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RESEARCH

DEATH ANXIETY IN THE ELDERLY: RELATION TO PARTICIPATION IN DAILY LIFE

ABSTRACT

Introduction: Evaluating daily living activities and death anxiety, which is one of the psychological problems that elderly people experience, is important to provide the best quality of care for improving the psychological well-being and the quality of life of elderly people. The aim of this study was to analyse death anxiety and daily living activities of elderly people living in a nursing home.

Materials and Method: This descriptive study was performed in a nursing home in Izmir in western Turkey. The sample comprised 150 elderly people who met the research inclusion criteria. Data were gathered with the use of the Demographic Information Form, the Templer Death Anxiety Scale and the Daily Life Activities Form.

Results: The mean Templer Death Anxiety score of the participants was 5.44 ± 1.05 , and the mean Daily Life Activities Form score was 36.67 ± 9.04 . Among activities of daily living, using the toilet had the lowest score (7.48 ± 2.62). Death anxiety was significantly higher among men ($t=2.81$, $p<0.05$). There was no statistically significant relationship between death anxiety and performance of activities of daily living ($r=-0.02$, $p>0.05$).

Conclusion: Death anxiety was not associated with performance of activities of daily living.

Keywords: Activities of daily living; Anxiety; Aged; Death; Nursing homes; Nursing care

ARAŞTIRMA

YAŞLILARDA ÖLÜM ANKSİYETESİ: GÜNLÜK YAŞAMA KATILIMLARI İLE İLİŞKİSİ

Öz

Giriş: Günlük yaşam aktivitelerini ve yaşlıların yaşayabileceği psikolojik problemlerden biri olan ölüm kaygısının değerlendirilmesi, verilecek bakımın kalitesi, yaşlıların psikolojik iyilik hali ve yaşam kalitesindeki artış açısından oldukça önemlidir. Bu çalışmanın amacı, yaşlı bakım evinde yaşayan yaşlıların ölüm kaygısı ve günlük yaşam aktivitelerini değerlendirmektir.

Gereç ve Yöntem: Bu tanımlayıcı çalışma, Türkiye'nin batısında bulunan İzmir ilindeki bir yaşlı bakım evinde gerçekleştirildi. Örneklem, araştırmaya katılma kriterlerini taşıyan 150 yaşlı bireyden oluşmuştur. Veriler "Demografik Bilgi Formu", "Templer Ölüm Anksiyetesi Ölçeği" ve "Günlük Yaşam Aktiviteleri Formu" kullanılarak toplanmıştır.

Bulgular: Katılımcıların ortalama Templer Ölüm Anksiyetesi Ölçeği puanı 5.44 ± 1.05 , Günlük Yaşam Aktiviteleri Formu ortalaması 36.67 ± 9.04 ' tür. Günlük yaşam aktiviteleri arasında tuvaleti kullanma puanı en düşük olanıydı ($X=7.48 \pm 2.62$). Ölüm kaygısı erkekler arasında istatistiksel olarak anlamlı düzeyde yüksek bulundu ($t=2.81$, $p<0.05$). Yaşlıların ölüm kaygı düzeyleri ile günlük yaşam aktiviteleri arasında istatistiksel olarak anlamlı bir ilişki bulunmadı ($r=-0.02$, $p>0.05$).

Sonuç: Yaşlıların ölüm kaygı düzeyleri ile günlük yaşam aktiviteleri arasında anlamlı bir ilişki bulunmadı.

Anahtar sözcükler: Günlük yaşam aktiviteleri; Anksiyete; Yaşlı; Ölüm; Bakım evleri; Hemşirelik bakımı

INTRODUCTION

Thinking about death in an excessive and pathological way may have a negative effect upon human psychology. However, although the thought of death creates anxiety, it also provides a reason to hold on to life and brings a meaning to existence (1). Death anxiety is characterized by a fear of pain, feeling of threat, uneasiness, feeling of punishment, loneliness, loss of control, disturbance, fear of the event of death, fear of what happens after death. Death anxiety is believed to originate from numerous different situations, such as fear of annihilation, castration and separation anxiety, a view of death as bodily mutilation and conditioned response of existential origins (2). It starts at birth and continues throughout life, with the perception that at one point, the individual will not exist anymore, that he/she will lose the world and become nothing (3). According to Yalom (4), fear of death is the cause of the first anxiety and first psychopathology and is so severe that most of the energy of life is spent on trying to deny it.

