

Original Article



The Investigation of Death Anxiety and Spiritual Well-Being Levels of Family Members of Patients Admitted to Intensive Care Unit

Selçuk Görücü^{1*}, Gülşah Gürol Arslan²¹Department of Nursing Fundamentals, Kumluca Faculty of Health Sciences, Akdeniz University, Antalya, Turkey²Department of Nursing Fundamentals, Faculty of Nursing, Dokuz Eylül University, Izmir, Turkey**Article Info****Article History:**

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***Corresponding Author:**

Selçuk Görücü,

Email: selcukgorucu@gmail.com

Abstract**Introduction:** This study aimed to investigate the death anxiety (DA) and spiritual well-being (SWB) levels of first-degree family members of patients hospitalized in the intensive care unit (ICU).**Methods:** The data of this descriptive correlational type of study were collected through a face-to-face interview and survey with 308 family members who came to visit family members treated in the ICU of a public hospital in the western province of Turkey. Results were analyzed with SPSS software version 22.**Results:** The average Death Anxiety Scale (DAS) score of the family members is 7.99 (3.15), which is above the middle value (min/max; 0-15), and the average Spiritual Well-Being Scale (SWBS) score is 121.83 (12.91), which is relatively high (min/max; 29-145). A positive, weak, and significant correlation existed between DAS and SWBS mean scores ($r=0.20$; $P<0.05$).**Conclusion:** As a result, the DA levels of family members increase with the thought of losing their patients in the ICU. During this period, family members of patients need spirituality more than ever to cope with increasing DA. In this study, a positive and significant correlation was found between the DA levels and SWB levels of the family members. According to this result, as family members' DA increases, their spiritual needs also increase.**Introduction**

The feeling of uncertainty affects the fear of death. Especially people who feel lonely in their lives and those who experience uncertainty are those who tend to have a fear of death. Fear of death can be triggered when a person loses or is in danger of losing someone dear to his or her life. While the individual receiving treatment in the intensive care unit struggles between life and death, her family members may experience fear of death and may need spiritual support to cope with it. It is known that the policy of prohibited or restricted visits in the intensive care unit (ICU) causes stress and anxiety in the patient and her family.¹ Therefore, it is reported that the psychosocial and spiritual needs of ICU patients as well as their families should be met.² In a study conducted with 223 family members who visit the in the ICU, it was reported that family members experienced moderate and severe cardiac anxiety.³

Spirituality comes to the forefront in cases of crisis, such as disease, stress, and fear of death where individuals question the meaning of life.⁴ Being a patient's family member or undertaking the care of a family member

may cause deterioration of life satisfaction, health, and stress. "Spiritual Distress" can occur in cases where the individual's belief system is challenged such as stressful condition, and various life events causing crises and losses.⁵ Spiritual well-being (SWB) also involves seeking the meaning, purpose, and understanding of a higher power upon which life depends.⁶ Although nurses have responsibilities that also concern the patient's family members, only dealing with the patient and the disease increases the anxiety levels of family members.⁷ Because of this, it is crucial to ensure family members' participation in the patient's care. Encouraging practices that will include the welfare of the family members are important in terms of the patient's and its family member's well-being and holistic care. Supporting spiritual self-care for a patient's family members could be one such practice. Healthcare research on spirituality has focused on patients. Less is known about the spiritual self-care of family members who support these patients in any challenging environment. Spiritual self-care is a vital component of achieving and maintaining SWB. Spiritual self-care encompasses practices and activities that nurture

and support an individual's SWB. Providing spiritual self-care support to family members can help reduce their stress, burnout, and fear.

Unfortunately, it is well known that patients' family members experience high levels of distress and grief in response to the patient's suffering. In the literature review, no study was found that evaluated the death anxiety (DA) and SWB levels of patients' family members. Our study will create innovation in providing holistic nursing care on how the SWB and DA levels of the patient's relatives are affected during the care and treatment process of the intensive care patient. In addition, by revealing how DA and SWB affect each other, our study will reveal innovation in terms of developing health policies in this field and increasing the quality of nursing care. The aim of this study is to investigate the levels of DA and SWB, the levels of family members of patients in intensive care, and the variables affecting these levels, and to analyze how DA and SWB affect each other.

