İzmir Kâtip Çelebi Üniversitesi Sağlık Bilimleri Fakültesi Dergisi 2024; 9(1): 25-30
DOI: 10.61399/ikcusbfd.1267198

İKÇÜSBFD

ARAŞTIRMA / RESEARCH

Investigation of Death Anxiety in Turkish Intensive Care Nurses After the Pandemic

Türk Yoğun Bakım Hemşirelerinde Pandemi Sonrası Ölüm Kaygısının İncelenmesi

Mehtap KIZILKAYA[1], Ahmet Salim ÖZKAYA[2], Kerime Derya BEYDAĞ[3]

[1] *Aydın Adnan Menderes University, Faculty of Nursing, Department of Mental Health and Diseases Nursing, Aydın, Türkiye*
[2] *Aydın Adnan Menderes University Institute of Health Sciences, Department of Mental Health and Diseases Nursing, Aydın, Türkiye*
[3] *İstanbul Gedik University, Faculty of Health Sciences, Department of Nursing, İstanbul, Türkiye*

Geliş tarihi/Received: 18.03.2023
Kabul tarihi/Accepted: 01.09.2023

Sorumlu Yazar/Corresponding Author:

Mehtap Kızılkaya, Dr. Öğr. Üyesi
Aydın Adnan Menderes University, Faculty of Nursing, Department of Mental Health and Diseases Nursing, Efeler, Aydın, Türkiye

E-posta: mehtap.kizilkaya@adu.edu.tr
ORCİD: 0000-0002-4000-8926

Ahmet Salim Özkaya, Yüksek Lisans Öğrencisi
ORCİD: 0000-0002-6679-7134

Kerime Derya Beydağ, Prof. Dr.
ORCİD: 0000-0002-7251-4882

Abstract

Objective: This study was conducted to determine factors affecting intensive care nurses' death anxiety levels in the post-pandemic period.

Material and Method: This descriptive cross-sectional study was conducted with intensive care nurses between May and June 2022 (n=522). Data were obtained with the Introductory Information Form and the Templer Death Anxiety Scale.

Results: It was determined that the death anxiety levels of the nurses were high. The death anxiety scale mean scores of the participants were determined as 11.30±0.99 (min:8, max:15). The death anxiety level of the nurses who have a graduate degree and are between the ages of 31-40 was found to be higher than that of their other colleagues. No statistically significant difference was found between nurses' gender, marital status, chronic illness, years of working in the profession, and the death anxiety scale total score (p>0.05).

Conclusions: The results of the research can be a reference understanding the death anxiety of intensive care nurses. Involving nurses in a comprehensive death education program that gives them the opportunity to express their feelings can help reduce their anxiety.

Keywords: Intensive care, nurse, death anxiety, post-pandemic, COVID-19.

Öz

Amaç: Bu araştırmada yoğun bakım hemşirelerinin pandemi sonrası süreçte ölüm kaygısı düzeylerini etkileyen faktörleri belirlemek amaçlanmıştır.

Gereç ve Yöntem: Tanımlayıcı kesitsel tipteki bu araştırma, Mayıs- Haziran 2022 tarihlerinde yoğun bakım hemşireleri ile gerçekleştirilmiştir (n=522). Veriler Tanıtıcı Bilgi Formu ve Templer Ölüm Kaygısı Ölçeği ile elde edilmiştir.

Bulgular: Hemşirelerin ölüm kaygısı düzeylerinin yüksek olduğu belirlenmiştir. Katılımcıların ölüm kaygısı ölçeği puan ortalamaları 11.30±0.99 (min:8, max:15) olarak saptanmıştır. Lisansüstü mezunu olan ve 31-40 yaş aralığında bulunan hemşirelerin ölüm kaygısı düzeyi diğer meslektaşlarına göre daha yüksek bulunmuştur. Hemşirelerin cinsiyetleri, medeni durumları, kronik hastalık olma durumu ve meslekte çalışma yılı ile ölüm kaygısı ölçeği toplam puan ortalaması arasında istatistiksel olarak anlamlı farklılık saptanmamıştır (p>0.05).

Sonuç: Araştırma sonuçları, yoğun bakım hemşirelerinin ölüm kaygılarını anlamada bir referans olabilir. Hemşirelerin duygularını ifade etmeye fırsat veren kapsamlı bir ölüm eğitimine dahil edilmeleri kaygılarını azaltmada yardımcı olabilir.

