



Research Article

The effect of spiritual well-being on compassion fatigue among intensive care nurses: A descriptive study

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ABSTRACT

Objectives: This study aimed to determine the effect of spiritual well-being of intensive care nurses on compassion fatigue.

Methods: It is a descriptive study. The sample of the study was composed of 167 nurses who were working in the intensive care units of the hospitals in Turkey. Data were collected by using "Personal Information Form", "The Spiritual Well-Being Scale" and "The Compassion Fatigue-Short Scale" between July and October 2022. Descriptive statistics, t-tests, correlation, and simple regression analysis were used to analyse data.

Findings: 35% (n = 59) of the participants were between 22 and 27 years old; 73% (n = 122) were females; 67% (n = 112) had an undergraduate degree; 57% (n = 96) had an experience of 1 to 5 years in the intensive care. It was determined that intensive care nurses had a moderate level of compassion fatigue and a high level of spiritual well-being. Although especially the educational levels of the nurses contributed to their level of spiritual well-being, a younger age and being single and less experienced in the nursing profession and intensive care were identified as significant factors in determining compassion fatigue. Nurses' Spiritual Well-Being Scale mean score was 113.89 ± 15.50 . The mean score of the Compassion Fatigue Scale was 60.15 ± 29.24 . A positive correlation was found between the Spiritual Well-Being and the Compassion Fatigue Scales ($\beta = 0.358$, $p = 0.000$).

Conclusions: Although intensive care nurses have a high level of spiritual well-being in general, they experience a moderate level of compassion fatigue. Younger and less experienced nurses should get more attention in intensive care units against compassion fatigue.

Implications for clinical practice: Management of feelings of compassion can be a protective factor for compassion fatigue and can be used as a prevention strategy in the context of improving mental well-being among intensive care nurses. Awareness and knowledge of nurses on spiritual needs should be enhanced.

Introduction

Intensive care nursing is a challenging area of expertise requiring a long-term and continuous contact with suffering patients and an advanced level of knowledge, skill, and technological equipment (Cinar & Eti Aslan, 2017; Kutlu et al., 2020). In the intensive care unit (ICU) where morbidity and mortality rates are high, interventional procedures are intensively performed and situations requiring urgency are commonly experienced (Cinar & Eti Aslan, 2017; Kim & Yeom, 2018). Nurses working in ICU may become prone to especially compassion fatigue during critical care practices due to high workload, exposure to

an unexpected patient death and the problems experienced with the patients/acquaintances or other staff (Alharbi et al., 2019; Guntupalli et al., 2014). Long-term and continuous observation of suffering patients and working with them may lead to negative experiences in the caregiving individuals, a negative change in their cognitive schemes and traumatic memories. Inability to use effective stress coping skills or lack of support for the caregivers at the development stage of compassion fatigue, compassion fatigue may be perpetuated (Vinesky, 2020; Yilmaz & Ustun, 2018; Zhang et al., 2018). It has been thought that the increased workload, environment of uncertainty, and stress due to isolation measures during the general Covid 19 pandemic process that

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has occurred in recent years may cause compassion fatigue in nurses (Labrague and de Los Santos, 2021; Ruiz-Fernández et al., 2020; Survavanshi et al., 2020).

Compassion fatigue is defined as an emotional, physical, and spiritual burnout that causes a decrease in the ability to empathise and/or to feel compassion for others (Alharbi et al., 2019; Dikmen & Aydin, 2016). It may occur due to long-term, intensive and continuous caregiving to patients and exposure to stress (Alharbi et al., 2019; Kula Sahin & Bulbuloglu, 2022). Compassion fatigue may render the caregiver into a tired, exhausted, desperate and hopeless state (Dikmen & Aydin, 2016; Zhang et al., 2018). Nurses experience a higher level of compassion fatigue compared to the other professional groups, as a result of showing compassion towards the trauma and pain of the patients, empathising, and being exposed to the traumas of patients for a long time (Guntupalli et al., 2014; Sirin & Yurttas, 2015; Vinesky, 2020; Zhang et al., 2018). Since compassion fatigue is a subjective feeling that may be developed due to personal characteristics and environmental stress, intensive care nurses should be aware of their emotional and psychological states and their needs for preventing compassion fatigue in the workplace (Zhang et al., 2018; Yilmaz & Ustun, 2018).