Materials and Methods

This descriptive correlational study was conducted in the intensive care unit of a state hospital in Turkey between September 2018 and February 2019. A probabilistic sampling technique was used in the study. The sample size was calculated based on 0.80% power at a significance level of 0.05 in the G-Power 3.0 statistical program. Since there was no study on this subject before, the sample size calculated on the basis of low effect in a single group was determined as 199. The sample of the study consisted of the family members of the patients who met the inclusion criteria. In order to increase the power of the research, 308 family members were reached, and data were collected by face-to-face interview method.

Inclusion Criteria

- 18 years and over
- being a first degree relative (mother, father, spouse, child) of the patient
- Being a family member of a patient who received treatment in intensive care for at least 24 hours or more. Having visited his patient at least once.
- Willingness to participate in the research.

Exclusion Criteria

- Having a communication problem (not knowing Turkish).
- Not being able to adequately answer the cognitive questions asked.

Data Collection Tools and Data Collection

Patient relative descriptive characteristics form: It consists of gender, age, marital status, having children, employment status, occupational distribution, monthly income status, educational level, previous loss of someone descriptive questions.

Templer's Death Anxiety Scale (DAS): It is a 15-item, binary Likert-type scale developed by Templer (1970) and explains the anxiety expressions stemming from the individual's perception of his own death process. The total score taken from the scale is 15. The DA level increases as the scores increase from 0 to 15. In the Turkish validity reliability study conducted by Akça and Köse⁸ the Cronbach's alpha value was 0.79. It was calculated as 0.71 in this study.

Spiritual Well-Being Scale (SWBS): It is a 5-point Likert-type scale developed by Eksi and Kardas⁶ and consists of 29 items. Range of scores that can be obtained from the scale is 21-145. High scores indicate increased SWB levels. The Cronbach alpha value of the scale was calculated as 0.88 by Eksi and Kardas.⁶ It was calculated as 0.85 in this study.

Statistical Analysis

The data were analyzed with SPSS 22.0 software package. Frequency, percentage, arithmetic mean, and Cronbach's alpha reliability coefficient were calculated to interpret the data. Normal distributions were evaluated using Kolmogorov-Smirnov test. Since the distribution of the scale scores was found to be normal by the normality test, the parametric tests of student's *t* test and one-way analysis of variance (ANOVA) were used. Pearson correlation analysis was used to analyze the correlation between the mean scores of the two scales and independent variables. The level of significance level was set at $P < 0.05$.

Results

Total number of participants in this study was 308. The mean age of the participants was 49.07 (11.06). In our study, 107 (34.7) of the participants were men and 201 (65.3) were women. Most of the participants were married 261 (84.7). Moreover, most respondents had secondary school or lower 161 (52.2). Most of the participants were unemployed 186 (60.4). Additionally, most of the participants reported that they had experienced a grief process before 294 (69.5) (Table 1).

Distribution of DAS and SWB scores according to sociodemographic characteristics of family members are given in Tables 2 and 3, respectively. The mean (SD) DAS score of the family members was 7.99 (3.15) (min/max: 0-15).

In the study, it was determined that the mean DAS score of females 8.36 (3.11) was statistically significantly higher ($P < 0.05$). It was found that the mean DAS score of the participants in the middle age group (46-59 years) was statistically significantly lower ($P < 0.05$). No statistically significant differences were found in the mean DAS score of the family members according to marital status, status of having children, and educational level ($P > 0.05$). The mean DAS score of the unemployed individuals was statistically significantly higher compared to the employed participants ($P < 0.05$). In this present study, occupational distribution was found to have a statistically significant

Table 1. Socio-demographic characteristics of family member (N=308)

Demographic features	No. (%)
Age	
20–45 years	120 (39.0)
46–59 years	132 (42.9)
>60 years	56 (18.2)
Gender	
Female	201 (65.3)
Male	107 (34.7)
Marital status	
Married	261 (84.7)
Single	47 (15.3)
Having children	
Yes	269 (87.3)
No	39 (12.7)
Employment status	
Yes	122 (39.6)
No	186 (60.4)
Occupational distribution	
Housewife	92 (29.9)
Retired	75 (24.4)
Employee	111 (36.0)
Officer	30 (9.7)
Monthly income status	
No income	94 (30.5)
Minimum wage and lower	132 (42.9)
More than minimum wage	82 (26.6)
Educational level	
Secondary school or lower	161 (52.2)
High school	95 (30.8)
University or higher	52 (16.8)
Previous loss of someone	
Yes	294 (69.5)
No	94 (30.5)

effect on the mean DAS score ($P < 0.05$). The mean DAS score of the patient relatives without any income was statistically significantly higher ($P < 0.05$). It was seen that the mean DAS score 8.72 (3.01) of the family members who did not previously lose someone was higher and that the experience of loss of someone statistically significantly affected the mean DAS score ($P < 0.05$) (Table 2).