As people grow older, they feel closer to death (2). A growing child usually perceives death as a "regression," whereas in old age, it is usually a highly accepted, inevitable and less fearsome situation. It has been reported that as one grows older, fear of life becomes predominant over fear of death because of the physical problems and social isolation of old age (3).

Death anxiety is a major concern for older adults. With aging, death is more likely and expected. In most cultures, dying is associated primarily with old age (2-4). As elders face the biopsychosocial challenges of aging, they inevitably think about their own death. As an existential issue, death anxiety stems from the conscious awareness of our own mortality. Individual thinks that does not exist her/his own existence, this thinking triggers negative feeling. (5). Anxiety about death can

reflect low levels of awareness to severe neurotic fears about losing self, loss of control, and loss of meaning. The quality of life of an individual is influenced by daily life activities, sense of well-being. Physical and psychological distresses are important in death anxieties (5,6).

In old age, physical and cognitive functions decline. Health, sexual life, independence, social life and support decrease or are lost. In addition, the awareness of having reached the end of life and gaining a different view of death results in changes in self-perception (5). The elderly may have difficulties in performing basic daily activities and become dependent on other people (6). Daily living activities include enhancing environmental security, communicating, eating, drinking, excreting, maintaining personal hygiene and keeping mobile. Decline in the ability to perform these activities in old age decreases the quality of life (6,7).

Anxiety regarding death is one of the crucial psychosocial problems of elderly people. It is important to assess the ideas and anxieties of the elderly associated with death during the admission process to the institution to improve their quality of care, psychological well-being and quality of life (8,9).

Limited studies of death anxiety among individuals living in nursing homes have been performed in Turkey. One study reported that they hoped to die as soon as possible and had low life satisfaction (9). Another study reported that the rate of psychiatric diseases, depression being the most common, was higher in elderly persons living in nursing homes than in those living in the community (5). However, the elderly living in nursing homes had less death anxiety than those living in the community.

The aim of this study was to analyse the death anxiety and daily living activities of elderly people



living in a nursing home. The following questions were posed:

What are the mean scores for death anxiety and daily living activities of elderly people living in a nursing home?

Are these scores related to socio-demographic factors?

Are the scores for death anxiety and daily living activities correlated?

MATERIALS AND METHOD

Setting and samples

This descriptive study was performed on 150 individuals above 60 years of age living in a nursing home in Izmir. A detailed psychiatric evaluation of the participants was performed. The inclusion criteria were being capable of giving written and oral response and not having any cognitive or hearing loss. Cognitive functioning was assessed using the Mini-Mental Status Test. Those with scores of 26 or below were excluded from the study (10). In line with the information received from home registration and staff; from 310 elderly people living in nursing home, who have terminal period cancer or kidney failure, who have difficulties in speech and meaning, illiterate aged and, after mental status assessment, whose cognitive abilities have been impaired and who refuse to participate in the study are excluded from the sample.

Measurements

Face-to-face interviews were conducted with the participants, and data were also collected with the use of three questionnaires: the Demographic Information Form, the Templer Death Anxiety Scale and the Daily Life Activities Form.

Demographic Information Form

Demographic variables included age, gender, having children, educational status, health

insurance, physical limitations, physical disease and psychiatric disease.

Templer Death Anxiety Scale (TDAS)

This scale developed by Templer (11) consists of 15 items. Possible scores range from 0 to 15, with higher scores indicating higher levels of death anxiety. Scores from 4.5 to 7 indicate normal levels of death anxiety. Cronbach's alpha value was calculated as 0.86 (12).

Daily Life Activities Form (DLAF)

This form is a questionnaire that was prepared by the researchers, guided by the results of prior studies, with the aim of measuring the daily living activities of elderly people (13,14). It consists of questions inquiring regarding their nutritional status, ability to pull themselves together, hygiene, toilet behaviour and mobility. The highest score that can be obtained from this form is 51. High scores were interpreted as independent behaviors. Cronbach's alpha value was calculated as 0.97 for this research.

Data analysis

Demographic variables were expressed as the distribution of numbers and percentages, means, and standard deviations. The Kruskal-Wallis test, Student's t-test, and the Mann-Whitney U Test were used to determine the relationships between dependent and independent variables. Correlation analysis was used to evaluate the relationship between death anxiety and daily living activities. For all statistical analyses, $p < 0.05$ was considered to indicate statistical significance.