Anahtar Kelimeler: Yoğun bakım, hemşire, ölüm kaygısı, pandemi sonrası, COVID-19.

1. Introduction

The occurrence of an infectious disease in a society that is more than the expected average frequency in a season is called an epidemic, and an epidemic that spreads across the world is called a pandemic (1). For a disease to be considered a pandemic, it must be widespread, cause deaths on a large scale, and be infectious. Coronavirus infectious disease-2019 (COVID-19), which first appeared in Wuhan, China and has spread worldwide since the end of 2019, is a disease that causes pneumonia and belongs to beta-coronavirus family, including Severe Acute Respiratory Syndrome-Coronavirus (SARS-CoV) and Middle East Respiratory Syndrome associated Coronavirus (MERS-CoV) (2). If the patient contracting COVID-19, which mainly affects the respiratory system and causes severe respiratory distress, is at an advanced age and has a chronic disorder, the course of the disease progresses negatively, and the treatment can only be given in intensive care units (3). Intensive care units are centers where high-level care and treatment are given to individuals who have a life-threatening condition and 24 hours of uninterrupted service is provided and they are equipped with advanced technology devices (4). Although intensive care units have technologically advanced life support systems, death cannot be prevented; only the process is delayed (5). In the understanding of modern medicine, where survival is considered a success and death a failure, intensive care nurses witness this painful and difficult experience by accompanying the patient at the time of death (6).

Working in the intensive care unit, nurses face the fact that they are also. In addition, after the death of the patient they care for, they also experience physical and behavioral problems, such as insomnia, headaches, and distraction (7,8). During the COVID-19 pandemic, healthcare workers have been affected physically and psychosocially by the process, both because they are members of society and because they work at the front line under serious risk (9,10). Psychosocial effects have manifested themselves as fear of death, anxiety about uncertainty, helplessness, hopelessness, depression, and post-traumatic stress disorder (11). It is known that the anxiety levels of intensive care nurses have increased due to witnessing numerous deaths because of the increase in the number of cases, uncertainties about treatment and process, lack of medical supplies, long working shifts, and the risk of contracting the virus and transmitting it to their family members (12,13). Death is a natural, inevitable, and universal phenomenon where vital functions completely terminate. It is known that acceptance of death has been difficult in every society throughout human history because it symbolizes leaving the material world behind and disappearing (14). Anxiety is the biological stimulant that develops in a situation that causes discomfort and prepares people to take action for the future. Death anxiety, which is one of the most common types of anxiety, starts with the birth of the individual and continues throughout his or her life. The lack of knowledge about death as it cannot be experienced, uncertainty about what will happen after death, worrying about the loved ones left behind, and fear of punishment after death form the basis of death anxiety (15). Since providing care for a near-death patient is an emotionally challenging experience, intensive care nurses should first know the meaning of death in their own lives and their feelings and thoughts about death. It is extremely important for nurses to be aware of their own attitudes towards death so that they can provide quality care for patients and their families and contribute to the peaceful and undisturbed death of patients. It is important to know the death anxiety levels and opinions of intensive care nurses who frequently encounter dying patients due to their working conditions about death so that they can provide qualified nursing care. It is thought that knowing the death anxiety levels of intensive care nurses, especially during the COVID-19 pandemic, where they frequently encounter death, will contribute to the literature and guide the planning in the following process. For all these justifications, our study was carried out to determine the perspectives of intensive care nurses on the phenomenon of death in the post-pandemic period, their death anxiety levels, and related factors.

Answers to the following questions were sought in the study.

• What are the death anxiety levels of intensive care nurses in the post-pandemic period?

• What are the factors affecting the death anxiety levels of intensive care nurses in the post-pandemic period?

2. Materials and Methods

2.1. Study Design

This study was conducted in a descriptive cross-sectional design.

2.2. Sample

The population of the research consisted of 35 thousand nurses registered with the Intensive Care Nurses Association (16). The sample size was determined as 380 nurses based on a 95% confidence interval and a 5% margin of error using the Raosoft sample calculator. The sample consisted of 522 intensive care nurses who worked in the intensive care unit, could use a smartphone or computer, had internet access, and participated voluntarily in the study. Participants who did not have a computer or smartphone with internet access were not included in the study.

2.3. Data Collection Tools

Research data were collected using a Descriptive Information Form and the Templer Death Anxiety Scale.

2.3.1. Descriptive Information Form

This form, which was prepared by the researchers, consisted of 6 questions about the sociodemographic and professional characteristics of nurses.

