

The Effect of the COVID-19 Pandemic on Death Anxiety and Spiritual Care in Oncology Patients

Abstract

Background: Concerns that the diseases of individuals with non-coronavirus disease 2019 (non-COVID-19) conditions will progress, their symptoms will worsen, their treatments will be prolonged, and morbidity and mortality will increase due to fears of disease transmission or contagion during the pandemic have affected all individuals. It is important to recognize the death anxiety of oncology patients, especially those who may have high levels of death anxiety, and to support their spiritual care.



Aim: The aim of this study was to determine the effect of the COVID-19 pandemic on death anxiety and the level of spirituality and spiritual care in oncology patients, as well as to identify the relationship between these variables.

Methods: In this study, 204 patients diagnosed with cancer were recruited through an online application. Data were collected using an individual identification form, Death Anxiety Scale, and the Spirituality and Spiritual Care Rating Scale (SSCRS). A descriptive cross-sectional study was conducted. The "Mann-Whitney U" test (Z-table value) was used for comparing measurement values of two independent groups in data not having a normal distribution; the "Kruskal-Wallis H" test (χ^2 -table value) was used to compare three or more independent groups. The "Spearman correlation test" was performed to determine the relationship between scale scores.

Results: The mean age of the patients in this study was 60.72 ± 14.36 years. The mean death anxiety score was found to be 11.19 ± 1.79 , and the mean SSCRS score was 30.50 ± 4.65 . Statistically significant differences were found in death anxiety and SSCRS scores according to the age groups of the patients and the presence of other chronic diseases ($P > 0.05$). In addition, a statistically significant difference was found in terms of death anxiety scale scores according to the diagnosis of COVID-19 ($P < 0.05$). There was a negative, very weak and statistically significant relationship between the patients' spirituality and spiritual care and death anxiety scale scores ($r = -0.157$; $P = 0.025$).

Conclusion: It has been determined that oncology patients have high death anxiety and a moderate perception of spirituality and spiritual care during the COVID-19 pandemic process.

Keywords: Death anxiety, pandemic, spirituality, oncology

Kevser Sevgi Ünal Aslan¹ ,
Funda Çetinkaya² 

¹Department of Fundamentals of Nursing, Osmaniye Korkut Ata University, Faculty of Health Sciences, Osmaniye, Türkiye

²Department of Surgical Nursing, Aksaray University, Faculty of Health Sciences, Aksaray, Türkiye

Introduction

The coronavirus disease 2019 (COVID-19) pandemic, a serious health problem worldwide, started with the detection of an epidemic with severe viral pneumonia in Wuhan, China, in December 2019.¹ It was declared an "urgent international public health problem" by the World Health Organization (WHO) on January 30, 2020 and a pandemic on March 11, 2020.² The high rate of transmission, relatively high death rates, lack of definitive treatment, and unknown long-term results create fears about COVID-19 all over the world.³

Although all individuals are at risk, the risk of COVID-19 infection is higher in those with serious health problems such as cancer, cardiovascular diseases, diabetes, and lung diseases.⁴ The literature reports that cancer patients have a higher risk of contracting COVID-19 than the general population.⁵ Many hospitals minimized contacts to keep these patients safe, used virtual platforms for communication, and required patients to visit hospitals alone, without support structures such as family or friends.⁶ Cancer patients already experience stress due to treatment and diagnosis, and the measures taken regarding the COVID-19 outbreak created additional stress. Oncology patients may experience high levels of stress and death anxiety when they perceive risky situations such as illness and serious adverse events if they are infected with COVID-19.⁷ In this

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Corresponding author: Kevser Sevgi Ünal Aslan
E-mail: kevser-sevgi@hotmail.com

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process, the spiritual care needs of the patients may also be affected. In the case of cancer, both patients and their caregivers often experience significant psychological, spiritual, and social distress.⁸ For this reason, spiritual care is considered a fundamental element for cancer patients.⁹ Previous studies also reveal that cancer patients need spiritual care.^{10,11}

Oncology patients with chronic diseases are expected to have increased spiritual care requirements and heightened death concerns during the long-term treatment process. Nurses should be aware of the spiritual care needs of oncology patients and plan spiritual care interventions. Care specific to the individual death concerns of oncology patients should be planned. It is crucial to meet these needs by employing spiritual care nurses in hospitals.