The most important factor in avoiding compassion fatigue is spiritual well-being status of the individual (Kula Sahin & Bulbuloglu, 2022). Spirituality, which means feeling life in Latin, is a concept that includes the elements that are meaningful to the individual, the individual's relationship with himself and the universe, his place in the universe as a result of the information coming from the past (Booth & Kaylor, 2018; MacLean et al., 2003). Spiritual well-being is the individual's ability to meet spiritual needs, to establish balanced relationships with the others without spiritual suffering and conflicts, to have a meaning and goal in life and shortly, to feel life (Cinar & Eti Aslan, 2017; Coppola et al., 2021; Kutlu et al., 2020).

Moreover, spiritual well-being is referred to as a supportive state in the attitudes and life goals of the individuals that establishes a connection between the mind and body of the individual (Chou et al., 2016; Coppola et al., 2021). It seems more possible for the individuals with a spiritual well-being at an optimal level to find a meaning and goal in their lives, to be in an inner harmony and peace and to get rid of stress in life (Chou et al., 2016; Kim & Yeom, 2018).

ICU nurses work in the environment with intense work pressure and stress while providing care to critically ill patients; and they are responsible for caring these critical patients who experience pain for a long time. These factors affect spiritual well-being levels of the nurses (Kacal & Demirsoy, 2018; Kutlu et al., 2020; Ozcelik & Duran, 2022) and may pave the way for the emergence of compassion fatigue symptoms among them (Dogu Kokcu & Kutlu, 2020; Sevin and Gunusen, 2021; Vinesky, 2020). Intensive care nurses should be able to ensure integration in physical, psychological and spiritual aspects during their daily practices in order to achieve spiritual well-being and they should be able to evaluate their own spiritual well-being. This may also have indirect positive effects on critically ill patients under their care (Kim & Yeom, 2018; Kutlu et al., 2020). Spiritual care included in the holistic care model has become highly important with the increase in health and disease needs of the individuals. There are studies in the literature aiming to determine spiritual needs among several patient populations in general. It is observed that these studies cover especially terminal patients (Chen et al., 2018; O'Brien et al., 2019), cardiovascular system patients (Aryafard et al., 2022; Yaghoobzadeh et al., 2018) and cancer patients (Park et al., 2020; Ripamonti et al., 2018). In addition to this, it seems that a direct path from spiritual well-being to compassion fatigue has not been examined among intensive care nurses.

Strategies for preventing/alleviating compassion fatigue in health-care professionals working in critical care units has been continued with growing interest recently (Alharbi et al., 2019; Kula Sahin & Bulbuloglu, 2022; Vinesky, 2020). This study is based on the consideration that spiritual well-being is a potential protective factor for compassion fatigue among intensive care nurses and therefore, it may be helpful in the

interventions for reducing compassion fatigue. Well-being of nurses at spiritual level may make critical care environment less stressful and less challenging.

Aims

This study aims to assess spiritual well-being and compassion fatigue of intensive care nurses and to examine the relationships between these variables. Specific research questions include the following:

1. What are the levels of spiritual well-being and compassion fatigue among intensive care nurses in Turkey?
2. What is the relationship between spiritual well-being state and compassion fatigue in ICU nurses?
3. What are the differences between spiritual well-being state and compassion fatigue of ICU nurses based on their sociodemographic/professional characteristics?

Methods

Study design

This study was designed as descriptive. Data of the study were collected between July and October 2022.

Sample and setting

The survey was conducted online and open to all provinces of Turkey without any limitation to cities. The study sample consisted of 167 intensive care nurses actively working in public or university hospitals in Turkey. All participants were the nurses who had been working in intensive care unit for more than one year. In this study, sample calculation was made with G Power 3.1.9.7 analysis. Accordingly, means difference from constant (one sample case) was chosen as statistical analysis, and the sample size was calculated as at least 150 people, with an effect size of 0.3 type 1 error rate of 0.05 and a power of 95%. 177 nurses were enrolled in the study. The study was completed with 167 samples.

Inclusion criteria

Nurses who agreed to participate in the study and have been working in the intensive care unit for at least 1 year were included in the study.

Exclusion criteria

Participants with psychiatric disorders and organic chronic diseases, who attended any support group or psychotherapy, who did not agree to participate in the study, who gave incomplete answers to the research questions were not included in the study.

Data collection

Data were collected from the participants online through Google Forms platform in the study. Links of the online surveys were sent via social media platforms (Facebook, Instagram and Twitter), Whatsapp groups, personal connections of the researchers and personal e-mails. Besides, participants were asked to share the survey with other intensive care nurses to increase the sample size.

