## **ORIGINAL PAPER**



# Spiritual Care and Death in Intensive Care from the Perspective of Nursing Students in Turkey: An Exploratory Mixed Study

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#### Abstract

This mixed methods research study aimed to determine spiritual care competencies and death anxiety levels of nursing students practicing in intensive care. The quantitative part of this study included 33 students while the qualitative part included 17 students. Nursing students' spiritual care competence was detected to be above medium and their death anxiety was high. Two themes emerged from the qualitative data collected through in-depth interviews with 17 nursing students: (a) Views on spiritual care competencies and (b) Views on death. These findings are significant to reduce nursing students' death anxiety, increase spiritual care competencies and the quality of patients' end-of-life care.

**Keywords** Nursing Students · Spiritual care · Death · Mixed Method

# Introduction

Clinical training is a significant experience that provides students with nursing skills (Al-Ghareeb et al., 2019). In clinical teaching, students practice in different clinics, and clinical rotations allow them to implement theoretical knowledge and improve their reasoning skills (Papastavrou et al., 2016). One of the clinical rotations for nurs-

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ing students is in the intensive care unit (ICU). In one study, students found the opportunity of working in intensive care to transfer theoretical knowledge to practice and different patient profiles an advantage. In addition, in the same study, they expressed the complexity of working conditions in the intensive care unit and the difficulty of providing care to dying patients as disadvantages (González-García et al., 2020). In the study conducted by Tastan et al. (2015), the students reported that the most significant difficulties they experienced in the ICU were related to the negative experiences resulting from the patient's health status. One of the students in this study stated that he wanted to die with his patient (Tastan et al., 2015).

Patient care in the ICU is rather complicated. It is reported that nursing students who come across various patients, especially patients facing death, experience various emotions (Anderson et al., 2015; Croxon et al., 2018; Jiang et al., 2019; Pask et al., 2018).

Spiritual care is crucial for patients hospitalized in ICUs, where mortality and morbidity rates are high because they are bedridden, unable to see their relatives, dependent on medical devices, and require intensive interventional procedures (Çınar & Eti Aslan, 2017). Among professional healthcare staff, nurses have the longest and most frequent contact with patients in the ICU and dying patients and their families (Wilson & Kirshbaum, 2011). Therefore, nurses should have spiritual self-awareness and consciousness regarding their emotions, thoughts, and attitudes about death before identifying and meeting patients' spiritual needs (Farahaninia et al., 2018).

Nurses' spiritual self-awareness affects the spiritual care they will provide (Ramazani et al., 2014). Spiritual self-awareness increases sensitivity to the spiritual needs of patients. Therefore, increasing spiritual self-awareness in nursing education can improve students' spiritual care competencies (Vincensi, 2019). The studies in the literature mostly focus on nursing students' spiritual care perceptions, the relations between these perceptions and their competence in meeting patients' spiritual care needs, and the place of spiritual care in the nursing curriculum (Farahaninia et al., 2018; Kudubes et al., 2021; Ross et al., 2018; Tüzer et al., 2020). However, no study was found to determine the spiritual care competencies and death anxiety of nursing students working in intensive care clinics. For this reason, this study aimed to determine nursing students' spiritual care competencies and death anxiety in clinical practice in the ICU.

## Materials and Methods

**Study Design** An exploratory mixed-methods design was utilized for this study to draw on the strengths of both qualitative research and quantitative research (Berman, 2017). The study data were collected in two stages. This qualitative study was conducted through a conventional content analysis approach. Conventional content analysis is a suitable way to obtain valid and reliable results from textual data. This method generates knowledge, new ideas and facts. Conventional content analysis is commonly employed in the design of studies that aim to describe a phenomenon. This type of study is often appropriate when there are limited theories or research literature on the phenomenon under study (Hsieh & Shannon, 2005). The quantita-



tive data were collected through a questionnaire in the first stage. The questionnaire was implemented to the nursing students who volunteered to participate in the study before and after their practice in intensive care clinics. It took 10 min to fill out the questionnaire. In the second stage of the study, an interview group was formed, and the data were collected with an in-depth interview technique conducted individually with nursing students. Each interview lasted an average of 50 min and was recorded with the participants' permission.

Participants and Data Collection The research was carried out in the intensive care clinics of a state hospital between November 2022 and January 2023. The research universe consisted of 64 fourth-year students in the Nursing Department of a university. Practicing in the ICU was selected as the inclusion criterion for nursing students. For this reason, students who cared for patients in the ICU within the scope of clinical practice courses were included in the sample group (n=36). Three students who practiced in the ICU were not included in the study because they did not volunteer to participate in the research. The quantitative part of the study was conducted with 33 students who practiced in ICU and agreed to participate in the research. In the study, post hoc power analysis was conducted to determine whether the number of students responding to the scales was sufficient and to determine the power. Our average effect size was calculated to be 0.299. With power set at 0.80 and a p value of 0.05, a sample size of n=32 would be sufficient to detect this effect size. The sample size of this study was n=33 indicating there was adequate power for the analyses we conducted. The convenience sampling method, one of the purposeful sampling methods, was employed in determining the sample in the qualitative part of the research (Yağar & Dökme, 2018). Interviews were conducted with 17 nursing students to collect qualitative data.