2.3.2. The Templer Death Anxiety Scale (DAS)

This Likert-type scale, which consists of 15 true/false items to determine the level of death anxiety, was developed by Templer (1970) and adapted into Turkish by Şenol (1989). During the calculation of the scale score, correct answers are given 1 point, while incorrect answers are not included in the scoring. Scores range from 0 to 15. The higher the score is, the higher the death anxiety is. If the total score obtained from the scale is ≥7, it is considered as high

death anxiety. The reliability coefficient (Cronbach's alpha value) of the Turkish version of the Death Anxiety Scale was determined as 0.86 (1). In this study, the reliability coefficient was found as 0.88.

2.4. Data Collection

The study was carried out between May and June 2022 in the form of an online survey through social networks. Data collection forms, which were created on Google forms, were shared on social networks, and nurses who met the sampling criteria were invited to participate in the study. The first part of the form included information about the purpose of the study and a voluntary consent form. The data of those who left the questionnaire incomplete were not accepted by the system, therefore they were not evaluated.

2.5. Data Analysis

The data obtained in the research were analyzed on the SPSS for Windows 22.0 software package. The normality of data was tested using the Kolmogorov-Smirnov test, and it was determined that the data showed a normal distribution. Descriptive statistics were presented as counts, percentages, mean and standard deviation values. Comparisons were made using t-test and ANOVA test, which are parametric tests. The findings were evaluated at the 95% confidence interval and 5% significance level.

2.6. Ethical Approval

Before data collection, approval of the Ethics Committee of a university was obtained (date: May 9, 2022; issue: 346). Data were obtained from intensive care nurses who volunteered to participate in the study, and they were provided preliminary information about the confidentiality of the data.

3. Results

Of the nurses in the study, 40.2% were between the ages of 31-40, 66.3% were female, 67.2% were married, 86.6% had an undergraduate degree, 90.2% had a chronic disease, and 49% had 1-10 years of work experience (Table 1).

Table 1. Distribution of Nurses by Demographic Characteristics (N:522)

	Variables	n	%
Age group	21-30	152	29.1
	31-40	210	40.2
	≥41	160	30.7
Gender	Female	346	66.3
	Male	176	33.7
Marital status	Married	351	67.2
	Single	171	32.8
Education	Undergraduate	452	86.6
	Graduate	70	13.4
Chronic diseases	No	471	90.2
	Yes	51	9.8
Total work experience in the profession (years)	1-10	256	49.0
	11-20	166	31.8
	≥21	100	19.2

The mean score of nurses in the study on the death anxiety scale was 11.30±0.99 (min:8, max:15). Scores on the scale range between 0 and 15. Death anxiety increases as scores increase. Those with a mean score of ≥7 are considered to have high levels of death anxiety. No statistically significant difference was found between nurses' score on the total death anxiety scale and their gender, marital status, presence of chronic disease, and total work experience in the profession (p>0.05).

A statistically significant difference was found between the age range of nurses and their mean score on the total death anxiety scale (p<0.05). According to the post-hoc test conducted to determine which group the difference originated from, the death anxiety levels of nurses between the ages of 31-40 were significantly higher than those in the 21-30 age group and ≥41 age group. A statistically significant difference was found between the mean score of participants on the total death anxiety scale according to their education level (p<0.05), and the death anxiety levels of the nurses with a graduate degree were significantly higher than those with an undergraduate degree (Table 2).

Table 2. Comparison of the Mean Scale Score of Nurses According to Their Demographic Character

Variables		n	Mean± sd	Test value p
Mean scale score and standard deviation		**522**	**11.30**±0.99 (min:8, max:15)	
Age group	21-30 [a]	152	11.28±0.93	F: 4.340
	31-40 [b]	210	11.45±0.98	**p: 0.014**
	≥41 [c]	160	11.14±0.98	**b>a>c**
Gender	Female	346	11.31±1.03	t: 0.182
	Male	176	11.29±0.99	p:0.856
Marital status	Married	351	11.31±1.01	t: -0.038
	Single	171	11.30±0.95	p:0.970
Education	Undergraduate	452	11.27±0.98	**t: 0-2.251**
	Graduate	70	11.55±1.03	**p: 0.025**
Presence of chronic disease	No	471	11.33±1.00	t:1.901
	Yes	51	11,05±0,84	p:0.058
Total work experience in the profession (years)	1-10	256	11,33±0,97	F: 0.155
	11-20	166	11,29±1,02	p:0.856
	≥21	100	11,27±0,98	

