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Undercover fear of elderly people in nursing homes: Death anxiety and depression[1]

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Abstract
Aim: To find out the level of death anxiety and depression level among Turkish elderly people.
Methods: This research was carried out on 106 elderly people aged 60 years and older from three different nursing homes. Descriptive statistics, one-way ANOVA, t-test, Cronbach's alpha coefficient, and correlations were used for the analyses.
Results: The 25.4% of elderly were between 65-69 years old, and included most of the elderly who were male (83%), single (92.5%) and retired (35.8%).The overall mean on depression was 14.43, and the death anxiety was 7.57. Mild depression was found in 69.8%, and no symptoms of depression were reported by 16% of the subjects. A positive correlation was found between total score of GDS and TDAS (r: 0.304, $p<0.01$).
Conclusion: Healthcare professionals working with elderly people in nursing homes should be aware about death anxiety of the elderly.
Keywords: Depression; death; death anxiety; nursing; elderly

Introduction

Populations around the world are rapidly ageing. The proportion of the world's population over 60 is expected to double from about 11% to 22% between 2000 and 2050. The number of people aged 60 and older is expected to increase from 605 million to 2 billion over the same period (World Health Organization, 2013). In 2012, according to the Turkish Statistics Institute, Turkey's population was 75.6 million. The population aged 65 and older was 5.7 million, with this population accounting for 7.5% of the total population. By 2023, this population is expected to increase to 8.6 million and account for 10.2% of the total population (Turkish Statistical Institute, 2012).

In parallel to the growth of older people in the world and in our country, the geriatric health problems have increased and are getting more important (Atalay & Dincer, 2006). Depression affects elderly people's overall health and quality of life. Many of the changes they face, such as the deaths of friends and loved ones, increased isolation and medical problems can lead to depression. Left untreated, depression affects much more than just mood. It can impact physical health, impair memory and concentration and prevent affected individuals from enjoying life (Hustey & Meldon, 2002; Mion et al., 2003; Chang & Chueh, 2011). However, depression is not a normal or necessary part of ageing and it is very important to recognise early as possible (Ormala & Julkunen, 2012).

Depression and anxiety are common psychiatric disorders among nursing home patients. A recent review, that included 36 studies from various countries, reported a prevalence rate of major depression ranging from 6% to 26%, a prevalence rate of minor depression ranging from 11% to 50% and a prevalence rate of depressive symptoms (GDS > 10) ranging from 36% to 49%

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(Jongenelis et al., 2003). In addition, depression is associated with excess mortality, both in community-dwelling elderly and in elderly nursing home patients (Geerlings et al., 2002).

Humans, unlike other creatures, are aware of personal mortality and this knowledge can cause fear of death and dying leading to the anxiety provocation (Sharif et al., 2014). On a practical level, studying death anxiety in older adults may lead to more effective strategies for improving the quality of life for this rapidly growing segment of our population. For example, individual studies suggest living circumstances, psychological problems, and physical problems predict higher levels of death anxiety in elderly people (Fortner & Neimeyer, 1999).

Death is a potential human concern that has been conceptualized as a powerful motivating force behind much creative expression and philosophic inquiry throughout the ages. Death anxiety is a term used to conceptualize the apprehension generated by death awareness (Abdel-Khalek, 2005). One common definition of death anxiety is expressed as a negative emotional reaction provoked by the anticipation of a state in which the self does not exist (Sharif et al., 2014). Death anxiety is well thought-out as a universal phenomenon and throughout the literature it has been defined in multiple of ways according to different conditions and situations (Saleem, Gul, & Saleem, 2015). Further, death anxiety may lead to ambivalence toward the body, disruption in personal relationships, and withdrawal from sexual intimacy because the physical body serves as a reminder of death (Goldenberg et al., 2006; Bassett, 2007). Death anxiety influences both personality and psychological health and may contribute to existential crises. However, if individuals have positive perceptions about their situation in life they may have reduced death anxiety (Sharif et al., 2014).