**Instruments** Introductory Information Form, Spiritual Care Competence Scale, Visual Analogue Scale (VAS) for Death Anxiety and Interview Form were used to collect research data.

**Introductory Information Form** The form has five questions about the age and gender of nursing students, the presence of a chronic disease in the students themselves or their relatives, and the status of caring for a relative.

Spiritual Care Competence Scale (SCCS) The scale was developed by Leeuwen et al. (2009), and the validity and reliability study of the Turkish form was performed by Dağhan et al. (2019) (Daghan et al., 2019; Van Leeuwen et al., 2009). It contains 27 items scored on a 5-point scale from "completely disagree" to "completely agree." The highest possible competency score is 135, and the lowest is 27. A high score shows that perceived competence relating to spiritual care is high. There are 3 subscales, measuring assessment and implementation of spiritual care (from 1 to 6 items), professionalization and patient counseling in spiritual care (from 7 to 21 items), and attitudes toward the patient's spirituality and communication (from 22 to 27 items). No cut-off point is specified for the scale. For this reason, the evaluation and interpretation of this research was based on the average of the scale scores.



**Visual Analog Scale (VAS) for Death Anxiety** The visual Analog Scale (VAS) is conducted to digitize some values that cannot be measured numerically. Two end definitions of the parameter to be evaluated are written at the two ends of a 100 mm line, and individuals are asked to indicate their situation on this line by drawing on the line, placing a dot on the line, or pointing (Williams et al., 2010).

**Interview Form** The researchers prepared the semi-structured interview form to conduct an in-depth assessment regarding the feelings and thoughts of the nursing students practicing in the intensive care clinic about life and death and their views and practices regarding spiritual care. There are four open-ended questions in the interview form (Table 1).

**Statistical Analysis** Support was received from a professional statistician in the analysis of the data. Quantitative and qualitative methods were used in data analysis. The quantitative data analysis was carried out in the SPSS (Statistical Package for Social Science) 21.0 package program. In the data analysis, numbers, %ages, and means were used for descriptive statistics. The conformity of the data to the normal distribution was evaluated with the Shapiro-Wilk test, after which the t-test, Mann-Whitney U, and Kruskal Wallis tests were utilized to the data. Statistical significance was determined as p < 0.05. Initially, the audio recordings of the conducted interviews were transcribed verbatim by the researchers, maintaining their original content without alterations. Subsequently, the written transcripts underwent independent coding by both researchers, identifying and formulating thematic categories. The analytical process employed in handling the qualitative data followed the principles of thematic analysis (Braun & Clarke, 2006).

All interviews were transcribed verbatim and analysed. All quotations behind each code were carefully read, and patterns were sought. Braun and Clarke state that in the last step, the themes and sub-themes should be related to the research question and the literature (Braun & Clarke, 2006). In this study, the consistency and validity of the data were raised by confirming the findings through discussions with the coauthors of this article (Braun & Clarke, 2006).

In the first step, two researchers read and re-read the text to ensure correctness and to exclude typing errors. In addition, the researchers debated the transcribed content. The first impressions and the perceived similarities and differences were recorded in the second step. In the third step, the data were systematically divided into meaningful codes. In the fourth step, these initial codes were noted and re-viewed; thus, codes became visible. In the fifth step, the coded data were advanced into a thematic map-

#### Table 1 Interview Form Questions

- 1. What are your feelings and thoughts about death?
- 2. Did you care for a patient who died or was about to die during intensive care practice? How has this situation affected you?
- 3. Are there any spiritual practices that help you cope with the difficult situations you experience in intensive care? If there is, can you explain?
- 4. What practices do you use to meet patients' spiritual care needs in intensive care?



making where the researchers considered the adjustment of themes and sub-themes. In the sixth and final step, each theme was analytically refined and related to the literature, and evident definitions were made for each theme and sub-themes:

Ethical Considerations: This study was performed in line with the principles of the Declaration of Helsinki. Ethics committee approval (Date:25.10.2022, No:744) was obtained from Izmir Bakırçay University Non-Interventional Research Ethics Committee to carry out the study, and permission was obtained from İzmir Bakırcay University (Date:18.11.2022). The students' verbal and written consents were obtained after they were informed about the purpose of the research, that their personal information would be kept confidential, that the data would not be used for any purpose other than the research, and that participating in the research would not affect their course achievement. In addition, the participants' permission was obtained beforehand to record the interviews.

# Results

# **Quantitative Results**

The mean age of the study participants was  $22.03\pm0.98$ ; of these, 66.7% were female, and 66.7% had a chronic disease in their relatives. Of the students, 69.7% did not receive spiritual care training, 92% thought that nurses should provide spiritual care, 69.7% thought that the spiritual care provided to patients was insufficient, and 51.2% "sometimes" provided spiritual care to patients (Table 2).

Students' mean score in the Spiritual Care Competence Scale was  $81.93\pm20.77$ , their mean score in the Assessment and Implementation of Spiritual Care sub-dimension was  $17.66\pm4.60$ , their mean score in Professionalization in Spiritual Care and Patient Counseling was  $42.48\pm12.21$ . Their mean score in the Attitude towards the Patient's Spirituality and Communication sub-dimension was  $21.78\pm7.03$ . It was unearthed that the students received a mean of  $7.30\pm2.17$  from the VAS scale used to determine death anxiety (Table 3).