Study procedure

The aim of the study was described in the data collection instruments shared through Google Forms and a brief information was given about the study. Before the participants filled out the questionnaire, they ticked the voluntary participation consent box in the first part of the

form. Continuation of the survey by the participant who gave consent was ensured securely. When editing the survey form, it was limited to only one response from the Google Forms Settings Menu. This prevented a user from undertaking survey questions again. At the same time, unauthorized access is prevented by allowing participants to respond by signing in to Google. Participation was on a voluntary basis and completing the online form lasted for nearly 10 min. It was shared online with nurses working in public hospitals and university hospitals in Turkey. At the end of the research, only the responsible researchers were able to access the data recorded in the system. Data entries of participants who gave incomplete answers were not included in the study.

Data collection instruments

Personal Information Form, The Spiritual Well-Being Scale and The Compassion Fatigue-Short Scale were used to collect data. Information regarding data collection instruments was indicated below:

Personal Information Form: This is a form including general characteristics such as sex, age, marital status and education level of the nurses, total working time in the nursing profession, total working time in the intensive care units, number of patients seen per day and the type of institution. In Turkey, nurses can work as Registered Nurses (RN) after high school and university education. After this training, nurses can continue their graduate education if they wish. For this reason, participants were grouped as High School/Undergraduate (RN), Graduate [Master's Degree in Nursing (MSN)]. Nurses working in Public Hospital/ City Hospital (Government Hospital) and Research and training (University Hospital) are included in this study.

The Spiritual Well-Being Scale: The validity and reliability of the 49-item scale, which was prepared by [Eksi and Kardas \(2017\)](#) to measure the spiritual well-being of adults by taking the opinions of 17 experts, was tested by applying it to 865 adults. It has been developed for adults to understand the personal, social, environmental and transcendental aspects of individuals' lives and to determine how well they are aligned with life's values. Other scales in the literature regarding the items of the scale and the opinions of experts in the field were used ([Katz & Stotland, 1959](#); [Veneziano & Hooper, 1997](#)). This is a 5-likert type scale including 29 items (1 = not applicable to me at all, 5 = Completely applicable to me). The range of scores to be taken from the scale varies between 29 and 145. Spiritual Well-Being Scale has 3 subscales including Transcendence, Harmony with Nature and Anomie. It is required to score the items in Anomie subscale reversely if a total scale score is desired. Considering the compatibility of Kaiser-Mayer-Olkin (KMO) coefficient in terms of factor analysis, values between 1 and 0.5 can be considered appropriate, while the KMO value of the scale is very appropriate with 0.95. The increase in the score obtained from the scale indicates that spiritual well-being state is promoted. Reliability coefficients of the subscales were found as $\alpha = 0.95$ in transcendence subscale, $\alpha = 0.86$ in Harmony with Nature subscale and $\alpha = 0.85$ in Anomie subscale. Total Cronbach Alpha value of the scale was calculated as $\alpha = 0.88$ ([Eksi & Kardas, 2017](#); [Eksi et al., 2019](#)). In this study, Cronbach's Alpha reliability coefficient was found as 0.90. Permission for the use of this scale was obtained via e-mail.

Compassion Fatigue-Short Scale: This scale, which aims to evaluate compassion fatigue in healthcare workers, is based on Figley's clinical experience and versions ([Figley, 1995](#)). Compassion Fatigue-Short Scale (CF-SS), which was developed by [Adams et al. \(2006\)](#) to evaluate compassion fatigue in healthcare professionals, assesses compassion fatigue under 13 items. The validity and reliability study of the scale was carried out by [Dinc and Ekinci \(2019\)](#) in Turkey. The scale has two subscales including secondary traumatic stress and burnout. The lowest 13 and the highest 130 points are obtained from the scale. As the scores taken from the scale increase, the level of compassion fatigue experienced by the individuals also increases. Cronbach α coefficient of the scale was determined as 0.87 for the total scale, 0.74 for the secondary traumatic stress subscale and 0.85 for the burnout subscale ([Dinc &](#)

[Ekinci, 2019](#)). In this study, Cronbach's Alpha reliability coefficient was found as 0.94. The permission for use of the scale was taken via e-mail.

Ethical Considerations

Necessary permissions were obtained from the Ethics Committee of Istanbul Health Sciences University Kanuni Sultan Suleyman Training and Research Hospital (Decision no: 2022.06.157) before the start of the study. Online informed consent was taken from all participants in compliance with the Declaration of Helsinki; and those who volunteered to participate in the study were included.

