Death anxiety of doctors and nurses with levels of depression related to death and the factors affecting them

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Abstract
Aim: This study was carried out to determine the factors affecting the anxiety levels of death and death related depression of doctors and nurses working at a Hospital.

Materials and Methods: The population of the this study, which was planned as cross-sectional, consists of all the doctors and nurses working at a State Hospital (n=288), while the sample consisted of 280 medical personnel. Data was collected using a 17 item Patient Identification Form including socio demographic and, including individual characteristics which were thought to be related to death anxiety of doctors and nurses, and Death Anxiety Scale (DAS), and Death Depression Scale (DDS).

Results: The mean score of Death Depression Scale for women is higher than men and the mean score of death depression scale for nurses is significantly higher than doctors (p=0.0001). There is no significant difference between the scores of DDS in terms of the marital status of medical personnel, having children or not, loving the work or not, the department they work, being exposed to serious danger of death, the situation of desensitization and feelings and thoughts about the death exposed to (p>0.05). The mean scores of women's Death Anxiety Scale are significantly lower than men (p=0.009), scores of single people (p=0.009) are lower than married ones, scores of people who don't have any children are lower than the people who have children (p=0.012).

Conclusion: In this study, the most important determinant of death anxiety and depression related to death was determined as female, nurse, and not having any children and work in surgical unit.

Keywords: Intensive care; death anxiety; death related depression; doctor; nurse

INTRODUCTION
Death is an existing reality for all living creatures, it is an end that mankind has been aware of throughout his life and is impossible to escape (1-3) The concept of death that people built in their minds has created their behavior and lifestyle in many religious, philosophical, moral and legal fields. Human perception of death is shaped by the personal experiences which they developed depending on the death events they saw around them, the religious and cultural values they believe in (4). Therefore, the perception of death is unique to each individual and independent of other people's perceptions (5). According to Yalom, the real cause of all psychopathology is death anxiety. However, the inevitable part of life is not the fear of death, but the death itself (6). According to Jung, the basis of death anxiety is the fear of living. It has been reported that those most afraid of death are those most afraid of living (7).

Death anxiety, as well as being associated with socioeconomic factors, it is seen that it is also affected by various factors, such as the recent death of a relative, the effect of religious beliefs, the presence of a deadly disease in or near the person, personality traits and having or not having children (8). Death depression, which is the second component of the reactions to death, is an emotional, attitude and cognitive structure. To reveal this structure reveals the effect of depression on death expectation and dying process. Death depression may be a reaction involving emotions such as hopelessness, loneliness, terror and some kind of sadness in response to the death of a person, a close friend or family member (9). In the Kübler - Ross (1969) theory, there are five stages of death, death and dying in fatal disease outlined as DABDA: Denial, Anger, Negotiation, Depression and Acceptance (10). At the stage of depression, people become depressed in the face of their own mortality and when they face the deaths of their relatives (11). In the depression stage, common
symptoms of depression appear to be sleepy, anorexia, fatigue, lack of energy, crying, self-indulgence, feeling lonely and isolated (12).

The relationship between death anxiety and death depression was shown in some studies (13). Today, death occurs largely in hospitals, which imposes the entire emotional burden of death on health professionals (14). Medical personnel who are frequently exposed to death need to understand their own feelings about death, share them with others and be aware of the biological, psychological, social and cultural needs of the patient who is in the terminal stage and his relatives (15). Health workers may be afraid to face death, like other people and experience anxiety in the matter of death (16). Care for patients at the end of life has been characterized as one of the most difficult parts of medical practice (17,18). An important reason may be confrontation with the finiteness of life. Mortality cues (i.e. experiences or events that make death salient) may remind physicians of their own mortality and the vulnerability of the human body (19). Examples of such cues include breaking bad news, or taking care of a dying patient (20). Nephrologists' subjective attitudes towards end-of-life issues and the conduct of terminal care. Death anxiety encompasses fear for the end of one's existence, fear of the dying process, fear of the unknown after death, and/or fear of the death of significant others (21).

The current research aims to examine death-related anxiety and death-related depression levels of doctors and nurses who frequently face death.

MATERIALS and METHODS

Design, Setting, Sample
This research, which was planned as cross-sectional, was conducted at Zonguldak Ataturk State Hospital between April and September in 2016. The population of the research consists of all the doctors and nurses working at Zonguldak Ataturk State Hospital (n=288). As for the sample group, it consisted of 280 medical personnel, including 116 doctors and 164 nurses who agreed to take part in the research from the target population. Only eight people refused to take part in the study. Thus, %97 percent of the population was detected.