Pearson correlation analysis was performed between Spiritual Care Competence and VAS Death Anxiety Scale total scores. According to the correlation analysis, there was no correlation between spiritual care competence and death anxiety ( $\rho$ =0.086; p=0.634).

A significant relationship was detected between the presence of chronic disease in students' relatives and the total and sub-dimensions of SCCS and VAS scale scores (p<0.001). It was determined that the total and sub-dimension mean scores of the students who had relatives with chronic diseases were higher than their mean VAS scale scores.

A statistically significant relationship was found between the students' spiritual care training status and the scales used in this study. The nursing students who received training on spiritual care had higher mean scores in the SCCS total scale and sub-dimensions than those who did not (p<0.001). However, the VAS scale mean scores of the nursing students who did not receive training on spiritual care were higher than those who received training (p<0.001) (Table 4).



**Table 2** Students' Demographic Characteristics (n=33)

Age $(22.03 \pm 0.98)$	n	%
Gender		
Female	22	66.7
Male	11	33.3
Presence of chronic disease		
Yes	2	6.1
No	31	93.9
Presence of Chronic Disease	in Relatives	
Yes	22	66.7
No	11	33.3
<b>Status of Receiving Training</b>	on Spiritual Care	
Yes	10	30.3
No	23	69.7
Should Nurses Provide Spiri	itual Care?	
Yes	32	97.0
No	1	3.0
Do you think the spiritual casufficient?	re provided to patient	s is
Yes	10	30.3
No	23	69.7
How often do you provide sp	oiritual care to patients	3?
Never	7	21.2
Sometimes	17	51.5
Often	8	24.2
Always	1	3.0

Table 3 VAS and SCCS Mean Scores

Scale Sub-Dimension and Total Score	Mean SD	Min-Max
Assessment and Implementation of Spiritual Care	$17.66 \pm 4.60$	12–30
Professionalization in Spiritual Care and Patient Counseling	$42.48 \pm 12.21$	30–73
Attitude towards the Patient's Spirituality and Communication	$21.78 \pm 7.03$	12-30
Spiritual Care Competence Total	$81.93 \pm 20.77$	55-132
VAS Score	$7.30\pm2.17$	3-10

# **Qualitative Results**

During the individual interviews, the initial focus was on eliciting the overarching perspectives of the students concerning spiritual care and mortality within the context of intensive care units. Some student expressions specific to the determined themes were presented as findings. The qualitative part of the research was conducted with 17 students.

Two themes emerged from the interviews: "The views of the nursing students practicing in the ICU on spiritual care competencies" and " their views on death". "The views on death" theme included sub-themes such as the meaning of life, a sad reality and a frightening situation, and "The views on spiritual care competencies" theme included sub-themes such as nursing students' views on their spiritual



Anxiety Scores							
	Assessment and Implementation	Professionaliza- tion in Spiritual	Attitude towards the Patient's	Spiritual Care Competence	VAS		
	of Spiritual Care	Care and Patient	Spirituality and	Total			
	or Spiritual Care	Counseling	Communication	Total			
Presence of	Chronic Disease i			1			
Yes	18.22(13-30)	43.72(30-73)	22.36 (12-30)	84.31(55-132)	7.72(3-10)		
No	16.54(12-22)	40.0 (30-69)	20.63 (12-29)	77.18(56–121)	7.09(3-10)		
	t=22.026	t = 19.985	t = 17.792	t = 37.566	t = 19.315		
	p = 0.000	p = 0.000	p = 0.000	p = 0.000	p = 0.000		
Status of Receiving Training on Spiritual Care							
Yes	19.10 (14-27)	43.70 (30-74)	23.40(12-30)	86.20 (56-130)	7.0 (3–10)		
No	17.04 (12–30)	41.95 (30–72)	21.8 (12–30)	80.08 (55–132)	7.43 (3–10		
	U=3.895	U = 4.163	T = 3.640	T=4.856	U = 3.500		
	p = 0.000	p = 0.000	p = 0.000	p = 0.001	p = 0.000		
Frequency of Providing Spiritual Care							
Never	16.14 (12–21)	39.0 (30-52)	23.42 (12-30)	78.57 (59–95)	7.28(5-10)		
Sometimes	18.64 (13-30)	45.17 (30–73)	21.82 (12-30)	86.64 (56-132)	6.88(3-10)		
Often	16.87 (13–22)	40.25(30-69)	19.62(13-30)	76.75 (55–121)	8 (6–10)		
Always	18 (18)	39 (39)	27 (27)	84 (84)	9 (9)		
	KW = 1.157 p = 0.384	KW = 1.478 p = 0.323	KW = 0.428 p = 0.916	KW = 1.980 p = 0.741	KW = 1.722 p = 0.680		

**Table 4** Comparison of Nurses' Demographic Characteristics with Spiritual Care Competencies and Death Anxiety Scores

practices and their views on meeting patients' spiritual care needs. Themes and subthemes are presented in Fig. 1.