The care and treatment process for oncology patients should be evaluated holistically, taking into account the individual characteristics of the patients. This study was conducted to evaluate the levels of death anxiety and spiritual care among cancer patients during the COVID-19 pandemic this study findings is very important in terms of providing data on how much oncology patients need spiritual care and how they handle death anxiety in the face of unexpected, chaotic situations.

Study Questions

The research questions were as follows:

1. What is the level of death anxiety among cancer patients during COVID-19?
2. What is the impact on spirituality and spiritual care ratings for oncology patients during COVID-19?
3. Is there a relationship between the spirituality and spiritual care rating levels and death anxiety among oncology patients?

Materials and Methods

This study was conducted as a descriptive type. According to the formula $n = t^2 \cdot p \cdot q / d^2$ for sample calculation with an unknown population, it was determined that a minimum of 132 patients should be included with a 5% margin of error within a 95% confidence interval.¹² This study was completed with 204 patients who met the study criteria. The study was conducted between June 2021 and February 2022.

The inclusion criteria were determined as individuals aged 18 years and older who have been diagnosed with cancer for at least one year, who have started cancer treatment, and who can speak Turkish and agree to participate in the study. The exclusion criteria were individuals who have a psychiatric disorder and use medication for this reason.

Data Collection Tools

In data collection, the Individual Introduction Form, Death Anxiety Scale, and Spirituality and Spiritual Care Rating Scale (SSCRS) were used.

Individual Introduction Form

This form consists of six questions investigating age, gender, educational status, presence of other chronic diseases, and diagnosis of COVID-19.

Death Anxiety Scale

Developed by Templer in 1970,¹³ its Turkish validity and reliability study was conducted by Şenol in 1989.¹⁴ It is a 15-item true-false scale that

measures the anxiety and fears of one's own death and risk of death. The total score obtained from the scale gives the death anxiety score. The highest score from the scale is 15. In the scoring, death anxiety is evaluated as 0-4 points "mild", 5-9 points "moderate", 10-14 points "severe", and 15 points "panic level." The Cronbach's alpha value of the scale was found to be 0.83.¹⁴ In this study, the Cronbach's alpha value was determined as 0.71.

Spirituality and Spiritual Care Rating Scale

Developed by McSherry, Draper, and Kendric in 2002,¹⁵ the validity and reliability of the scale in Turkish were carried out by Ergül and Bayık Temel in 2007. The scale is evaluated as a five-point Likert-type scale.¹⁶ It consists of 17 items in total, with 13 items scored straight and four items (3, 4, 13, 16) reverse scored. Scoring of the scale ranges from 17 points at the lowest to 85 points at the highest. A high total scale score indicates a good level of perception of spirituality and spiritual care. In Turkey, Ergül and Bayık Temel (2007) determined the Cronbach's alpha coefficient of the scale to be 0.76.¹⁶ In this study, the Cronbach's alpha coefficient of the scale was determined to be 0.74.

Data Collection

Data were collected via a Google Form using social media platforms (WhatsApp, email). Questionnaires prepared with the application were administered to the participants who agreed to participate in the research after the purpose of the research was explained and their informed consent was obtained. The average response time for the questionnaires was 10 minutes.

Ethical Considerations

In order to conduct the research, ethical approval was obtained from the Scientific Research and Publication Ethics Committee of Osmaniye Korkut Ata University (Approval Number: 2021/3/3, Date: 26.05.2024). In addition, application permission was obtained from the Ministry of Health. Consent was obtained from the participants participating in the study. The principle of confidentiality was adhered to in the research. The study was conducted in accordance with the Principles of the Declaration of Helsinki.

Data Analysis

For the analysis of the data in the research, the SPSS 24.0 (IBM Corp., Armonk, NY, USA) statistical software package was used. The introductory information of the individuals is presented with frequency distribution and percentages to explain the nature of the sample. In addition, mean, standard deviation, minimum, and maximum values were used to describe the scales. The "Mann-Whitney U" test (Z-table value) was used for comparing measurement values of two independent groups in data not having a normal distribution; the "Kruskal-Wallis H" test statistics (χ^2 -table value) were used to compare three or more independent groups. "Spearman correlation analysis" was applied to examine the relationship between "Death anxiety" and "SSCRS" for the individuals participating in the study.

Study Variables

Dependent Variable

Mean scores from the Death Anxiety Scale and the Spirituality and Spiritual Care Rating Scale.