Human attitudes toward death are expressed either consciously or unconsciously by personal characteristics and via culture, social and philosophical belief systems (Sharif et al., 2014). Religious institutions carry rituals, theological and philosophical views, and mythologies that are often culturally determined. These cultural perspectives play a strong role in the development of different death attitudes among individuals who belong to the various religious orientations (Singh, 2013). In addition, the meaning of death may vary within the same culture, because of individual differences in personality characteristics, traits, and beliefs that shape a person's conscious or unconscious behaviors and attitudes to death and dying (Peters et al., 2013; Sharif et al., 2014). According to Turkish culture, death is not fearful or final but is rather the completion of life and a gateway to the afterlife. However, evaluation of thoughts and attitudes toward death is relatively new in Turkey.

For health care providers, death is an ever present reality despite increasing technologically advanced health systems, longer patient survival, and cure from life-threatening conditions (Nyatanga & de Vocht, 2006). In the health care environment, death anxiety is an important concept to consider in a wide range of practice settings, including community screenings of healthy individuals, psychiatric care, acute and trauma care, chronic care, and pediatrics and in individuals facing diagnosis of a life threatening illness" (Lehto & Stein , 2009). Because of its importance to human responses to health stressors, death anxiety is included as a nursing diagnosis with specific North American Nursing Diagnosis Association nursing outcome criteria (Moorhead et al., 2008).

Nurses with higher death anxiety may be reluctant to discuss death issues with patients and their families. Nurses who receive education in communication related to death become more comfortable with discussion of death concerns with patients and their families, suggesting the importance of death anxiety awareness in nursing education curriculum (Deffner & Bell, 2005).

A rapid increase in the population of Turkey, industrialization, urbanization, problems with the national economy and migration to and from other places have caused a transformation from the extended family to the nuclear family. Many families live in smaller households in urban areas and the participation rate of women in labor has risen significantly over the years, as families need more than one source of income for their livelihood. In the past, it was a common practice for elderly people to live with their children. Nowadays there is simply neither enough physical space to accommodate elderly people in apartments, nor is there someone in the household to take care of

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them and offer them assistance in their daily lives while also being a companion, as women leave the household early in the morning as their husbands do. Thus, it has become more and more common for elderly people to live alone. Furthermore, with their children's more limited available time, elderly people have fewer opportunities to spend time with their children and they must go to nursing homes (Altay & Avci, 2009).

Although helping individuals and their families manage death is a central responsibility of nursing worldwide and an increasing literature suggests that death anxiety contributes to important emotional and behavioral outcomes, theoretical and empirical background of the concept has not been systematically examined in the nursing literature in our country. Review of literature on death anxiety leads to the conclusion that not much research has been done in Turkey. To understand the relationship of basic demographic variables to death anxiety, we analyzed it among elderly people in southern Turkey.

Methods

The purpose of this study was to find out the level of death anxiety and depression incidence, evaluate its relationship with several socio-demographic variables among elderly people in 3 nursing homes in southern Turkey. One of them (Ya-ko Der Nursing Home) was state and the others (Muratpaşa Municipality Nursing Home and Buyuksehir Municipality Nursing Home) were state nursing homes.

Participants

A total of 129 eldely people aged 60 years and older in different three nursing homes were recruited. No sampling method was utilized, as we tried to include all the residents in the research. They were enrolled in the Ya-Ko Der Nursing Home (n = 15), Muratpaşa Municipality Nursing Home (n = 42), and Büyükşehir Municipality Nursing Home (n = 72). The sample of the study was designed to include the individuals who were 60 years old or above, scored at least 24 points on the Mini Mental Test, had no physical or mental problem to answer the questions or no oral communication barrier such as hearing or speaking, and accepted to answer the questionnaire form. One hundred and six elderly people (82.2%) were included in the final study. The major reasons for study refusal were: (1) too disoriented to make a decision about participating (n=13), (2) with serious hearing problems (n=5), and (3) declined participation (n=3). The data were collected through face-to-face interviews. All of the older people participated to the study were asked to provide written informed consent. The older people were informed about the purpose of the study and what should be expected of them. Participants were assured of rights of refusal to participate in or to withdraw from the study at any stage without any negative consequences.

Measures

Socio-demographic Information Form

Socio-demographic characteristics of the elderly people, including age, gender, marital status, education status, information about chronic diseases, and information about staying in a nursing home were questioned using this form prepared by the authors.