# Theme 1. The Views of the Nursing Students Practicing in the ICU on Spiritual Care Competencies

**Sub-Theme 1. Students' Views on Their Spiritual Practices** The majority of the students who practiced in the ICU stated that they comprehended the value of life in the ICU. They stated that when they encountered death in the ICU, they performed spiritual practices that made them feel good, such as giving thanks, praying, sharing emotions, and doing meditative exercises.

"I had witnessed the farewell of the relatives of a patient who was certain to die. I cried a lot and left. I was thankful that I was healthy." (Student 8).

"There were moments when I had difficult situations in the intensive care. I cried when my patient died. Praying made me feel good in such situations and gave me strength. (Student 2)

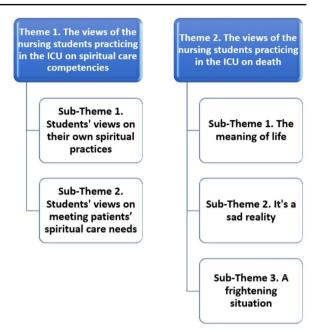
"Sharing my feelings with experienced nurses and friends made me feel more normal when I felt bad about the dying patients in the ICU." (Student 4).

"I felt very bad while caring for the patient who was about to die. I walked away. I tried to remember happy moments in my life. I practiced deep breathing." (Student 16).

**Sub-Theme 2. Students' Views on Meeting Patients' Spiritual Care Needs** Most students who practiced in the ICU discussed their efforts to meet their spiritual needs.



Fig. 1 Themes and Sub-Themes



They stated that they empathized, met with patients to determine their spiritual care needs, helped patients perform their prayers, and tried not to make them feel lonely.

"I put myself in my patient's shoes. I tried to support my patient about what would be good for him. I provided this information to my patient. While giving information, I avoided saying things that might upset him." (Student 5).

"I first ask my patients whether they have spiritual practices or not. Then I support them so they can do what they want to do." (Student 6).

"In the intensive care environment, the environmental conditions may not meet patients' spiritual care needs. I told my patients they could pray when they expressed a desire to practice spiritually." (Student 13).

"Supporting patients' spiritual practices makes me more hopeful. I care about the privacy of patients. I try to make them feel that I am with them physically and spiritually and that they are not alone..." (Student 10).

# Theme 2. Views on Death

**Sub-Theme 1. The Meaning of Life** Most nursing students practicing in the ICU stated that death is a significant concept because it adds meaning to life.

"...Life; being, feeling, living in the moment and being awake.... Life was not that meaningful for me before I worked in intensive care. I realized the significance of



life when I saw people who were in very bad condition or even died in the ICU." (Student 3).

"It seems like life would have no meaning without death. I think it is necessary to live life by making contributions." (Student 7).

"I decided how meaningful health and life were when I looked at intensive care patients... I think it is the presence of death that makes life worthwhile." (Student 9).

"While we are living, we forget that there is such a thing as death. We do not know the value of life without death. For me, death is the meaningful completion of life." (Student 14).

**Sub Theme 2. It is a Sad Reality** Some nursing students practicing in the ICU stated that death is a sad concept.

"I find it very strange to think of death. It is very sad to suddenly disappear from this life or to know that the people you love will no longer be in your life." (Student 17).

"The fact that some patients in the ICU could not hold on to life, shed their last tears just before dying, and then seeing the sadness of their relatives made me deeply sad and sorrowful..." (Student 11).

"The energy of mourning due to the deaths I saw in the ICU enveloped me ..." (Student 15).

**Sub Theme 3. A Frightening Situation** Some nursing students practicing in the ICU reported that death is frightening.

"Just like that, all good things have an end, life has an end too, which is death. It scares me to think about the uncertainty of death, the time and manner of death." (Student 12).

"It is terrible to think of the loved ones I will leave behind when I die, or not to be able to see the person I love." (Student 1).

# Discussion

This study explored senior nursing students' views regarding their experiences with spiritual care competencies and the concept of death in intensive care practice.

Holistic nursing care addresses the relationship between body, mind, and spiritual health. In this context, nurses are expected to provide patients with physical, socio-cultural, psychological, and spiritual care (Lalani, 2020). However, spiritual care, one of the most important parts of holistic nursing practice, must be addressed in clinical practice (Batstone et al., 2020).

In another research endeavor, students expressed the significance of delivering spiritual care to patients. (Kalkim et al., 2018). In the present study, most students (97%) believed that nurses should provide spiritual care, but a high rate of students (69.7%) thought that nurses did not provide adequate spiritual care in the clinic. Similarly, the studies in the literature also presented that the number of nurses acting as role models in the clinic regarding the implementation of spiritual care to patients



was insufficient (Cruz et al., 2017; Kalkim et al., 2016). Midilli et al. (2017) asserted that nearly all of the participating students in their study deemed it imperative to offer spiritual care to patients. Simultaneously, the research indicated that two out of three students reported a lack of guidance from academic professionals or responsible nurses in the realm of spiritual care (Midilli et al., 2017).