Independent Variables

Characteristics of the individual such as age, gender, marital status, chronic disease status, and having COVID-19 are among the independent variables of the research.

Results

It was determined that the mean age of the participants was 60.72 ± 14.36 years, and 97 (47.5%) were in the ≥ 65 age group. In the study, 108 (52.9%) of the individuals were female, 155 (76.0%) were married, 94 (46.1%) had completed primary school, 126 (61.8%) had other chronic diseases, and 189 (92.6%) individuals were not diagnosed with COVID-19 (Table 1). It was determined that the mean death anxiety score of the patients was 11.19 ± 1.79 , and the mean SSCRS score was 30.50 ± 4.65 . A statistically significant difference was found in terms of SSCRS and death anxiety scale scores according to age groups and the presence of other chronic diseases. In addition, a statistically significant difference was found in terms of death anxiety scale scores according to the diagnosis of COVID-19 ($Z = -4.542$; $P = 0.000$) (Table 2).

The relationship between SSCRS and the death anxiety scale is shown in Table 3. A negative, very weak, and statistically significant relationship was found between SSCRS and the death anxiety scale ($r = -0.157$; $P = 0.025$). As SSCRS scores increase, death anxiety scale scores decrease.

Discussion

While cancer patients are a group experiencing uncertainty about their future, the anxiety of contracting COVID-19 and not being able to receive treatment has further exacerbated this uncertainty.¹⁷ The intense emotions experienced can affect death anxiety in patients. In this study, it was determined that cancer patients experienced severe

death anxiety during the pandemic. Similar to the results of the present study, anxiety and depression were observed in studies conducted with cancer patients during the pandemic.¹⁸⁻²⁰ In the study, it was determined that patients aged 50 and under, and those over 65 years old, experienced higher levels of death anxiety compared to the 50-64 age group. Cengiz et al. (2021) found that individuals between the ages of 46-65 experienced death anxiety.²¹ This study showed that additional chronic illness increases death anxiety. Similarly, Karahan and Hamarta (2019) found a significant relationship between death anxiety and chronic illness in their study.²² In this context, while many individuals with chronic diseases face the fact that "death is inevitable," they are not actually ready for death.²³ During the pandemic, many oncology patients experienced anxiety, worry, feeling overwhelmed, hypersensitivity, hypervigilance, helplessness, and disappointment.²⁴ Butow et al. (2022), in their study with oncology patients, stated that patients with high levels of anxiety/depression experienced more death anxiety.²⁴ It was determined that cancer patients diagnosed with COVID-19 experienced higher levels of death anxiety. Death anxiety is an emotion that includes panic, fear, or anxiety resulting from thoughts about death, being cut off from the world, or what happens after life.²⁵ Despite advances in treatment, cancer is strongly associated with death in the minds of patients,²⁶ and with the addition of COVID-19, this may increase death-related anxieties as patients feel more vulnerable, making this population particularly susceptible to depression.

The study found that the spirituality and spiritual care of cancer patients were at a moderate level. Conversely, Atan et al. (2020) stated that cancer patients have a high level of spirituality and spiritual care.²⁷ Spirituality plays an active role in coping with diseases, ensuring well-being, and in the treatment and healing process of chronic diseases. It is thought that there is an important link between human helplessness and seeking divine help. Situations of desperation, such as the danger of death, coming face to face with death, and serious illnesses, are known to be significant factors in awakening a sense of religion.²⁷ When the literature is examined, it has been observed that many patients desire to reconsider and reaffirm their beliefs when they think that they have reached the end of their lives. It has been found that they tend to make their own spirituality or spiritual well-being a goal or priority in the hope of achieving a peaceful death.²⁸⁻³² In the study, it was determined that oncology patients aged 50-64 had better spirituality and spiritual care than other age groups. This result can be explained by the fact that spirituality and spiritual care are subjective concepts dependent on patients' own worldviews and interpretations. In this study, it was determined that the total mean score for spirituality and spiritual care of those who did not have another chronic disease was higher than that of those who had another chronic disease. Contrary to the results of this study, Atan et al. (2020) showed that cancer patients with chronic diseases have higher levels of spirituality and spiritual care.²⁷