t: t test, F: ANOVA test

4. Discussion

It is important to know the perspectives of intensive care nurses, who mostly provide care for patients whose general condition is severe and close to death, on death, their death anxiety levels, and affecting factors so that they can continue to provide qualified nursing care in the post-COVID-19 pandemic period. The mean score of intensive care nurses included in our study on the death anxiety scale was determined as 11.30±0.99 (min:8, max:15). In other words, the death anxiety level of nurses was evaluated as high because their mean score on the death anxiety scale was ≥7. The presence of a high level of death anxiety may cause nurses to distance themselves from patients, focus on physical care, ignore

the psychosocial needs of patients, and feel disappointed and exhausted (17). For this reason, it may be appropriate to carry out in-depth studies on how intensive care nurses with high death anxiety understand death and how they position death in their lives, and then to make support plans so that they can develop effective methods to cope with death anxiety. According to existential psychiatrist Irvin Yalom, "With repeated contact, one can get used to anything, even dying. Exposure to low doses of fear repeatedly in a therapy can lead to depersonalization" (18). In other words, when healthcare professionals with high death anxiety witness the death of patients, this can be considered an experience of exposure, and subsequent depersonalization is expected. However, our research findings are contrary to Yalom's expression. The intensive care nurses included in our study witnessed the deaths of a large number of patients as they worked in intensive care units during the COVID-19 pandemic; that is, they were frequently exposed to the phenomenon of "death". This suggested that exposure therapy, which is often used and successful in phobia treatments, was not an adequate solution to a complex situation such as death. The review of the literature indicated that there were studies in which intensive care nurses had high levels of death anxiety, similar to our research finding (19). One of the results obtained in the present study was that there was no statistically significant difference between nurses' mean scores on the total death anxiety scale in terms of gender ($p>0.05$). According to the literature, the death anxiety levels of females are generally higher than those of males (20). It can be thought that higher levels of anxiety in women may be related to gender roles. Indeed, while the anxious nature of women is accepted in society, men are expected to be strong. No statistically significant difference was found between the marital status of the intensive care nurses included in the study and their mean score on the total death anxiety scale. Some studies in the literature indicated that the fear of death scores of married nurses were higher than those of single nurses (21). The high degree of anxiety among married nurses can be attributed to their sense of responsibility for their spouse and children, as well as their belief that witnessing the death of family members is a painful event.

There was no statistically significant difference between the intensive care nurses' chronic diseases and their mean score on the death anxiety scale ($p>0.05$). Although intensive care nurses' chronic disease affects their quality of life, it can be considered that it does not affect death anxiety since it is a process that they can manage. Yorulmaz and Kurt Sezer (2020) reported that there was no significant difference between the presence of a chronic disease and death anxiety, but that the death anxiety scores of participants with chronic diseases were higher. Another finding of our study was that there was no statistically significant difference between nurses' total work experience and their mean score on the total death anxiety scale ($p>0.05$). The results of some studies conducted in Iran and our country are similar to our research findings (23). In the literature, there are studies showing that nurses working in intensive care units compared to those working in other clinics and nurses with more work experience compared to those with less work experience had higher fear of death scores (24). These results can suggest that working in the intensive care unit for many years results in witnessing a difficult experience such as death, and this leads to exhaustion.

In our study, it was determined that there was a statistically significant difference between the age group of intensive care nurses and their total death anxiety scale score ($p<0.05$). Nurses with the highest death anxiety were between the ages of 31 and 40. The reason for having higher death anxiety than their colleagues in other age groups can be interpreted as the fact that the mentioned age range involves adults, individuals generally spend their work and family lives in a certain order at this age, and they are afraid that death will affect their lives. In the literature, there are studies reporting that death anxiety increases with advancing age (9). Another finding of our study was that there was a statistically significant difference between nurses' mean scores on the total death anxiety scale according to their education levels ($p<0.05$). The death anxiety levels of intensive care nurses with a graduate degree were found to be significantly higher than those with an undergraduate degree. The results obtained were similar to those of our study. In studies conducted abroad, it was stated that as the education level of nurses increased, their attitudes towards death were affected positively (25). Death anxiety is a feeling that is experienced as a result of the thought that plans will not come true or that arises due to the uncertainty after death. In this respect, as intensive care nurses who have a graduate degree have life expectations and plans, knowing that death is an irreversible experience that interrupts this situation may increase their anxiety levels.