Ethical considerations

The study was approved by the ethical committee of the EUNF (IRB approval number: 03-1420) and the nursing home branch manager of the IMM Culture and Social Affairs Department. The researchers informed each individual about the objectives of the study, and their permission to participate was obtained through interviews.

Informed written consent was also obtained from all participants. The consent form was in

RESULTS

The sociodemographic characteristics of the participants are summarized in Table 1. Half (50.0%) of the participants were male; 56.7% were widowed, divorced or living alone; 54.7% had children; 36.0% were primary school graduates; 66.0% stated that they experienced physical limitation; 42.7% had health insurance; 75.3% reported having a physical disease; and 16.7% reported having a psychiatric disease. The mean duration of stay in the nursing home was 5.30 ± 3.68 years.

The mean age of the participants was 66.12 ± 9.79 years. The mean TDAS score was 5.44 ± 1.05 , and the mean total DLAF score was 36.67 ± 9.04 . The mean TDAS score and the mean total DLAF score were evaluated according to demographic data.

Data on factors that affected death anxiety are shown in Table 2. Death anxiety was analyzed using the kruskal-wallis test, student's t-test, and the mann-whitney u test. Death anxiety was significantly higher among men than among women ($t=2.81$, $p<0.05$). Death anxiety was high among participants who were divorced or living alone ($W=0.77$, $p>0.05$), had no children ($t=-0.63$, $p>0.05$), had no health insurance ($t=-0.77$, $p>0.05$), had no physical limitations ($t=-0.58$, $p>0.05$) and had no physical diseases ($t=-0.40$, $p>0.05$) and low among those who graduated from high school ($W=4.49$, $p>0.05$); however, these differences were not statistically significant.

accordance with the ethical principles of the Universal Declaration of Human Rights.

Death anxiety was higher in those with psychiatric diseases, but the difference was not statistically significant ($Z=-0.90$, $p>0.05$). There was no significant correlation between age and TDAS score ($r=-0.04$, $p>0.05$).

Among daily living activities, the lowest performance was in using the toilet (7.48 ± 2.62), followed by dressing-pulling (8.52 ± 1.63), self-feeding (8.72 ± 1.27) and mobility (9.76 ± 3.60). The highest performance was in hygiene (10.71 ± 2.94). The distribution of DLAF mean scores according to some sociodemographic variables is shown in Table 3. In this study, daily living activities were analyzed using the kruskal-wallis test, student's t-test, and the mann-whitney u test. DLAF scores were higher in those who were male ($t=-0.64$, $p>0.05$), single ($W=0.28$, $p>0.05$), had no children ($t=-0.99$, $p>0.05$), were high school graduates ($W=5.41$, $p>0.05$), had health insurance ($t=1.81$, $p>0.05$) and had no psychiatric diseases ($Z=-0.90$, $p>0.05$), but the differences were not statistically significant. On the contrary, DLAF scores were significantly lower in those who had physical limitations ($t=-8.30$, $p<0.001$) and physical diseases ($t=-4.28$, $p<0.001$). Age and DLAF score were negatively correlated ($r=-0.20$, $p=0.01$).

Pearson correlation coefficients were applied to establish if there was a correlation between death anxiety and performance of daily living activities. There was no statistically significant correlation between death anxiety and performance of daily living activities ($r=-0.02$, $p>0.05$) (Table 4).

**Table 1.** Distribution of the elderly's sociodemographic variables.

Variable	n	%
Gender		
Female	75	50.0
Male	75	50.0
Marital status		
Single	49	32.7
Married	16	10.7
Divorced/widowed	85	56.7
Having children		
Yes	82	54.7
No	68	45.3
Education status		
Able to read and write	50	33.3
Primary school	54	36.0
Secondary school	34	22.7
High school	12	8.0
Health insurance		
Yes	64	42.7
No	86	57.3
Physical limitation state		
Yes	99	66.0
No	51	34.0
Physical disease state		
Yes	113	75.3
No	37	24.7
Psychiatric disease state		
Yes	25	16.7
No	125	83.3

Table 2. Distribution of the TDAS (Templer Death Anxiety Scale) mean score according to some sociodemographic variables.