The results of the study showed that as the spiritual care scale scores of the patients increased, their death anxiety scale scores would decrease. Religion or spirituality is an important coping strategy for many cancer patients. A high perception of spirituality and spiritual care can contribute positively to the disease processes of patients, fostering the perception that God collaborates with the patient in a constructive way. Conversely, cancer patients who refuse to hold religious beliefs and avoid religious coping behaviors may be more prone to potentially depressive thoughts and death anxiety.³³ Overall, positive religious coping strategies reflect a confident and

Variables (N = 204)	n	%
Age [$\bar{X} \pm SD$ → 60.72 ± 14.36 (years)]		
<50	36	17.7
50-64	71	34.8
≥ 65	97	47.5
Gender		
Female	108	52.9
Male	96	47.1
Marital status		
Married	155	76.0
Single	49	24.0
Education		
Primary Education	94	46.1
Secondary Education	65	31.9
High School	31	15.1
University	14	6.9
Presence of Other Chronic Diseases		
Yes	126	61.8
No	78	38.2
Being Diagnosed with COVID-19		
Yes	15	7.4
No	189	92.6

All values are expressed as number (percentage) or mean \pm standard deviation. SD: Standard Deviation.

Table 2. Comparison of Spiritual Care and Death Anxiety Scores According to Sociodemographic Variables					
Variables (N = 204)	n	SSCRS		Death Anxiety Scale	
		$\bar{X} \pm SD$	Median [IQR]	$\bar{X} \pm SD$	Median [IQR]
Age					
<50 ¹	36	30.94 ± 5.42	30.0 [8.0]	11.92 ± 1.89	12.0 [2.0]
50-64 ²	71	31.54 ± 4.91	31.0 [7.0]	10.87 ± 1.62	10.0 [2.0]
≥65 ³	97	29.49 ± 3.92	29.0 [5.0]	11.14 ± 1.82	11.0 [2.0]
Statistical Analysis Possibility Difference			$\chi^2=9.270$ P = 0.010 [2-3]		$\chi^2=6.724$ P = 0.035 [1-2]
Gender					
Female	108	30.54 ± 4.95	31.0 [7.0]	11.39 ± 1.76	12.0 [2.0]
Male	96	30.46 ± 4.29	30.0 [6.8]	10.95 ± 1.81	11.0 [2.0]
Statistical Analysis Possibility			Z=-0.082 P = 0.935		Z=-1.853 P = 0.064
Marital Status					
Married	155	30.27 ± 4.66	30.0 [6.0]	11.16 ± 1.84	11.0 [2.0]
Single	49	31.22 ± 4.57	31.0 [7.0]	11.27 ± 1.64	12.0 [3.0]
Statistical Analysis Possibility			Z=-1.507 P = 0.132		Z=-0.464 P = 0.643
Education					
Primary Education	94	30.61 ± 4.93	30.0 [7.0]	11.04 ± 1.79	11.5 [2.0]
Secondary Education	65	30.18 ± 4.16	30.0 [5.5]	11.09 ± 1.58	11.0 [2.0]
High School	31	31.32 ± 4.91	31.0 [7.0]	11.29 ± 2.07	11.0 [2.0]
University	14	29.43 ± 4.36	30.0 [7.2]	12.35 ± 2.06	13.0 [4.3]
Statistical Analysis Possibility			$\chi^2=1.309$ P = 0.520		$\chi^2=0.298$ P = 0.861
Presence of Other Chronic Diseases					
Yes	126	30.04 ± 4.47	29.5 [6.0]	12.10 ± 1.64	12.0 [2.0]
No	78	31.24 ± 4.85	31.0 [6.0]	11.32 ± 2.02	11.0 [3.0]
Statistical Analysis Possibility			Z=-2.028 P = 0.043		Z=-2.829 P = 0.005
Being Diagnosed with COVID-19					
Yes	15	31.47 ± 5.41	33.0 [9.0]	12.20 ± 2.62	12.0 [4.0]
No	189	30.42 ± 4.59	30.0 [6.0]	10.19 ± 1.72	10.0 [2.0]
Statistical Analysis Possibility			Z=-1.016 P = 0.310		Z=-4.542 P = 0.000

Bold values indicate statistical significance (P<0.05). SSCRS: Spirituality and Spiritual Care Rating Scale; SD, Standard Deviation.

constructive response with positive life meaning, spiritual connection, and religious adaptation.³²

Limitations of the Study

This study has several limitations. Collecting data online and reaching a limited number of people are among the limitations of the research.