Mini Mental State Examination Form

The Mini-Mental State Examination Form (MMSE) is a scale developed by Folstein et al. (1975), which can be easily applied and provides information about the degree of cognitive impairment. It consists of the categories of orientation, registration, attention/calculation, recall, language and construction (Folstein, Folstein, & McHugh, 1975). The MMSE and the Turkish MMSE for the uneducated were modified and formed by Ertan, Eker, & Gungen (1999). Afterwards, Gungen, Ertan, Eker, & Yasar (2002) conducted a study on its validity and reliability for the diagnosis of slight dementia. There are 11 items in the test and the test is 30 points in total. Any score greater than or equal to 27 points (out of 30) indicates a normal cognition. Below this, scores can indicate severe (≤9 points), moderate (10–18 points) or mild (19–24 points) cognitive

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impairment (Folstein, Folstein, & McHugh, 1975). Our study participants had at least 24 points on the MMSE.

The Geriatric Depression Scale

The Geriatric Depression Scale (GDS), first created by Yesavage et al. (1983), has been tested and used extensively with the older population. It is a brief questionnaire in which participants are asked to respond to the 30 questions by answering yes or no in reference to how they felt on the day of administration. Scores of 0 - 9 are considered normal, 10 - 19 indicate mild depression and 20-30 indicate severe depression. The GDS may be used with healthy, medically ill and mild to moderately cognitively impaired older adults. It has been extensively used in community, acute and long-term care settings. The GDS was found to have a 92% sensitivity and a 89% specificity when evaluated against diagnostic criteria. The validity and reliability of the tool have been supported through both clinical practice and research. The GDS is not a substitute for a diagnostic interview by mental health professionals. It is a useful screening tool in the clinical setting to facilitate assessment of depression in older adults especially when baseline measurements are compared to subsequent scores (Yesavage, et al., 1983; Sheikh & Yesavage, 1986).

The Templer's Death Anxiety Scale

The Templer's Death Anxiety Scale (TDAS) has been the most repeatedly employed scale to for measuring death anxiety. It was developed on a two-factor model of death anxiety including psychological factors that are internal and external factors about life experience related to death. It consists of 15-items with a true/false format. Nine of the 15 items are scored in the direction of the true alternative and 6 for the false option. Total score can range from 0 to 15. The high score denotes high death anxiety. The original English version has good test-retest reliability, internal consistency, as well as considerable validity data. That is, the test-retest (3-week interval) was 0.83, whereas the internal consistency (K/R-20) was 0.76. Different methods were used to assess the TDAS validity with good results. Higher scores indicate higher levels of death anxiety (Templer, 1970). TDAS was developed a theoretically and has been translated and validated in 26 languages (Beshai & Naboulsi, 2004). Literature reveals explained that the scale has been translated into 54 distinctive languages like German, Arabic, Korean, Chinese, Dutch, Russian, Farsi, Portuguese, Japanese, French, Hindi, Italian, Spanish and Swedish (Templer et al., 2006). The validity and reliability study of the Turkish version was published by Akca and Kose (2008).

Analysis

Statistical analyses were completed using SPSS Version 23.0 (SPSS Inc., Chicago, IL, USA) statistical program, with significance set at $p \leq 0.05$. Descriptive statistics, one-way ANOVA, t-test, and correlations were used for the analyses. Internal consistency was assessed using Cronbach's alpha coefficient for the GDS and TDAS.

Ethical considerations

The written permission of the heads of nursing homes was obtained for the study. It obtained the ethics committee approval from the Akdeniz University Faculty of Medicine Non-entrepreneurial Clinical Research Ethics Committee. Permission to conduct this study was received from the authors' institutional ethical committee. The informed consent was obtained from the director of the nursing homes, and from the elderly. Participants were assured of their right of refusal to participate in or to withdraw from the study at any stage without any negative consequences. The questionnaire was completely anonymous. The data were kept confidential.