Data Collection Tools
To collect the data, a questionnaire which was prepared in accordance with literature by the researcher and consisted of 17 questions, including individual characteristics which were thought to be related to death anxiety of doctors and nurses, Death Anxiety Scale (DAS) by Templer, which includes 15 items to measure the level of death anxiety and Death Depression Scale (DDS) which includes 17 items were applied (4).

Templer Death Anxiety Scale (DAS)
This scale was developed by Templer in 1970 and adapted into Turkish by Senol in 1989. It consists of 15 true-false items to measure death anxiety. It is a 15-true/false item scale that measures the anxiety and fears of the individual about his own death and risk of death. The correct answers are scored as 1 point while incorrect ones are not scored. The scores range from 0 to 15. It was interpreted that the higher got the scores, the higher would be the death anxiety. It can be considered that people who got a mean score of 7 or above have high death anxiety. 0-4 scores are considered as 'mild level', 5-9 scores are 'moderate level', 10-14 scores are 'severe level' and 15 scores are considered as 'panic level' of anxiety (22). The Test-Retest correlation conducted by Templer for Cronbach’s alpha reliability coefficient of the scale was 0.83. According to Senol, Cronbach’s alpha reliability coefficient of the scale was 0.86.

Death Depression Scale (DDS)
Death Depression Scale is a 17-item scale that was developed by Templer, Lavoie, Chalgujian and Thomas Dobson to assess emotional states, such as depression, sadness, loneliness, horror and grief associated with death (4). Turkish version of validity and reliability study was carried out by Yaparel and Yildiz. (23). The Test-Retest correlation coefficient of the scale was 0.74 in this version. The lowest score of the scale is 0 and the highest score is 17. It is interpreted that there is no depressive mood between the scores of 0-8, there is a depressive mood between 8-17 and the depressive mood is experienced more intensively as the score increases.

Ethical Considerations
Before starting the research, the approval of 2016/2 was received from the chairmanship of Bülent Ecevit University Clinical Traits Ethics Committee on 27 January 2016 and official permission was obtained from the Chief Physician of Zonguldak Ataturk State Hospital on 28 March 2016, written and verbal approval was received from doctors and nurses.

Statistical Analysis
Statistical analyses were carried out by using Statistical Package for the Social Sciences (SPSS) 16.0 for Windows on a computer. After the data complied with normal distribution with regard to skewness and Kurtosis values, data evaluation proceeded using percentages, mean values, standard deviation, the t- test and ANOVA test.

RESULTS

Sociodemographic characteristics of the medical personnel who participated in the study and the distribution of Death Depression Scale (DDS) and Death Anxiety Scale (DAS) were given in Table 1.

The mean score of Death Depression Scale for women is higher than men and the mean score of death depression scale for nurses is significantly higher than doctors (p=0.0001). There is no significant difference between the scores of DDS in terms of the marital status of medical personnel, having children or not. (p>0.05). The mean scores of women’s DAS are significantly higher than men (p=0.009), DDS scores of single people (p=0.0001) and nurses(p=0.0001) are higher than married ones, and doctors, scores of people who don’t have any children are higher than the people who have children (p=0.012).
Certain characteristics of the medical personnel who participated in the study and the distribution of DDS and DAS were given in Table 2.

There is no significant difference between the scores of DDS and DAS in terms of loving the work or not, being exposed to serious danger of death, the situation of desensitization and feelings and thoughts about the death exposed to (p>0.05). But, the mean scores of DDS and DAS of the people who work in surgical units are lower than the people working in internal medicine, intensive care and emergency units(p=0.0001).

**DISCUSSION**

This study investigates what the anxiety and depression level of doctors and nurses frequently face with death is and which factors affect this level. It is found out that women's DAS and DDS scores are higher than men's. In accordance with our study, of Ertufan (2008) in his work on the doctor, Acehan, and sugar death anxiety scores of women in his work with medical service emergency medical personnel reported that it was higher in males(1,2). Again, it is similarly reported that the death anxiety of women is higher than men's in the study of Dickinson et al. In USA
medical students (24) and and the study which Soleimani et al did in Iran (24,3). This case may be explained by the fact that women are more comfortable in terms of expressing emotions than men and men’s inability to show their emotions easily because of the stronger and powerful roles assigned by the community on them. (5,2).