In the study, the mean (SD) SWBS score of the family members was 121.83 (12.91) (min/max: 21-145).

In the study, no statistically significant differences were found in mean SWBS scores between different groups of gender, age, and status of previous loss of someone when SWBS was analyzed according to the sociodemographic characteristics of the family members ($P > 0.05$). The

Table 2. Distribution of mean death anxiety scale score by sociodemographic characteristics of family members

Mean score of death anxiety	Mean (SD)	P
Gender		
Female	8.36 (3.11)	t: 2.91
Male	7.28 (3.12)	P: 0.00*
Age (y)		
20–45	8.36 (3.13)	F: 3.19
46–59	7.46 (2.91)	P: 0.04*
>60	8.41 (3.58)	
Marital status		
Married	8.07 (3.08)	t: 1.13
Single	7.51 (3.48)	P: 0.25
Having children		
Yes	8.05 (3.07)	t: 1.01
No	7.51 (3.66)	P: 0.31
Employment status		
Yes	7.42 (2.94)	t: -2.56
No	8.36 (3.23)	P: 0.01*
Occupational distribution		
Housewife	9.34 (2.82)	
Retired	7.37 (3.49)	F: 8.71
Employee	7.43 (3.04)	P: 0.00*
Officer	7.43 (2.38)	
Monthly income status		
No income	9.19 (2.97)	F: 11.05
Minimum wage and lower	7.64 (3.10)	P: 0.00*
More than minimum wage	7.17 (3.07)	
Educational level		
Secondary school or lower	8.04 (3.01)	F: 1.60
High school	8.26 (3.44)	P: 0.20
University or higher	7.30 (2.98)	
Previous loss of someone		
Yes	7.66 (3.16)	t: 2.73
No	8.72 (3.01)	P: 0.00*

SD: Standard deviation; t: t-test; F: One-way ANOVA test. * Statistically significant ($P < 0.05$).

mean SWBS score of the individuals who were married had children and were unemployed was statistically significantly higher ($P < 0.05$). The monthly income status and occupational distribution of the family members had a statistically significant effect on the mean SWBS score ($P < 0.05$). The mean SWBS score of the individuals with a low educational level was statistically significantly higher ($P < 0.05$) (Table 3).

A positive weak, and significant ($r = 0.20$; $P < 0.05$) correlation was found between the DAS and SWBS score averages of family members (Table 4).

In the study, mean DAS score of the family members had a negative ($r = 0.16$; $P < 0.05$), weak and significant correlation with the independent variable of gender,

Table 3. Distribution of mean spiritual well-being scale score by sociodemographic characteristics of family members

Mean score of spiritual well-being	Mean (SD)	P
Gender		
Female	122.39 (13.00)	t: 1.04
Male	120.78 (12.75)	P: 0.29
Age (y)		
20–45 years	121.43 (13.18)	
46–59 years	121.49 (13.04)	F: 0.57
>60 years	123.51 (12.09)	P: 0.56
Having children		
Yes	122.49 (12.33)	t: 2.37
No	117.28 (15.81)	P: 0.01*
Occupational distribution		
Housewife	125.47 (10.09)	
Retired	120.86 (12.77)	F: 7.81
Employee	121.88 (12.48)	P: 0.00*
Officer	112.93 (17.67)	
Monthly income status		
No income	125.73 (10.41)	
Minimum wage and lower	123.06 (11.96)	F: 16.56
More than minimum wage	115.40 (14.64)	P: 0.00*
Marital status		
Married	122.97 (11.69)	t: 3.71
Single	115.53 (17.09)	P: 0.00*
Previous loss of someone		
Yes	122.01 (12.67)	t: 0.36
No	121.43 (13.50)	P: 0.71
Employment status		
Yes	119.74 (14.25)	t: -2.31
No	123.20 (11.80)	P: 0.02*
Educational level		
Secondary school or lower	124.42 (10.69)	
High school	122.50 (12.13)	F: 18.58
University or higher	112.59 (16.28)	P: 0.00*

SD: Standard deviation; t: t-test; F: One-way ANOVA test; *Statistically significant ($P < 0.05$).

a positive ($r = 0.14$; $P < 0.05$), weak and significant correlation with employment status, a negative ($r = 0.22$; $P < 0.05$) significant correlation with occupational distribution and a negative ($r = 0.24$; $P < 0.05$) significant correlation with monthly income status. A positive significant correlation was found between the experience of the loss of someone and the mean score DAS score of the family members ($r = 0.15$; $P < 0.05$) (Table 4).