Results

In this study, 106 elderly were interviewed. The 25.4% of elderly were between 65-69 years old, and included most elderly who were male (83%), single (92.5%), retired (35.8%), and had completed primary education (46.2%). The majority had indicated that they had a chronic disease

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(64.2%), 30.2% had hypertension, or 29.2% had rheumatic diseases. The majority of subjects' length of stay in a nursing home varied from one to three years (54.7%), and 59.4% had no visitors in the nursing home (Table 1). The majority of elderly indicated that they have no visitors (62.3%), but they can do activities independently outside the nursing home (67%). Nearly half of them indicated that old age is a good thing (49.1%), and come to the end of life is inevitable (48.1%), but one third of them indicated that they feel lonely (29.2%).

Table 1. The Socio-Demographic Characteristics of the Elderly (n = 106)

Socio-demographic characteristics	n	%
Age (year)		
60-64	15	14.2
65-69	27	25.4
70-74	23	21.7
75-79	23	21.7
80 and older	18	17.0
Gender		
Female	18	17.0
Male	88	83.0
Marital status		
Married	8	7.5
Single	98	92.5
Occupatinal status		
Retired	38	35.8
Housewife	31	29.2
Self-employed	22	20.8
Public servant	15	14.2
Education level		
Illiterate	38	35.8
Primary	49	46.2
Secondary	3	2.8
High	9	8.5
University	7	6.6
Chronic diseases		
Yes	68	64.2
No	38	35.8
Types of chronic diseases (n= 116)*		
Hypertension	32	30.2
Rheumatic diseases	31	29.2
Respiratory system diseases	29	27.4
Coronary artery disease	11	10.4
Diabetes mellitus	9	8.5
Cerebrovascular disease	4	3.8
Length of stay in a nursing home		
Less than one year	36	34.0
1-3 years	58	54.7
5-7 years	11	10.4
More than 10 years	1	0.9
Elderly with visitors		
Yes	43	40.6
No	63	59.4

The mean, standard deviation, Cronbach's α reliability coefficients of the GDS and TDAS for Turkish elderly was showed in Table 2. The overall mean on depression was 14.43, which

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indicates that elderly had mild depression. The death anxiety was 7.57, which indicates that elderly reported slightly more than half of the indicators of death anxiety. According to the mean scores of the GDS, mild depression was found in 69.8% (n=74), and no symptoms of depression were reported by 16% (n=17) of the subjects. Also, fifteen elderly had serious depression, and the information was given to the organizations' health professional after the study by the researchers. Reference to this table reveals that the alpha reliability coefficient was 0.75 for the GDS, and 0.64 for the TDAS (Table 2).

Table 2. Mean, Standard Deviation (SD), Internal Consistency (Cronbach's α coefficient) of the GDS and TDAS for Turkish Elderly (n = 106)

Scale	Total items	Range of scores	Mean	SD	α
GDS	30	0-30	14.43	5.15	0.75
TDAS	15	0-15	7.57	2.98	0.64

GDS: The Geriatric Depression Scale; TDAS: The Templer's Death and Anxiety Scale

Not only geriatric depression level, but also death anxiety level were lower in the citizens' of private nursing home rather than state nursing homes ($p>0.05$). The geriatric depression level was higher in elderly who were 80 years and older ages (16.1±5.4), on the other hand the death anxiety level was higher in elderly whose ages were between 60 and 65 years (8.9±3.7). The geriatric depression level was equal between the elderly who have and do not have chronically illness (Table 3).

Table 3. Level of Geriatric Depression and Death Anxiety of Elder People in 3 Nursing Homes (n=106)

Demographics	GDS $\bar{X}$ ±SD	TDAS $\bar{X}$ ±SD
Nursing Homes		
Buyuksehir Municipality Nursing Home (State)	14.9±5.4	7.6±2.8
Muratpasa Municipality Nursing Home (State)	14.1±5.0	7.9±3.1
Ya-ko Der Nursing Home (Private)	13.1±3.9	5.7±2.6
Age		
60-64 years	13.7±5.2	8.9±3.7
65-69 years	15.0±4.2	7.0±2.1
70-64 years	14.4±5.1	7.6±2.9
Between 75-79 years	13.4±6.6	6.9±3.3
Between 80 and above years	16.1±5.4	7.2±2.9
Chronic illness		
Yes	14.7±5.8	7.3±3.0
No	14.2±4.7	8.0±2.8

GDS: The Geriatric Depression Scale; TDAS: The Templer's Death and Anxiety Scale

A positive and low correlation was found between total score of GDS and TDAS (r: 0.304, $p<0.01$) (Table 4). According to the analyses results, there were no significant differences in GDS and TDAS scores with regards to socio-demographic variables such as age, gender, marital status, occupational status, education level, chronic diseases, type of nursing home, length of stay in a nursing home, elderly with visitors ($p>0.05$).