Another limitation of the study is that it evaluated the fear of death and the perception of spiritual care during the pandemic among cancer patients, without any comparison to periods before the pandemic. However, the strength of the study lies in its inclusion of all cancer stakeholders, assessing shared perspectives and experiences among the groups.

Conclusion

This study shows that cancer patients have moderate levels of spirituality and severe levels of death anxiety during the COVID-19 pandemic period. It is important for cancer patients to be evaluated by nurses regarding their disease care process and treatments during the pandemic. It has been determined that the spiritual care requirements of oncology patients have increased due to heightened concerns about death during the COVID-19 process. Appointing spiritual

Table 3. Examination of the Relationships Between Spiritual Care and Death Anxiety Scales		
Correlation (N = 204)	Death Anxiety Scale	
SSCRS	r	-0.157
	p	0.025
Statistical significance P<0.05.		

care nurses in clinics and opening related units is very important, especially for patients who require a chronic and long treatment process, such as oncology patients. It is believed that identifying the spiritual care needs of patients, reducing their death concerns, and planning individual-specific nursing initiatives will positively affect the treatment process. Accordingly, by identifying the spiritual care needs of patients, their self-efficacy and coping skills can be increased.

Ethics Committee Approval: Ethics committee approval was obtained from Osmaniye Korkut Ata University Scientific Research and Publication Ethics Board (Approval Number: 202173/3, Date: 26.05.2024).

Informed Consent: Written informed consent was obtained from the participants.