Contrary to our study, there are studies in the literature in which no statistically significant difference was found between the education level of nurses and their death anxiety levels (5). In addition, it is stated in the literature that education about death can raise the awareness of nurses about the phenomenon of death, reduce death anxiety, and change negative attitudes towards the care of near-death patients (15). In many studies conducted locally and abroad on the topic, it was determined that death education given to nurses significantly reduced death anxiety levels (20, 21, 26). Nurses' conversations about death and their ability to express their feelings seem to have been effective in reducing death anxiety (27, 28).

It was determined that the mean scores of intensive care nurses included in the study on the total death anxiety scale were also high in the post-pandemic period. Our findings showed that there was not a statistically significant difference between nurses' mean scores on the total death anxiety scale in terms of their demographic data, such as gender, marital status, having a chronic disease, and total work experience in the profession. It was found that the death anxiety levels of nurses who had a graduate degree and were between the ages of 31 and 40 were significantly higher than those of their other colleagues.

4.1. Limitations

The research findings are based on the self-reports of the intensive care nurses participating in the research. The study's findings are confined to the responses provided by nurses working in the intensive care unit at the time of the study.

5. Conclusion

Based on these findings, it is recommended to implement supportive education and counseling programs that will help intensive care nurses recognize and express their feelings about death, cope with death anxiety, and determine the psychosocial needs of patients close to death. In addition, as can be seen in the results, it should be known that nurses who are in the 31 and 40 age range and who have graduate education are a risky group and interventions should be planned by the institution management. It will also be beneficial to conduct in-depth research with a larger sample group and to plan qualitative studies.

6. Contribution to Field

This study was conducted as a descriptive cross-sectional study to determine the factors affecting the post-pandemic death anxiety levels of intensive care nurses. The research results are a reference for nurses working in intensive care. It was determined that the death anxiety levels of the participant nurses were high. It was determined that the death anxiety levels of nurses with undergraduate degrees and between the ages of 31 and 40 were higher than their those of other colleagues. These results show thatit is of great importance for intensive care nurses to know the meaning of death in their own lives and to be aware of their feelings and thoughts about death so that they can provide quality care to their patients. Because intensive care nurses often encounter patients close to death and witness their patients' moments of death. For this reason, it would be appropriate for intensive care nurses to go through a comprehensive death education program in which they realize their feelings about death and provide an environment for them to express themselves. This training is necessary for providing holistic nursing care and reducing the work stress of nurses.

Ethical Aspect of the Research

Before data collection, approval of the Ethics Committee of a university was obtained (date: May 9, 2022; issue: 346). Data were obtained from intensive care nurses who volunteered to participate in the study, and they were provided preliminary information about the confidentiality of the data.

Conflict of Interest

There is no conflict of interest regarding any person and/or institution.

Authorship Contribution

Concept: MK, ASÖ, KDB; **Design:** MK, ASÖ; **Supervision:** MK, ASÖ, KDB; **Funding:** MK, ASÖ; **Materials:** - **Data Collection/Processing**: MK, ASÖ; **Analysis/Interpretation**: KDB, MK; **Literature Review:** MK, ASÖ; **Manuscript Writing:** MK, ASÖ; **Critical Review:** MK, KDB, ASÖ.

References

1. Aslan R. Epidemics, pandemics and covid-19 from history to the present. Journal of Details. 2020;8(85):35-41.

2. World Health Organization. Coronavirus disease (Covid-19) advice for the public [homepage on the internet]. 2020 [cited 2021 Sep 12]. Avaliable from: https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html

3. Bahar A, Buldak Cİ. Nursing management of covid-19 patients who is in intensive care unit. Journal of Health Science Yuksek Ihtisas University. 2020;1:78-84.

4. Tambağ H, Mansuroğlu S, Yıldırım G. Determination of the spirutual support perception of intensive care unit nurses: A pilot study. J Contemp Med. 2018;8(2):159-64.

5. Kayaoğlu K, Ekinci M. Death anxiety in intensive care nurses and affecting factors. Int J Psychiatry Psychol Res. 2016;5:21-36.

6. Jang SK, Park WH, Kim HI, Chang SO. Exploring nurses' end-of-life care for dying patients in the ICU using focus group interviews. Intensive Crit Care Nurs. 2019;52:3-8.

