (5.6)	
Satisfied about their family environment			
Satisfied	43 (24.5)	18 (14.4)	
Quite satisfied	36 (20.6)	13 (10.4)	13.093(<0.001)
Not satisfied	96 (54.9)	94 (75.2)	