In the study, the mean SWBS score of the family members had a positive weak, and significant correlation with employment status ($r = 0.13$; $P < 0.05$), a negative and significant correlation with occupational distribution ($r = 0.21$; $P < 0.05$), a negative significant correlation with monthly income distributions ($r = 0.29$; $P < 0.05$), a negative significant correlation with marital status ($r = 0.20$; $P < 0.05$), a negative significant correlation with the status of having children ($r = 0.13$; $P < 0.05$) and a negative significant correlation with educational level ($r = 0.30$; $P < 0.05$) (Table 4).

Discussion

This present study investigated the DA and SWB levels and the correlation between these levels of 308 first-degree family members of patients treated in ICU. A positive weak, and significant ($r = 0.20$; $P < 0.05$) correlation was found between the DAS and SWBS score averages of family members. The mean (SD) DAS score of the family members was 7.99 (3.15) which is above the intermediate value. In this present study, in which the majority of participants (65.3%) were females, the mean DAS score of females was significantly higher compared to males, consistent with the literature.^{9,10} The various roles imposed on males and females by society can significantly affect the expression of DA by causing both genders to express their fear and anxiety in different ways.¹¹ In a field study, Russac et al¹² reported that DA increases with increasing age, while in our study, low DA was detected in the middle age group, while DA levels were found to be significantly higher in the young and older age groups. In this study, the mean DAS score of those in the middle-aged group (46-59 years) was significantly high. Although the DA levels of the married family members in this present study were higher than that of the singles, this difference was not

Table 4. Correlation between death anxiety scales and spiritual well-being scales according to descriptive characteristics of family members

Scales	Descriptive Characteristics of Family Members								
	Age	Gender	Employment status	Occupational distribution	Monthly income status	Marital status	Status of having children	Educational level	Previous loss of someone
Death Anxiety Scale	r:0.03 P:0.59	r:0.16 P:0.00*	r:0.14 P:0.01*	r:0.22 P:0.00*	r:0.24 P:0.00*	r:0.06 P:0.25	r:0.05 P:0.31	r:0.06 P:0.28	r:0.15 P:0.00*
Spiritual Well-Being Scale	r:0.04 P:0.38	r:0.06 P:0.29	r:0.13 P:0.02*	r:0.21 P:0.00*	r:0.29 P:0.00*	r:0.20 P:0.00*	r:0.13 P:0.01*	r:0.30 P:0.00*	r:0.02 P:0.71
Interscale Correlation									
							Death Anxiety Scale Mean Score		
Spiritual Well-Being Scale Mean Score							r=0.200 P=0.000*		

*Statistically significant ($P < 0.05$). r: Pearson correlation analysis.

statistically significant. There are also studies reporting that there is no correlation between marital status and DA level.¹³ In our study, no significant difference was found between the education level of the family members and the DAS score averages. It was found that DA decreased as the education level increased. In a study, similar to our findings, it was reported that DA decreased as the education level increased.¹⁴ In our study, the DAS score average of individuals who did not work and did not have any income was significantly higher. Our study finding is consistent with Şahin and Demirkıran¹⁵ study finding that lower income leads to higher DA levels. It was found that the mean DAS score of the individuals who had no previous experience with the loss of someone was higher. This result is consistent with the theory of Lester and Templer¹⁶ who suggested that individuals who have no previous experience or have little experience associated with death would have a higher DA. Likewise, in the study by Florian and Mikulincer,¹⁷ it was reported that the DA levels of individuals who had recently lost their family members were significantly higher compared to those who have never experienced any loss or those who had many years passed over their loss.