7. Barnes S, Jordan Z, Broom M. Health professionals' experiences of grief associated with the death of pediatric patients: A systematic review. JBI Evid Synth. 2020;18(3):459-515

8. Puento-Fernandez D, Lozano-Romero MM, Montoya-Juarez R, Marti-Garcia C, Campos-Calderon C, Hueso-Montero C. Nursing professionals' attitudes, strategies, and care practices towards death: A systematic review of qualitative studies. J Nurs Scholarsh. 2020;52(7):1-10.

9. Lai J, Ma S, Wang Y, Cai Z, Hu J, Wei N, et al. Factors associated with mental health out comes among health care workers exposed to coronavirus disease 2019. JAMA Network Open. 2020;3(3):1-1.

10. Roelen CA, Van Hoffen MF, Waage S, Schaufeli WB, Twisk JW, Bjorvatn B, et al. Psychosocial work environment and mental health-related long-term sickness absence among nurses. Int Arch Occup Environ Health. 2018;91(2):195-203.

11. Huang JZ, Han MF, Luo TD, Ren AK, Zhou XP. Mental health survey of medical staff in a tertiary infectious disease hospital for COVID-19. Chinese Journal of Industrial Hygiene And Occupational Diseases. 2020;38(3):192-95.

12. Albott CS, Wozniak JR, Mcglinch BP, Wall MH, Gold BS, Vinogradov S. Battle buddies: Rapid deployment of a psychological resilience intervention for health care workers during the Covid-19 pandemic. Anesth Analg. 2020;131(1):43-54.

13. El-Hagea W, Hingrayc C, Lemogne C, Yrondif A, Brunault P, Bienvenu Etainj B, et al. Health professionals facing the coronavirus disease 2019 (Covid-19) pandemic: What are the mental health risks? Encephale. 2020;46(3):73-80.

14. Turhan EH. Death anxiety and coronavirus on the axis of death sociology. Habitus Journal of Sociology. 2021;2(2):85-101.

15. İnci F, Öz F. Palliative care and death anxiety. Current Approaches in Psychiatry. 2012;4(2):178-87.

16. Turkish Society of Critical Care Nurses [Internet]. [cited 2022 Feb 12]. Available from: https://tybhd.org.tr/

17. Salum MEG, Kahl C, da Cunha KS, Koerich C, dos Santos TO, Erdmann AL. The process of death and dying: Challenges in nursing care for patients and family members. Revista Da Rede de Enfermagem Do Nordeste. 2017;18(4):528-35.

18. Yalom I. Varolusçu Psikoterapi. Çev. Zeliha İyidoğan Babayiğit, İstanbul: Kabalcı Yayınevi; 2013.

19. Peters L, et. How death anxiety impacts nurses' caring for patients at the end of life: A review of literature. Open Nurs J.2013;7:14-21.

20. Berndtsson IEK, Karlsson MG, Rejno ACU. Nursing students' attitudes toward care of dying patients: A pre-and post-palliative course study. Heliyon. 2019;5(10):1-7.

21. Guo Q, Zheng R. Assessing oncology nurses' attitudes towards death and the prevalence of burnout: A cross-sectional study. Eur J Oncol Nurs. 2019;42:69-75

22. Yorulmaz D, Kurt Sezer H. Investigation of death anxiety and affecting factors of nurses and doctors' working in a state hospital: Artvin example. Journal of Traditional Medical Complementary Therapies. 2020;3(2):171-7.

23. Arab M, Bagheri SHS, Sayadi A, Heydarpour N. Comparison of death anxiety, death obsession, and humor among nurses working in medical-surgical departments and intensive care units. Arch Neurosci. 2019;6(2):e86398.

24. Zaybak A, Erzincanlı S. Attitudes of nurses towards death. International Refereed J Nurs Res. 2016;6:16-29.

25. Mallory JL, Allen CL. Care of the dying: A positive nursing student experience. Medsurg Nursing. 2006;15(4):217-22.

26. Xu F, Huang K, Wang Y, Xu Y, Ma L, Cao Y. A questionnaire study on the attitude towards death of the nursing interns in eight teaching hospitals in Jiangsu, China. Biomed Res Int. 2019;1-8.

27. Benli SS, Yıldırım A. The relationship between life satisfaction and attitude towards death in nurses. Gumushane University Journal of Health Sciences. 2017;6(4):167-79.

28. Akça F, Köse A. Adaptation of death anxiety scale (DAS): Validity and reliability studies. J Clin Psychiatry. 2018;11(1):7-16.