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Table 4. Mutual Correlation Between The Geriatric Depression Scale (GDS) and Templer's Death Anxiety Scale (TDAS)

		GDS	**TDAS**
GDS	Pearson Correlation Sig. (2-tailed)	1	**0.304****
TDAS	Pearson Correlation Sig. (2-tailed)	**0.304****	1

** Correlation is significant at the 0.01 level (2-tailed).

Discussion

Although it is considered that Turkey still has a comparatively young population, statistics show that elderly people are gaining more and more attention (Ongun, Guder, & Demirag, 2016). The purpose of this study was to find out the level of death anxiety and depression incidence among elderly people in nursing homes in southern Turkey.

Old age is a lifetime of risks, especially "risk of dying". This idea becomes undeniably distinct by aging. However, this should not show that old people are confined to thinking about death all the time. When suitable living conditions provided, people of old age do make future plans and try to realize their plans (Tufan, 2011).

The findings demonstrated that elderly were more likely to have death anxiety and depression, because in our study the majority of subjects' were living from one to three years (54.7%) in a nursing home, and had no visitors (59.4%). Interestingly no significant differences were found between socio-demographic variables and total score of GDS and TDAS. According to our research results, the majority of elderly indicated that they can do activities independently outside the nursing home (67%). Nearly half of them indicated that old age is a good thing (49.1%), and come to the end of life is inevitable (48.1%), but one third of them indicated that they feel lonely (29.2%).

Social support was linked with death anxiety and fear of the unknown. Close relationships can increase self-esteem and may be a buffer against death anxiety, whereas disruption of such relationships may lead to death awareness and concerns (Mikulincer et al., 2002). Elderly with more psychosocial stressors are also likely to have anxiety symptoms. For example, if elderly feel that they need more emotional support or have low personal mastery beliefs, they are twice as likely to report anxiety symptoms. Negative life events also increased the likelihood of having anxiety symptoms. To a lesser extent, having a negative view on the meaning of life may also play a role in having anxiety symptoms (Mehta et al., 2003).

In Turkey, the target is for every elderly person to live at own home or to live with a child as long and as independently as possible. To realize this target, it is important to ensure that the nation's elderly people are able to manage their life needs. However, sending one's relative to a nursing home is often considered to be an unethical and immoral attitude by Turkish society whose members would rather avoid doing so. Having to stay there is also regarded as something to be ashamed for the elderly due to social pressure, which pushes them deeper in loneliness and abandonment. As a result, for both parts, there is a stigma attached to it. Probably to de-stigmatize and alleviate this dramatic and tragic, such a term was coined (Ongun, Guder, & Demirag, 2016).

For the present study, the important results in that series of studies are the correlation between death anxiety and depression. These correlations were significant and positive (r: 0.304, $p<0.01$). Some research papers Abdel-Khalek (2005) has investigated the correlation between the death anxiety, and general depression. Nursing home residents, even if relatively healthy, are exposed to disability, death, and dying, which may lead to feelings of vulnerability and anxiety (Ron, 2004; Iecovich & Lev-Ran, 2006).

Culture is among the most salient factors that are linked to individuals' perceptions of their environment. Individuals from different cultures tend to react to death and dying differently as

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different cultures have given distinct value and meaning to life and death. Whereas some cultures fear death, others see it as a normal part of life (Wu, Tang, & Kwok, 2002).

Neimeyer, Wittkowski, & Moser (2004) suggested that deeper religious belief may predict lower death anxiety. Belief in God's existence and belief in the afterlife are related to decreased death anxiety and greater acceptance of death (Cohen et al., 2005; Harding et al., 2005). In Islam, the religion of most people, Allah creates death and life; death is God's will, a transition from a temporary life on earth to immortal life, whether in paradise or in hell (Al-Sabwah & Abdel-Khalek, 2006; Azaiza et al., 2010). Religiosity appears to be inversely associated with death anxiety among Muslims (Suhail & Akram, 2002; Al-Sabwah & Abdel-Khalek, 2006).