Continuing clinical training alongside nurses who are qualified and competent role models for the nursing profession and who have professional knowledge and skills will positively affect student development. Working with nurses who possess spiritual care competence and provide adequate spiritual care will encourage students to provide spiritual care. For this reason, training should be provided on the importance and maintenance of spiritual care by identifying nurses' spiritual care perceptions and competencies. Nurses should be informed of the significance of being role models for students.

Especially in intensive care clinics, patients face critical situations such as approaching death, suffering, fear, isolation, vulnerability and complete dependence on healthcare personnel. Therefore, patients in intensive care have more intense spiritual care needs. Nurses and nursing students are expected to have spiritual care competence to meet the spiritual care needs of intensive care patients (Riahi et al., 2018). Based on the findings of a study, it was determined that the spiritual care competencies of nursing students were rated at a average level, while their attitudes toward spiritual care were considered to be above average (Kalkim et al., 2018). In their respective studies, Guo et al. (2023) and Babamohamadi et al. (2018) both concluded that the spiritual care competence of students was assessed to be at an average level (Babamohamadi et al., 2018; Guo et al., 2023). Conversely, Abu Snieneh et al. (2022) reported that the spiritual competence of nurses in the intensive care unit (ICU) was relatively high (Abu-Snieneh & Abdelaziz, 2022). In this study, the mean SCCS total score of the students was 81.93 ± 20.77. Considering that the maximum total mean score that can be obtained from the scale is 137, we can state that students' spiritual care competencies are above average.

Based on the mixed design of the present research, it was possible to examine students' views on spiritual care in more detail. The findings from the qualitative data pointed out that the students used spiritual care practices for themselves and the patients they cared for while practicing in the ICU. It was observed that the students who experienced providing care for dying patients in the ICU employed individual practices such as being thankful, praying, sharing their feelings, and doing meditative exercises. In addition, they used empathy to determine the patients' spiritual care needs, talked to them, and tried to help them with their prayers.

This finding may be related to nursing students interacting more with patients who need spiritual care, especially in intensive care clinics. Empathizing, listening to the spiritual stories of the patients, providing resources for their spiritual practices, and helping them are among the spiritual care practices that should be implemented by intensive care nurses (Çınar & Eti Aslan, 2017).

Spiritual practices may help nurses provide better care and cope with patient deaths (Green, 2021). Nursing students also articulated that spiritual care practices encompassed the application of empathy to comprehend and establish a connection with patients (Connerton & Moe, 2018; Taylor et al., 2023). Nurses can provide spiri-



tual care by sharing with their patients, giving them hope, taking time to touch, being by their side, and listening to them (Hawthorne & Gordon, 2020). Therefore, nursing students should be able to use spiritual practices in hospital practice. Although nursing students' spiritual care competence is moderate, it must be increased to meet patients' spiritual care needs. For this reason, spiritual care should be integrated into the training curriculum to provide students with spiritual care competence. Nurses with spiritual care competence should act as role models in providing spiritual care in clinical practice.

The courses on spiritual care are very few and limited in the curriculum during undergraduate nursing education. The studies conducted in the literature indicated that when this topic is addressed insufficiently in training, the nurses care less for spiritual care and do not provide spiritual care. The studies have demonstrated that nurses often perceive themselves as lacking in the ability to provide adequate spiritual care and, consequently, tend to avoid addressing the spiritual care needs of patients in clinical settings (Minton et al., 2018; O'Brien et al., 2019; Zumstein-Shaha et al., 2020). Additionally, research has indicated that offering spiritual care training to nurses can enhance their awareness, knowledge, and proficiency in providing spiritual care (Green, 2021; Rachel et al., 2019). A specific course on spiritual care does not exist in the undergraduate nursing curriculum in Türkiye. This study determined that only 30.3% of the nursing students received training on spiritual care since spiritual care is not addressed as a separate course in the nursing curriculum but is included in the form of short chapters in the content of different courses.

The present study also discovered a significant difference between nursing students' spiritual care training status and their spiritual care competence. Students must receive training in spiritual care, especially throughout their undergraduate education. For this reason, it may be recommended to include spiritual care training in the nursing curricula and to demonstrate the implementation of spiritual care provision during training (by using patient simulations).

The studies in the literature generally focused on examining the relationship between spiritual care competencies and different demographic characteristics such as gender, educational status, age, and religion (Abu-Snieneh & Abdelaziz, 2022; Daghan et al., 2019). However, no previous studies examined the relationship between having a relative with a chronic disease and the frequency of providing spiritual care. The present study determined that nursing students whose relatives had a chronic disease had higher spiritual care competence. According to this result, it can be argued that the spiritual care competence of the nursing students may be higher based on the experience of providing spiritual care as they interact with their relatives with chronic diseases.

In addition, no significant difference was found in this study between the frequency of providing spiritual care and spiritual care competence. Spiritual care provision does not only consist of skills because knowledge and attitude are also important aspects. For this reason, even if nursing students efficiently and frequently use skills in providing spiritual care, their spiritual care competence may be low depending on their knowledge and attitude.