Sociodemographic variables	TDAS Score			
	Mean	Std. Dev.	W/t/Z	p
Gender				
Female	5.67	0.93	2.81	0.005*
Male	5.20	1.11		
Marital status				
Single	5.42	1.06	0.77	0.678
Married	5.39	0.62		
Divorced/widowed	5.45	1.11		
Having children				
Yes	5.39	1.09	-0.63	0.530
No	5.49	0.99		
Education status				
Able to read and write	5.45	0.99	4.49	0.212
Primary school	5.53	1.15		
Secondary school	5.41	1.04		
High school	4.98	0.73		
Health insurance				
Yes	5.38	1.06	-0.77	0.438
No	5.51	1.05		
Physical limitation state				
Yes	5.37	0.93	-0.58	0.558
No	5.47	1.10		
Physical disease state				
Yes	5.42	1.03	-0.40	0.688
No	5.49	1.12		
Psychiatric disease state				
Yes	5.66	1.22	-0.96	0.443
No	5.39	1.02		

*p<0.01

**Table 3.** Distribution of the DLAF (Daily Life Activities Form) mean score according to some sociodemographic variables.

Variable	DLAF Score			
	Mean	Std. Dev.	W/t/Z	p
Gender				
Female	36.19	10.07	-0.64	0.518
Male	37.15	7.93		
Marital status				
Single	37.14	8.72	0.28	0.868
Married	36.63	7.61		
Divorced/widowed	36.40	9.55		
Having children				
Yes	36.00	9.51	-0.99	0.323
No	37.47	8.45		
Education status				
Able to read and write	34.48	10.28	5.41	0.144
Primary school	38.03	8.47		
Secondary school	36.65	8.58		
High school	39.66	9.04		
Health insurance				
Yes	37.81	7.81	1.81	0.072
No	35.13	10.35		
Physical limitation state				
Yes	28.47	10.35	-8.30	0.000*
No	40.89	4.23		
Physical disease state				
Yes	35.38	9.71	-4.28	0.000*
No	40.59	4.90		
Psychiatric disease state				
Yes	35.38	11.42	-0.90	0.365
No	37.10	8.48		

*p<0.001

Table 4. Correlation between the TDAS (Templer Death Anxiety Scale) mean score and daily life activities and the DLAF (Daily Life Activities Form) mean scores.

DLAF	TDAS	
	r	p
Self-eating	-0.06	0.410
Dressing-pulling	-0.03	0.684
Hygiene	-0.03	0.646
Toilet using	-0.00	0.973
Mobilisation	-0.00	0.979
DLAF	-0.02	0.775

DISCUSSION

Thoughts of death occur throughout life but may become more prominent in the elderly (15). The findings of this study revealed that the mean level of death anxiety among the elderly participants was normal. It has been suggested that the elderly can generally cope with this anxiety. Similar studies also have found moderate levels of death anxiety among the elderly (16).

The majority of the participants (72.0%) were independent in their activities of daily living with a mean score of DLAF. Other studies in Turkey produced similar results, showing that the rate of independence in activities of daily living among the elderly ranged from 65.9% to 82.8% (17).

The variable most expected to be associated with death anxiety is age. The expectation in general is that as one approaches the end of life, death anxiety should increase (12). However, one study reported that death anxiety decreased as age increased (18). It has been observed that elderly people have less death anxiety than young and middle-aged adults, and that after a certain age death anxiety shows a negative linear course. Our study found no statistically significant relationship between death anxiety and age or age group. The studies support that the death anxiety increase of

with age. Death anxiety may be related to higher ageism. According to the Terror Management Theory, as older age tends to be associated with greater susceptibility to deteriorating bodily functions and death (18,19). Although this result is contrary to that of numerous studies, there are studies that report no relationship between death anxiety and age (19). On the contrary, our population is Muslim. In Islam, Allah creates death and life. According to Islam, life in this world is temporary. After death, people go to paradise or hell. Belief in the existence of God and in the afterlife is related to decreased death anxiety (20).