It is important to understand that elderly people are a vulnerable group and that the use of health care services is influenced by anxiety and depressive symptoms. Advanced practice nurses who are working at the nursing homes or acute care settings are at the front line for recognizing unidentified anxiety or depression among elderly people. Advanced practice nurses could use instruments such as the TDAS or the GDS-30/15, which are quick and valid ways to evaluate death anxiety and depressive symptoms among elderly patients in nursing homes or acute care settings.

Limitations

There are some limitations of the present study, which must be mentioned. Firstly, the study population is a selective one. Serious cognitive impairment (MMSE<24), and severe physical illness were exclusion criteria. Secondly, this study is limited in population and in variables examined. The generalizability of our results may be limited because our samples were collected from only one city of Turkey. The variables were basic demographics such as age, gender, and living situation in a nursing home. Incorporating other cities, and other variables of possible relevance, would help in understanding generalizability. Despite these limitations, an implication of present findings along with other results is that a person's cultural background needs to be considered when assessing death anxiety.

Conclusion

In conclusion, one has a supportive social and familial network is important in decreasing death anxiety and depression. Healthcare professionals working with elderly should take special care to create good relationships with the families of the elderly and to encourage them to spend time with their loved ones. In addition, elderly persons both in the community and in nursing homes may benefit from activities and social clubs. Offering activities in which elderly people can engage may also leave less time to ruminate about negative thoughts.

Decleration of Conflicting Interests

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References

Abdel-Khalek, A.M. (2005). Death anxiety in clinical and non-clinical groups. *Death Studies, 29,* 251–259. doi: 10.1080/07481180590916371

Akca, F., & Kose, A. (2008). Adaptation of Death Anxiety Scale (DAS): Validity and reliability studies. *Journal of Clinical Psychiatry, 11,* 7-16.

Al-Sabwah, M. N., & Abdel-Khalek, A. M. (2006). Religiosity and health distress in Arabic college students. *Death Studies, 30,* 365–375. doi: 10.1080/07481180600553435

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Altay, B., & Avci, I. A. (2009). Relationship of perceived family social support and depression symptoms of old people living in Alanli District, Samsun. *TAF Prevention Medical Bultein, 8*(2), 139-146.

Atalay, A., & Dincer, F. (2006). Chronic pain syndrome and the elderly. In Arıogul S (Ed), *Geriatrics and Gerontology* (pp. 719-728). Ankara, MN Medical & Nobel Press.

Azaiza, F., Ron, P., Shoham, M., & Gigini, I. (2010). Death and dying anxiety among elderly Arab Muslims in Israel. *Death Studies, 34*(4), 351-364. doi: 10.1080/07481181003613941

Bassett, J.F. (2007). Psychological defenses against death anxiety: Integrating terror management theory and Firestone's separation theory. *Death Studies, 31*, 727–750. doi: 10.1080/07481180701490628

Beshai, J. A., & Naboulsi, M. A. (2004). Existential perspectives on death anxiety. *Psychological Reports*, *95,* 507–513. doi: 10.2466/pr0.95.2.507-513

Chang, T. Y., & Chueh, K. H. (2011). Relationship between elderly depression and health status in male veterans. *Journal of Nursing Research, 19*(4), 298-315. doi: 10.1097/JNR.0b013e318236cf89

Cohen, A. B., Pierce, J. D., Chambers, J., Meade, R., Gorvine, B. J., & Koenig, H. G. (2005). Intrinsic and extrinsic religiosity, belief in the afterlife, death anxiety, and life satisfaction in young Catholics and Protestants. *Journal of Research in Personality, 39,* 307–324. doi:10.1016/j.jrp.2004.02.005

Deffner, J. M., & Bell, S. K. (2005). Nurses' death anxiety, comfort level during communication with patients and families regarding death, and exposure to communication education: A quantitative study. *Journal for Nurses in Staff Development, 21,* 19–23.