In this study, single people’s DAS scores are found higher than married ones’. Erdogdu and Ozkan found that the death anxiety level of married people is higher than single ones’. It is suggested that married people have more death anxiety because of the responsibilities to their children and wives and these responsibilities also increase the anxiety (25) According to the study conducted by Turgay, marital status and death anxiety have no relevance with each other (26). There was no significant difference between the marital statuses in terms of DAS in the studies Benli and Yıldırım did with nurses in Tunceli State Hospital and (3,27). The literature is controversial in this topic. This case may result from regional variations or the doctors and nurses’ being evaluated sometimes together, sometimes separate (16).

In this study, it is found that the death anxiety score of people with no children is significantly higher than people with children. Ongider and Eyuboglu stated that there is no significant difference between having a child and DAS in 2013 (16). On the contrary, in this study with intensive care nurses, Ozdemir indicated that nurses with children have a higher DAS score than the nurses with no children. (28). The variability of these findings may be due to regional differences.

According to of the doctors and nurses participating in this study, when we examine the DDS and DAS scores, nurses have more depression and anxiety with regard to death. Nurses frequently face with decreased patients and on the other hand, caring for deceased people causes negative feelings such as sorrow, anxiety and depression. Several studies have been showed that nurses suffer from mental health problems like depression, anxiety, death anxiety, death obsession, interpersonal conflict or lack of support (1,29,30) Ertufan, Hançerlioğlu, Gholamreza showed that death anxiety, depression and death obsession are determinant in death anxiety (1,29,30). It is stated that doctors and nurses working in the field of surgery have lower death anxiety than those working in internal, intensive care and emergency services. The reason for this may be that the rate of facing death incidence may be higher in surgical units, and this may have caused desensitization. Unlike this study, Benli and Yıldırım found no significant difference among the units in their study with nurses working in Tunceli State Hospital (27). This difference may be due to the fact that the relevant study was conducted only in nurses.

When the feelings and ideas about death events are evaluated, it was found that the death anxiety level of people who see death as a failure and incompetence are higher than the people who take death naturally, see it as an escape, feel nothing towards death and feel sorry. Sahin et al. showed that more than half of nursing students encounter death at any time of their lives and this case increased their death anxiety more. They also showed that the students who have more anxiety didn’t want to care for dying patients (31). However, dying patients and their families can be provided the care they deserve when they are cared with the awareness that expected death happening at the end of the process is not a failure. It is essential for medical personnel to learn not only how to face death and dying, but also how to prepare themselves to overcome the complex emotions that might follow and to prevent their own burnout. As death is an inevitable part of life, and grieving is normal for all people, they have to find their own coping mechanism (32).

**LIMITATION**

Comparing the group of doctors or nurses with a control group dealing with death could be more revealing to see who faced death. In later work, it would be more explanatory to distinguish who faces death and who does not.

**CONCLUSION**

In this study, the most important determinant of death anxiety and depression related to death was determined as female, nurse, and not having any children and work in surgical unit.

Women working in the field of health and especially nurses are a sensitive group in terms of death anxiety and depression. This sensitivity can be taken into account in assignments in sections where death is common. In this study, while desensitization against death does not affect death anxiety and depression, working in the field of surgery among professional groups causes less death anxiety. This situation can be attributed to the fact that physicians and nurses working in the surgical field face many deaths, and that the death event is directly related to their own performance.

In the light of the findings above, it is considered to be essential that healthcare professionals should be provided with the training for the care of the patient in the death process both in school curricula and in-service training in institutions they work after graduation in order to help change their negative attitudes towards death, create awareness of death anxiety and depression, improve their coping strategies with death. Although it is not possible for physicians, nurses may be recommended to perform rotation in surgical and internal units to reduce their depression and anxiety against death. Doctors, on the other hand, should be monitored by the hospital administration for depression and anxiety against death.

**Competing Interests:** The authors declare that they have no competing interest.

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**Ethical Approval:** Before starting the research, the approval of 2016/2 was received from the chairmanship of Bülent Ecevit University Clinical Traits Ethics Committee on 27 January 2016 and official permission was obtained from the Chief Physician of Zonguldak Ataturk State Hospital on 28 March 2016, written and verbal approval was received from doctors and nurses.
REFERENCES

6. Cakar FS. The levels predicting the death anxiety of loneliness and meaning in life in youth. European J Education Studies 2020;6;97-121.