Caring for a dying patient causes death anxiety in nurses. Hence, nurses may not feel ready to communicate with and care for patients and their families. While nurses



and other healthcare professionals may have positive intentions to provide the highest quality of care to patients facing death, they may have fears about death, which may negatively affect their attitudes toward providing care (Nia et al., 2016). Like its effect on nurses, death anxiety can cause negative emotional reactions such as sadness, hopelessness, and guilt in nursing students while caring for dying patients (Gurdogan et al., 2019; Tang et al., 2021).

In their respective studies, Mohammadi et al. (2022) observed that nursing students exhibited a high level of death anxiety, whereas Gurdogan et al. (2019) found that nursing students, on the other hand, had an average level of death anxiety (Gurdogan et al., 2019; Mohammadi et al., 2022). The present study concluded that nursing students' death anxiety levels were high. The high rate can be explained by the fact that nursing students were practicing in the ICU at the time of the study. It can be argued that the nursing students were more exposed to the concept of death because they cared for more near-death patients, and therefore, their death anxiety was higher. The findings obtained from the qualitative data showed that while practicing in the ICU, the nursing students grasped the meaning of life and felt sadness and fear about death.

According to a study, nurses working in intensive care had higher death anxiety than those working in other clinics. In addition, it was determined that nurses with high death anxiety had higher spiritual care perceptions (Rahman et al., 2021). Another study reported a negative relationship between spiritual care and death anxiety (Salimi et al., 2017). The present study found no significant relationship between nursing students' death anxiety in the ICU and their spiritual care competencies. The different findings in various studies may be caused by different sample groups and the clinics where the student nurses worked.

## Limitations

Since the study was conducted with a sample studying at the nursing department of a university and practicing in intensive care during the data collection process, the results cannot be generalized to the population. It is believed that the period and duration of intensive care rotation during practice may also affect spiritual care competencies and death anxiety. The study can be expanded by replicating it in different semesters of nursing education. In the quantitative part of the research, the number of samples is numerically small. This is within the limitations of our study. For this reason, we can recommend conducting research with a larger sample group in future studies.

## Conclusion

Nursing students practicing in intensive care often encounter death-related issues, which may lead to the development of fear of death or death anxiety in nursing students. This study concluded that the participating nursing students had high death



anxiety and regarded death as a scary, dismal concept that helped them grasp the value of life.

Death anxiety stems from one's thoughts and feelings about death. A lack of information about death may cause it. Providing training on death and death-related issues is the first step in reducing nursing students' death anxiety. These trainings should holistically address topics such as the normalcy and naturality of the death process, patient needs in the last stages of life and how to meet these needs.

Spiritual care is one of the fundamental elements of holistic nursing care. This study determined that the participating nursing students' spiritual care competence was above the medium level and unrelated to death anxiety. For nursing students to develop spiritual care competencies, it is necessary to provide courses on the importance of spiritual care and how it is provided. In addition, students should be provided with experiences regarding spiritual care while they do their internship and practice. Developing these competencies will ensure that nursing students will be more successful in clinical practice, and the quality of end-of-life care will increase.

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## References

- Abu-Snieneh, H. M., & Abdelaziz, E. M. (2022). The nurses' perceptions of spiritual care competency in intensive care units. *Psychology Health & Medicine*, 19(2), 1–7. https://doi.org/10.1080/13548506. 2022.2079691.
- Al-Ghareeb, A., McKenna, L., & Cooper, S. (2019). The influence of anxiety on student nurse performance in a simulated clinical setting: A mixed methods design. *International Journal of Nursing Studies*, 98(1), 57–66. https://doi.org/10.1016/j.ijnurstu.2019.06.006.
- Anderson, N. E., Kent, B., & Owens, R. G. (2015). Experiencing patient death in clinical practice: Nurses' recollections of their earliest memorable patient death. *International Journal of Nursing Studies*, 52(3), 695–704. https://doi.org/10.1016/j.ijnurstu.2014.12.005.
- Babamohamadi, H., Ahmadpanah, M. S., & Ghorbani, R. (2018). Attitudes toward spirituality and spiritual care among Iranian nurses and nursing students: A cross-sectional study. *Journal of Religion and Health*, 57,(4), 1304–1314. https://doi.org/10.1007/s10943-017-0485-y.
- Batstone, E., Bailey, C., & Hallett, N. (2020). Spiritual care provision to end-of-life patients: A systematic literature review. *Journal of Clinical Nursing*, 29(19), 3609–3624. https://doi.org/10.1111/jocn.15411.