We found that death anxiety was significantly related to gender. Several studies found that women had higher death anxiety than men (21). In cultures with a traditional structure, because of the expectation that men should be braver and stronger than women, death anxiety can be higher in women and is acted out more often by women. Women have been proven to be emotionally, cognitively different from men. It has been established that, while men approach death in a more cognitive way, women have a higher emotional burden and a higher awareness regarding this emotional structure (19,21). However, we observed that death anxiety in elderly men was higher than that reported in



other studies. In general, men receive substantial instrumental and health-enhancing support from their spouse. Therefore, older men may feel death anxiety due to anticipating lose instrumental support after the loss of a partner (19,21).

We also found that death anxiety was higher among participants who had no children than among those who had children, even though the difference was not statistically significant. This difference could be because of the awareness that their generation will continue thanks to their children or the social support they receive from their children (3). Children have a crucial role in making the elderly feel safe and able to cope with their problems. Elderly people who have children may be able to cope with their anxieties more easily.

Studies have shown that the presence of physical problems and/or severe health problems affects death anxiety. It has been established that death anxiety in the elderly is manifested as somatic complaints (19). Studies comparing death anxiety in patients with terminal cancer and people without a fatal disease reported that death anxiety was actually less among the cancer patients (22). Our study found no relationship between the presence of physical disease and death anxiety. Death anxiety, is related to the annihilation of one's existence which has been defined as a state of severe distress that is induced by the threat or actual loss of the intactness of person. Death anxiety is closely related to illnesses and their symptoms (6).

Death anxiety is intensely experienced starting from childhood (22) and is related to psychological stress experienced in youth. Higher levels of stress, especially from chronic stressors, may speed ageing. Ageing includes not only biological ageing, but also cognitive ageing associated with poorer processing speed and working memory (23). In individuals who experience intense anxiety, the fear of death can lead to loss of time control. Patients with depression, especially severe depression, may think that they

are already dead and experience intense death anxiety. Studies argue that death anxiety can also lead to depression, as both are related to existential concerns with the loss of meaning in life (22,23). Our study found higher death anxiety in participants with a psychiatric disease, although the result was not statistically significant. Accordingly, we think that our data verify the relationship of death anxiety with psychological disorders.

Limitations in daily activities affect the quality of life in elderly people. Reportedly, people aged 65 years or older are dependent in at least one kind of daily activity, that 10.0% of those aged 65 to 69 years need help, and that 47.0% of those aged 85 years or above are dependent in their daily activities (24). It was found that almost half of geriatric patients had scores below average in daily activities. Over 80.0% could perform activities such as eating, bathing and going to the toilet alone, but as the activities became complicated (shopping, cleaning, etc.), performance decreased (17).

Among the activities of daily living, the participants in our study had the lowest score for using the toilet and the highest score for hygiene. Except for physical limitations and physical disease affected activities of daily living. Performance of activities of daily living was statistically significantly lower in participants with physical limitations or disease. These elderly people were more dependent on others for the performance of the activities of daily living. It can be concluded that as the incidence of chronic diseases increases with age, the dependency level will increase due to the disability caused by chronic diseases.

Our study found no significant relationship between death anxiety and performance of activities of daily living. A study by Ustuner et al. (2010) also found no relationship between death anxiety and performance of activities of daily living (25). However, other studies have found that when people cannot perform daily activities, they become

dependent on other people or auxiliary devices, and this dependence increases both death anxiety and mortality (3,8,17).

The limitations of our study included the small sample size, comprising non-fatal patients and elderly participants, all chosen from a nursing home, and the absence of a control group comprising other patient groups. Another limitation of our study is that the scales were self-assessment scales, which can cause some negative results. Because these scales are based on participants' declarations, the answers may not always be correct, and the participants may misinterpret the questions according to their cultural characteristics or social environments.

Death anxiety affects human life and life quality at all ages, with the greatest effect upon the elderly. Ignoring death anxiety would result in disregarding one of the most important factors affecting mental health. The condition of elderly people living in

nursing homes should be analysed and individual and collective efforts regarding nursing should be increased to enhance their quality of life. Supporting the activities the elderly can perform independently by psychotherapeutic nursing interventions will enable them to embrace life and help them age in a healthy way, preventing gloomy thoughts of death and thus decreasing death anxiety.

In conclusion, our study showed that death anxiety levels of the elderly participants were not related to their daily living activity levels. Death anxiety levels were related only to gender among sociodemographic characteristics. It is believed that these results will guide professionals working in the field of elderly health and contribute to future studies of ageing and death anxiety.

Conflict of interest

The authors declare no conflict of interest related to this study.

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