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References

- Phelan AL, Katz R, Gostin LO. The novel coronavirus originating in Wuhan, China: challenges for global health governance. *JAMA*. 2020;323(8):709-710. [CrossRef]
- World Health Organization. Coronavirus disease pandemic. Accessed July 5, 2024. <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- Rajkumar RP. COVID-19 and mental health: a review of the existing literature. *Asian J Psychiatr*. 2020;52:102066. [CrossRef]
- Dai M, Liu D, Liu M, et al. Patients with cancer appear more vulnerable to SARS-CoV-2: a multicenter study during the COVID-19 outbreak. *Cancer Discov*. 2020;10(6):783-791. [CrossRef]
- Yu J, Ouyang W, Chua MLK, Xie C. SARS-CoV-2 transmission in patients with cancer at a tertiary care hospital in Wuhan, China. *JAMA Oncol*. 2020;6(7):1108-1110. [CrossRef]
- Cruikshank S. Covid-19: the impact on people affected by cancer, oncology nurses and the wider healthcare community. *Enferm Clin*. 2021;31(4):201-202. Spanish. [CrossRef]
- Miaskowski C, Paul SM, Snowberg K, et al. Stress and symptom burden in oncology patients during the COVID-19 pandemic. *J Pain Symptom Manage*. 2020;60(5):e25-e34. [CrossRef]
- Sankhe A, Dalal K, Agarwal V, Sarve P. Spiritual care therapy on quality of life in cancer patients and their caregivers: a prospective non-randomized single-cohort study. *J Relig Health*. 2017;56(2):725-731. [CrossRef]
- Puchalski CM, Sbrana A, Ferrell B, et al. Interprofessional spiritual care in oncology: A literature review. *ESMO Open*. 2019;4(1):e000465. [CrossRef]
- Balboni MJ, Sullivan A, Amobi A, et al. Why is spiritual care infrequent at the end of life? Spiritual care perceptions among patients, nurses, and physicians and the role of training. *J Clin Oncol*. 2013;31(4):461-467. [CrossRef]
- Dedeli O, Yildiz E, Yuksel S. Assessing the spiritual needs and practices of oncology patients in Turkey. *Holist Nurs Pract*. 2015;29(2):103-113. [CrossRef]
- Türkiye Cumhuriyeti Sağlık Bakanlığı, Kanser Daire Başkanlığı. Türkiye kanser istatistikleri 2018. Accessed July 5, 2024. https://hsgm.saglik.gov.tr/depo/birimler/kanser-db/Dokumanlar/Istatistikler/Kanser_Rapor_2018.pdf
- Templer DI. The construction and validation of a Death Anxiety Scale. *J Gen Psychol*. 1970;82(2d Half):165-177. [CrossRef]
- Şenol C. Ankara İlinde Kurumlarda Yaşayan Yaşlılarda Ölümle İlişkin Kaygı Ve Korkular. Yayınlanmamış Yüksek Lisans Tezi. Ankara: Ankara Üniversitesi Sosyal Bilimler Enstitüsü; 1989.
- McSherry W, Draper P, Kendrick D. The construct validity of a rating scale designed to assess spirituality and spiritual care. *Int J Nurs Stud*. 2002;39(7):723-734. [CrossRef]
- Ergül Ş, Bayık Temel A. Maneviyat ve Manevi Bakım Dereceleme Ölçeği'nin Türkçe formunun geçerlik ve güvenilirliği. *Ege Üniv Hemş Yükseköğül Derg*. 2007;23(1):75-87.
- Young AM, Ashbury FD, Schapira L, Scotté F, Ripamonti CI, Olver IN. Uncertainty upon uncertainty: supportive care for cancer and COVID-19. *Support Care Cancer*. 2020;28(9):4001-4004. [CrossRef]
- Juanjuan L, Santa-Maria CA, Hongfang F, et al. Patient-reported outcomes of patients with breast cancer during the COVID-19 outbreak in the epicenter of China: a cross-sectional survey study. *Clin Breast Cancer*. 2020;20(5):e651-e662. [CrossRef]
- Wang Y, Duan Z, Ma Z, et al. Epidemiology of mental health problems among patients with cancer during COVID-19 pandemic. *Transl Psychiatry*. 2020;10(1):263. [CrossRef]
- Romito F, Dellino M, Loseto G, et al. Psychological distress in outpatients with lymphoma during the COVID-19 pandemic. *Front Oncol*. 2020;10:1270. [CrossRef]
- Cengiz Z, Yıldırım H, Gürdap Z. Meaning of life and death anxiety in individuals with chronic disease. *Van Med J*. 2021;28(3):348-353. Turkish. [CrossRef]
- Karahan FŞ, Hamarta E. The effect of chronic diseases and polypharmacy on anxiety and death anxiety in geriatric patients. *Aegean J Med Sci*. 2019;2(1):8-13. Turkish. [CrossRef]
- Kaçan Softa H, Uçukoğlu H, Ulaş Karahmetoğlu G, Esen D. A research on factors affecting level of death anxiety of the elderly. *Yaşlı Sorun Araş Derg*. 2011;4(1-2):67-79. Turkish.
- Butow P, Havard PE, Butt Z, et al. The impact of COVID-19 on cancer patients, their carers and oncology health professionals: a qualitative study. *Patient Educ Couns*. 2022;105(7):2397-2403. [CrossRef]
- Khademi F, Moayedi S, Gollitaleb M, Karbalaie N. The COVID-19 pandemic and death anxiety in the elderly. *Int J Ment Health Nurs*. 2020;30(1):346-349. [CrossRef]
- Moser RP, Arndt J, Jimenez T, Liu B, Hesse BW. Perceptions of cancer as a death sentence: tracking trends in public perceptions from 2008 to 2017. *Psychooncology*. 2021;30(4):511-519. [CrossRef]
- Atan G, Özer Z, Turan GB. Assessment of hopelessness and spiritual care perception in cancer patients. *J Contemp Med*. 2020;10(2):266-274. Turkish. [CrossRef]
- Hsiao SM, Gau ML, Ingleton C, Ryan T, Shih FJ. An exploration of spiritual needs of Taiwanese patients with advanced cancer during the therapeutic processes. *J Clin Nurs*. 2011;20(7-8):950-959. [CrossRef]
- Pattison NA, Lee C. Hope against hope in cancer at the end of life. *J Relig Health*. 2011;50(3):731-742. [CrossRef]
- Finocchiaro DN. Supporting the patient's spiritual needs at the end of life. *Nursing*. 2016;46(5):56-59. [CrossRef]
- Devi MK, Fong KCK. Spiritual experiences of women with breast cancer in Singapore: a qualitative study. *Asia Pac J Oncol Nurs*. 2019;6(2):145-150. [CrossRef]
- Vardar O, Sercekus P, Özkan S. Kanser hastalarının ve bakım verenlerin baş etmesinde maneviyat ve din. *Koç Univ J Educ Res Nurs*. 2021;18(4):462-466.
- Sharif SP, Lehto RH, Nia HS, et al. Religious coping and death depression in Iranian patients with cancer: relationships to disease stage. *Support Care Cancer*. 2018;26(8):2571-2579. [CrossRef]