- Berman, E. A. (2017). An exploratory sequential mixed methods approach to understanding researchers' data management practices at UVM: Integrated findings to develop research data services. *Journal of eScience Librarianship*, 6(1), 1104–1110. https://doi.org/10.7191/jeslib.2017.1104.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa.
- Çınar, F., & Eti Aslan, F. (2017). Spiritualism and nursing: The importance of spiritual care in intensive care patients. *Journal of Academic Research in Nursing*, 3(1), 37–42. https://doi.org/10.5222/jaren.2017.037.
- Connerton, C. S., & Moe, C. S. (2018). The essence of spiritual care. Creative Nursing, 24(1), 36–41. https://doi.org/10.1891/1078-4535.24.1.36.
- Croxon, L., Deravin, L., & Anderson, J. (2018). Dealing with end of life—New graduated nurse experiences. *Journal of Clinical Nursing*, 27(1), 337–344. https://doi.org/10.1111/jocn.13907.
- Cruz, J. P., Alshammari, F., Alotaibi, K. A., & Colet, P. C. (2017). Spirituality and spiritual care perspectives among baccalaureate nursing students in Saudi Arabia: A cross-sectional study. *Nurse Education Today*, 49(4), 156–162. https://doi.org/10.1016/j.nedt.2016.11.027.
- Daghan, S., Kalkim, A., & Sağkal Midilli, T. (2019). Psychometric evaluation of the Turkish form of the spiritual care competence scale. *Journal of Religion and Health*, 58(1), 14–27. https://doi. org/10.1007/s10943-018-0594-2.
- Farahaninia, M., Abasi, M., Seyedfatemi, N., JafarJalal, E., & Haghani, H. (2018). Nurses' attitudes towards spiritual care and spiritual care practices. *Journal of Client-Centered Nursing Care*, 4(2), 61–68. https://doi.org/10.32598/jccnc.4.2.61.
- González-García, M., Lana, A., Zurrón-Madera, P., Valcárcel-Álvarez, Y., & Fernández-Feito, A. (2020). Nursing students' experiences of clinical practices in emergency and intensive care units. *International Journal of Environmental Research and Public Health*, 17(16), 5686. https://doi.org/10.3390/ijerph17165686.
- Green, C. (2021). Spiritual health first aid for self-care. *Journal of Christian Nursing*, 38(3), 28–31. https://doi.org/10.1097/CNJ.0000000000000085.
- Guo, Z., Zhang, Y., Li, P., Zhang, Q., & Shi, C. (2023). Student nurses' spiritual care competence and attitude: An online survey. *Nursing Open*, 10(3), 1811–1820. https://doi.org/10.1002/nop2.1441.
- Gurdogan, E. P., Kınıcı, E., & Aksoy, B. (2019). The relationship between death anxiety and attitudes toward the care of dying patient in nursing students. *Psychology Health & Medicine*, 24(7), 843–852. https://doi.org/10.1080/13548506.2019.1576914.
- Hawthorne, D. M., & Gordon, S. C. (2020). The invisibility of spiritual nursing care in clinical practice. *Journal of Holistic Nursing*, 38(1), 147–155. https://doi.org/10.1177/0898010119889704.
- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. https://doi.org/10.1177/1049732305276687.
- Jiang, Q., Lu, Y., Ying, Y., & Zhao, H. (2019). Attitudes and knowledge of undergraduate nursing students about palliative care: An analysis of influencing factors. *Nurse Education Today*, 80(2), 15–21. https://doi.org/10.1016/j.nedt.2019.05.040.
- Kalkim, A., Midilli, T. S., & Baysal, E. (2016). An investigation of the perceptions and practices of nursing students regarding spirituality and spiritual care. *Religions*, 7(8), 101–113. https://doi.org/10.3390/ rel7080101.
- Kalkim, A., Midilli, T. S., & Daghan, S. (2018). Nursing students' perceptions of spirituality and spiritual care and their spiritual care competencies: A correlational research study. *Journal of Hospice & Palliative Nursing*, 20(3), 286–295. https://doi.org/10.1097/NJH.0000000000000446.
- Kudubes, A. A., Akıl, Z. K., Bektas, M., & Bektas, İ. (2021). Nurses' attitudes towards death and their effects on spirituality and spiritual care. *Journal of Religion and Health*, 60, 153–161. https://doi.org/10.1007/s10943-019-00927-2.
- Lalani, N. (2020). Meanings and interpretations of spirituality in nursing and health. *Religions*, 11(9), 428–433. https://doi.org/10.3390/rel11090428.
- Midilli, T. S., Kalkım, A., & Dağhan, Ş. (2017). Spiritual care-related opinions and practices of nursing students. *Journal of Human Sciences*, 14(1), 666–677.
- Minton, C., Batten, L., & Huntington, A. (2018). The impact of a prolonged stay in the ICU on patients' fundamental care needs. *Journal of Clinical Nursing*, 27(11), 2300. https://doi.org/10.1111/jocn.14184.
- Mohammadi, F., Masoumi, Z., Oshvandi, K., Khazaei, S., & Bijani, M. (2022). Death anxiety, moral courage, and resilience in nursing students who care for COVID-19 patients: A cross-sectional study. BMC Nursing, 21(1), 4–7. https://doi.org/10.1186/s12912-022-00931-0.