Ertan, T., Eker, E., & Gungen, C. (1999). *The standardized mini mental state examination for illiterate Turkish elderly population.* 2nd International Symposium on Neurophysiological and Neuropsychological Assessment of Mental and Behavioral Disorders (abstract), Bursa.

Folstein, M.F., Folstein, S.E., & McHugh, P.R. (1975). Mini mental state a practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research, 12*(Suppl 3), 189-198.

Fortner, B. V., & Neimeyer, R.A. (1999). Death anxiety in older adults: A quantitative review. *Death Studies, 23*, 387-411. doi: 10.1080/074811899200920

Geerlings, S.W., Beekman, A.T.F., Deeg, D.J., Twisk, J.W., & Van Tilburg, W. (2002). Duration and severity of depression predict mortality in older adults in the community. *Psychological Medicine, 32,* 609–618. doi: http://dx.doi.org/10.1017/S0033291702005585

Goldenberg, J. L., Hart, J., Pyszczynski, T., Warnica, G. M., Landau, M., & Thomas, L. (2006). Ambivalence toward the body: Death, neuroticism, and the flight from physical sensation. *Personality and Social Psychology Bulletin, 32,* 1264–1277. doi: 10.1177/0146167206289505

Gungen, C., Ertan, T., Eker, E., & Yasar, R. (2002). Reliability and validity of the Standardized Mini Mental State Examination in the diagnosis of mild dementia in Turkish population. *Turkish Journal of Psychiatry, 13,* 273-281.

Harding, S. R., Flannelly, K. J., Weaver, A. J., & Costa, K. G. (2005). The influence of religion on death anxiety and death acceptance. *Mental Health, Religion & Culture, 8,* 253–261. doi: 10.1080/13674670412331304311

Hustey, F.M., & Meldon, S.W. (2002). The prevalence and documentation on impaired mental status in elderly emergency department patients. *Annals of Emergency Medicine, 39*(3), 248-253. doi:10.1067/mem.2002.122057

Iecovich, E., & Lev-Ran, O. (2006). Attitudes of functionally independent residents toward residents who were disabled in old age homes: The role of separation versus integration. *The Journal of Applied Gerontology, 25,* 252–268. doi: 10.1177/0733464806288565

Jongenelis, K., Pot, A. M., Eisses, A. M., Beekman A. T., Kluiter, H., Van-Tilburg, W., & Ribbe M. W. (2003). Depression among older nursing home patients: A review. *Tijdschrift Voor Gerontologie en Geriatrie, 34,* 52–59.

Lehto, R. H., & Stein, K. F. (2009). Death anxiety: an analysis of an evolving concept. *Research and Theory Nursing Practice, 23*(1), 23-41. doi: http://dx.doi.org/10.1891/1541-6577.23.1.23

Mehta, K. M., Simonsick, E. M., Penninx, B. W., Schulz, R., Rubin, S. M., Satterfield, S., & Yaffe, K. (2003). Prevalence and correlates of anxiety symptoms in well-functioning older adults: findings from the health aging and body composition study. *Journal of American Geriatrics Society, 51,* 499–504. doi: 10.1046/j.1532-5415.2003.51158.x

Mikulincer, M., Florian, V., Birnbaum, G., & Malishkevich, S. (2002). The death-anxiety buffering function of close relationships: Exploring the effects of separation reminders on death-thought accessibility. *Personality and Social Psychology Bulletin, 28,* 287–299. doi: 10.1177/0146167202286001

Mion, L.C., Palmer, R.M., Meldon, S.W., Bass, D.M., Singer, M.E., Payne, S.M., Lewicki, L.J., Drew, B.R., Connor, J.T., Campbell, J.W., Emerman, C. (2003). Case finding and referral model for emergency department elders: A randomized clinical trial. *Annals of Emergency Medicine, 41*(1), 56-67. doi: http://dx.doi.org/10.1067/mem.2003.3

Moorhead, S., Johnson, M., Maas, M. L., & Swanson, E. (2008). *Nursing outcomes classification (NOC).* St. Louis: MO: Mosby Elsevier.