Another study finding was that the mean score of the SWB scale of family members was high. In this study, there was no statistically significant difference between the mean SWBS score and the gender of the family members. Consistent with the literature, Osarrodi et al¹⁸ study on nurses and Rabow & Knish¹⁹ reported that there was no difference in SWB scores according to gender in their studies on cancer patients. On the other hand, SWB levels of females were reported to be significantly higher in the studies by Frost et al²⁰ and Lewis et al.²¹ These findings suggest that it may be due to the intercultural role differences that society imposes on gender. Spirituality has been reported to be used to provide hope in despair and anxiety in the literature.²² In the studies by Tate and Forchheimer²³ and Peterman et al,²⁴ it was reported that the SWB levels of elderly patients were higher. In the present study, the SWBS score was higher in the age group of above 60 years, however, no significant difference was found between the age groups. The mean SWBS score of the individuals who were married and had children was statistically significantly higher than that of the singles. Similarly, in the study by Ercan et al,²⁵ it was reported that married individuals had a higher perception of SWB. According to these results, being married and having children can be considered important in terms of providing strong social support. In this present study, the mean SWBS score of the unemployed individuals was significantly higher than that of the employed ones. This result is considered due to the fact that 49.4% of the unemployed individuals were housewives and their mean SWBS score was higher than that of all participants.

On the other hand, the SWB level of employed individuals was found to be higher in a study by Amirmohamadi et

al²⁶ in cancer patients. The mean SWBS score of those without any income was significantly higher than that of the participants with minimum wage or a higher income. However, no effect of income status could be demonstrated on the mean score of SWBS in a study by Park and Cho.²⁷ On the other hand, a high-income level was found to be associated with a higher level of SWB in a study by Amirmohamadi et al²⁶ in cancer patients. In this present study, the mean SWBS score of the individuals with a lower educational level was higher. Similarly, SWB levels of participants with a low educational level were found to be high in the study by Peterman et al.²⁴ The idea of losing a family member causes uncertainty, hopelessness, anxiety, and emotional, cognitive, and social stress in individuals.²⁸ The correlation between DAS and SWBS was analyzed. There was a positive, weak, and significant correlation between the scales ($r=20$; $P<0.05$). SWBS scores of the family members can be suggested to increase as DAS scores increase. In the study by Moetamedi et al²⁹ spirituality was found to create positive mental thinking, joy, and hope for reducing anxiety about death, as well as developing a sense of a purpose for living and self-efficacy in individuals. In line with these results, it is considered that family members adhere to spiritual emotions more to cope with increasing DA.

Conclusions and Recommendations

As a result, family members' DA levels increase at the thought of losing their patient in intensive care. During this period, family members need spirituality more than ever to cope with increasing DA. In this study, a positive and significant relationship was found between family members' DA levels and SWB levels. This finding is new and important in terms of developing health policies. It is thought that our study findings provide a perspective to the literature in terms of strengthening holistic care and integrating it into health policies.

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Authors' Contribution

Conceptualization: Selçuk Görücü, Gülşah Gürol Arslan.

Data curation: Selçuk Görücü, Gülşah Gürol Arslan.

Formal analysis: Selçuk Görücü, Gülşah Gürol Arslan.

Investigation: Selçuk Görücü, Gülşah Gürol Arslan.

Methodology: Selçuk Görücü, Gülşah Gürol Arslan.

Project administration: Selçuk Görücü, Gülşah Gürol Arslan.

Resources: Selçuk Görücü, Gülşah Gürol Arslan.

Software: Selçuk Görücü, Gülşah Gürol Arslan.

Supervision: Selçuk Görücü, Gülşah Gürol Arslan.

Validation: Selçuk Görücü, Gülşah Gürol Arslan.

Visualization: Selçuk Görücü.

Writing—original draft: Selçuk Görücü, Gülşah Gürol Arslan.

Writing—review & editing: Selçuk Görücü.

Competing Interests

The authors report no actual or potential conflicts of interest.

Research Highlights

What is the current knowledge?

- DA is a stressful anxiety that needs to be dealt with.
- Intensive care units are life-threatening, stressful care environments.
- Being a family member is as difficult as being treated in intensive care.
- Holistic care is important for family members.

What is new here?

- The DA levels of patient family members increase with the thought of losing their patients in the ICU.
- A positive correlation was found between the DA levels and SWB levels of the family members of patients in the ICU.
- As family members' DA increases, the need for spiritual support increases.
- Regular communication and information should be provided to the family members of patients who have family members in the intensive care unit.
- Holistic care should be provided to the patient and family.

Data Availability Statement

The datasets are available from the corresponding author on reasonable request.

Ethical Approval

The approval for our study was obtained from the Non-Interventional Research Ethics Committee of Dokuz Eylül University (Decision date: 27.09.2018, Decision No: 2018/23–27). All participants filled out written informed consent forms.

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