- Nia, H. S., Lehto, R. H., Ebadi, A., & Peyrovi, H. (2016). Death anxiety among nurses and health care professionals: A review article. *International Journal of Community Based Nursing and Midwifery*, 4(1), 2–10.
- O'Brien, M. R., Kinloch, K., Groves, K. E., & Jack, B. A. (2019). Meeting patients' spiritual needs during end-of-life care: A qualitative study of nurses' and healthcare professionals' perceptions of spiritual care training. *Journal of Clinical Nursing*, 28(1–2), 182–189. https://doi.org/10.1111/jocn.14648.
- Papastavrou, E., Dimitriadou, M., Tsangari, H., & Andreou, C. (2016). Nursing students' satisfaction of the clinical learning environment: A research study. BMC Nursing, 15(1), 1–10. https://doi.org/10.1186/ s12912-016-0164-4.
- Pask, S., Pinto, C., Bristowe, K., Van Vliet, L., Nicholson, C., Evans, C. J., & Guo, P. (2018). A framework for complexity in palliative care: A qualitative study with patients, family carers and professionals. *Palliative Medicine*, 32(6), 1078–1090. https://doi.org/10.1177/026921631875762.
- Rachel, H., Chiara, C., Robert, K., & Francesco, S. (2019). Spiritual care in nursing: An overview of the measures used to assess spiritual care provision and related factors amongst nurses. Acta Biomed for Health Professions, 90(4), 44–55. https://doi.org/10.23750/abm.v90i4-S.8300.
- Rahman, S., Elbi, H., Cetinkaya, A. C., Altan, S., Ozan, E., & Pirincci, E. (2021). Factors that predict the perception of spirituality and spiritual care of nurses working in high-risk units and the effect of death anxiety. *Perspectives in Psychiatric Care*, 57(2), 473–480. https://doi.org/10.1111/ppc.12651.
- Ramezani, M., Ahmedi, F., Mohammedi, E., & Kazemnejad, A. (2014). Spiritual care in nursing: A concept analysis. *International Nursing Review*, 61(2), 211–219. https://doi.org/10.1111/ppc.12651.
- Riahi, S., Goudarzi, F., Hasanvand, S., Abdollahzadeh, H., Ebrahimzadeh, F., & Dadvari, Z. (2018). Assessing the effect of spiritual intelligence training on spiritual care competency in critical care nurses. *Journal of Medicine and Life*, 11(4), 346–354. https://doi.org/10.25122/jml-2018-0056.
- Ross, L., McSherry, W., Giske, T., van Leeuwen, R., Schep-Akkerman, A., Koslander, T., & Jarvis, P. (2018). Nursing and midwifery students' perceptions of spirituality, spiritual care, and spiritual care competency: A prospective, longitudinal, correlational European study. *Nurse Education Today*, 67, 64–71. https://doi.org/10.1016/j.nedt.2018.05.002.
- Salimi, H., Kermanshahi, F., Haji Alizadeh, K., & Mehralitabr Firozjaie, A. (2017). The relationship between death anxiety and spirituality constructs with general health among nursing and midwifery students. *Health Spirituality and Medical Ethics*, 4(2), 2–8.
- Tang, M. L., Goh, H. S., Zhang, H., & Lee, C. N. (2021). An exploratory study on death anxiety and its impact on community palliative nurses in Singapore. *Journal of Hospice & Palliative Nursing*, 23(5), 469–477. https://doi.org/10.1097/NJH.0000000000000782.
- Tastan, S., Iyigun, E., Ayhan, H., & Hatipoglu, S. (2015). Experiences of Turkish undergraduate nursing students in the intensive care unit. *Collegian (Royal College of Nursing, Australia)*, 22(1), 117–123. https://doi.org/10.1016/j.colegn.2013.12.003.
- Taylor, E. J., Pariñas, S., Mamier, I., Atarhim, M. A., Angeles, L., Aslan, H., & Sinaga, J. (2023). Frequency of nurse-provided spiritual care: An international comparison. *Journal of Clinical Nursing*, 32(3–4), 597–609. https://doi.org/10.1111/jocn.16497.
- Tüzer, H., Kırca, K., & Özveren, H. (2020). Investigation of nursing students' attitudes towards death and their perceptions of spirituality and spiritual care. *Journal of Religion and Health*, *59*(3), 2177–2190. https://doi.org/10.1007/s10943-020-01004-9.
- Van Leeuwen, R., Tiesinga, L. J., Middel, B., Post, D., & Jochemsen, H. (2009). The validity and reliability of an instrument to assess nursing competencies in spiritual care. *Journal of Clinical Nursing*, 18(20), 2857–2869. https://doi.org/10.1111/j.1365-2702.2008.02594.x.
- Vincensi, B. B. (2019). Interconnections: Spirituality, spiritual care, and patient centered care. Asia-Pacific Journal of Oncology Nursing, 6(2), 104–110. https://doi.org/10.4103/apjon\_48\_18.
- Williams, V. S., Morlock, R. J., & Feltner, D. (2010). Psychometric evaluation of a visual analog scale for the assessment of anxiety. Health and Quality of Life Outcomes, 8(1), 1–8. https://doi. org/10.1186/1477-7525-8-57.
- Wilson, J., & Kirshbaum, M. (2011). Effects of patient death on nursing staff: A literature review. *British Journal of Nursing*, 20(9), 559–563. https://doi.org/10.12968/bjon.2011.20.9.559.
- Yağar, F., & Dökme, S. (2018). Planning of qualitative researches: Research questions, samples, validity and reliability. *Gazi Journal of Health Sciences*, 3(3), 1–9.
- Zumstein-Shaha, M., Ferrell, B., & Economou, D. (2020). Nurses' response to spiritual needs of cancer patients. European Journal of Oncology Nursing, 48(2), 101792. https://doi.org/10.1016/j.ejon.2020.101792.



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