Neimeyer, R. A., Wittkowski, J., & Moser, R. P. (2004). Psychological research on death attitudes: An overview and evaluation. *Death Studies, 28*, 309–340. doi: 10.1080/07481180490432324

Nyatanga, B., & de Vocht, H. (2006). Towards a definition of death anxiety. *International Journal of Palliative Nursing, 12,* 410–413. doi: 10.12968/ijpn.2006.12.9.21868

Ormala, K. K., & Julkunen, K.V. (2012). Functional activity and depression in elderly subjects over 70 years of age visiting Accident and Emergency Departments. *Singapore Nursing Journal, 39*(2), 3-9.

Ongun, E., Guder, F.Z., & Demirag, A. (2016). Elderly people's choice of media and their perceived state of loneliness. *Online Journal of Communication and Media Technologies; 6*(1), 35-47.

Peters, L., Cant, R., Payne, S., O'Connor, M., McDermott, F., Hood, K., Morphet, J., & Shimoinaba, K. (2013). How death anxiety impacts nurses' caring for patients at the end of life: a review of literature. *The Open Nursing Journal, 7,* 14-21. doi: 10.2174/1874434601307010014

Ron, P. (2004). Depression, hopelessness, and suicidal ideation among the elderly: A comparison between men and women living in nursing homes and in the community. *Journal of Gerontological Social Work; 43* (2-3), 97–116. doi: 10.1300/J083v43n02_07

Saleem, T., Gul, S., & Saleem, S. (2015). Death anxiety scale; translation and validation in patients with cardiovascular disease. *The Professional Medical Journal, 22*(6), 723-732.

Sharif-Nia, H., Ebadi, A., Lehto, R.H., Mousavi, B., Peyrovi, H., & Chan, Y.H. (2014). Reliability and validity of the Persian version of Templer Death Anxiety Scale-extended in veterans of Iran–Iraq warfare. *Iranian Journal of Psychiatry Behavioral Science, 8*(4), 29-37.

Sheikh, R.L. & Yesavage, J.A. (1986). Geriatric Depression Scale (GDS): Recent evidence and development of a shorter version. *Clinical Gerontologist, 5,* 165-173. doi: 10.1300/J018v05n01_09

Singh, C. (2013). An analytic study of death anxiety among type 2 diabetes. *Mediterrenean Journal of Social Science, 4*(10), 205-17.

Suhail, K., & Akram, S. (2002). Correlates of death anxiety in Pakistan. *Death Studies, 26,* 39–50. doi: 10.1080/07481180210146

Bektaş, H., Körükcü, Ö., & Kabukcuoğlu, K. (2017). Undercover fear of elderly people in nursing home: Death anxiety and depression. *Journal of Human Sciences*, *14*(1), 587-597. doi:10.14687/jhs.v14i1.4268

Templer, D. I., Awadalla, A., Al-Fayez, G. Frazee, J., Bassman, L., Connel, H. J, Arikawa, H., & Abdel-Khalek, E. M. (2006). Construction of a death anxiety scale-extended. *Omega, 53*(3), 209-226. doi: 10.2190/BQFP-9ULN-NULY-4JDR

Templer, D. I. (1970). The construction and validation of a Death Anxiety Scale. *Journal of General Psychology, 82,* 165–177.

The Turkish Statistical Institute. (2012, August). *Population by years, age group and gender*. Retrieve from: http://www.tuik.gov.tr/UstMenu.do?metod=temelist

Tufan, I. (2011, July). *Violence against the elderly in Turkey*. A section from 1st Turkey atlas of gerontology geroatlas national social and applied association of gerontology Antalya, Retrieved from http://www.inpea.net/images/Turkey_Violence__Against_Elderly_2011.pdf

World Health Organization. (2013, August). *Data and statistics*. Retrieved from http://www.who.int/topics/ageing/en/erişim tarihi: 12.02.2016.

Wu, A. M., Tang, C. S., & Kwok, T. C. (2002). Death anxiety among Chinese elderly people in Hong Kong. *Journal of Aging and Health, 14*(1), 42-56. doi: 10.1177/089826430201400103

Yesavage, J. A., Brink, T. L., Rose, T. L., Lum, O., Huang, V., Adey, M., & Leirer, V. O. (1983). Development and validation of a geriatric depression screening scale: A preliminary report. *Journal of Psychiatric Research, 17*, 37-49. doi: 10.1016/0022-3956(82)90033-4