Data analysis

Descriptive statistics were used to analyse data. All results were assessed at a confidence interval of 95% and a significance level of $p < 0.05$. "Independent samples *t* test" was used to compare the variables ensuring normality assumption between two groups; and "ANOVA" was used for the comparison of three and more groups. In addition, "Post Hoc" was used for the differences between groups. Moreover, "Pearson Correlation" analysis was used while assessing the relationship between The Spiritual Well-Being and Compassion Fatigue-Short Scales and their subscales. The effect of intensive care nurses on spiritual well-being and compassion fatigue was tested by simple linear regression analyses. The analysis of data obtained from the study was carried out by using IBM SPSS 25.0 package program.

Results

Ten nurses were withdrawn from the study including seven due to their incomplete answers to the survey and three declined to participate. Sociodemographic and professional experience characteristics of the intensive care nurses included in the study were introduced in [Table 1](#). 35.3% ($n = 59$) of the participants were between 22 and 27 years old; and most of them were females 73.1% ($n = 122$), single 52.1% ($n = 87$) and had an undergraduate degree in nursing 67.1% ($n = 112$). Regarding work experience, most of the participants had a professional experience from 1 to 5 years 44.3% ($n = 74$) and an experience in intensive care between 1 and 5 years 57.5% ($n = 96$). It was also determined that 62.9% ($n = 105$) of the participants were seeing two patients per day and 35.9% ($n = 60$) were working in a public hospital ([Table 1](#)).

Spiritual Well-Being scores based on sociodemographic and professional experience characteristics

Distribution of intensive care nurses' scores from Spiritual Well-Being Scale based on their sociodemographic and professional experience was given in [Table 2](#). A statistically significant difference was found between mean spiritual well-being scores of the participants based on their education levels ($F = 19.431$, $p < 0.000$). Further analysis revealed that spiritual well-being levels of the intensive care nurses with a high school degree (1) were higher than the nurses with an undergraduate (2) and graduate degree (3) (1–2, $p = 0.000$, 1–3, $p = 0.000$). In addition, intensive care nurses with an undergraduate degree (2) were found to have a higher level of spiritual well-being compared to the nurses with a graduate degree (3) (2–3, $p = 0.000$).

No statistically significant difference was found between mean spiritual well-being scores of the participants based on age ($F = 1.386$, $p > 0.253$), marital status ($t = 0.422$, $p > 0.673$), professional experience ($F = 0.045$, $p > 0.987$) and intensive care experience ($F = 0.690$, $p > 0.503$) ([Table 2](#)).

Table 1
Sociodemographic and professional experience characteristics of the intensive care nurses (N = 167).

	Personal Characteristics	F	%	N = 167	Personal characteristics	F	%
Age	22–27	59	35.3	Education ^a	High school	26	15.6
	28–33	53	31.7		Undergraduate	112	67.1
	34+	55	32.9		Graduate	29	17.4
Sex	Female	122	73.1	Marital status	Single	87	52.1
	Male	45	26.9		Married	80	47.9
Professional Seniority ^b	1–5	74	44.3	Intensive care seniority ^b	1–5	96	57.5
	6–10	35	21.0		6–10	47	28.1
	11–15	30	18.0		11+	24	14.4
	16+	28	16.8				
Number of patients seen per day ^c	2	105	62.9	Type of institution ^d	Public h.	60	35.9
	3–5	33	19.8		Research and training	55	32.9
	6	29	17.4		City h.	52	31.1

a = High School/Undergraduate (RN), Graduate (MSN).

b = Years.

c = Up to 6 patients can be seen for very short periods of time during emergencies and shift changes.

d = Public Hospital/ City Hospital (Government Hospital) and Research and training (University Hospital).

Table 2
Comparison of Mean Scores of Intensive Care Nurses from The Spiritual Well-Being Scale and The Compassion Fatigue-Short Scale and Subscales Based on their Sociodemographic Characteristics.

Variables	N	Spiritual Well-Being X̄ ± SD	t/F(p)	Compassion Fatigue X̄ ± SD	t/F(p)	
Marital Status	Single	87	114.38 ± 16.94	t = 0.422 p = 0.673	67.30 ± 29.47	t = 3.397 p = 0.001
	Married	80	113.36 ± 13.87		52.38 ± 27.10	
Age	22–27(1)	59	116.47 ± 17.11	F = 1.386 p = 0.253	69.34 ± 28.70	F = 5.125 p = 0.007 ^b [1–3] 1–3, p = 0.001
	28–33(2)	53	113.21 ± 15.97		57.62 ± 29.71	
	34+(3)	59	111.78 ± 12.91		52.73 ± 27.20	
Education Level	High school (1)	26	126.88 ± 7.32	F = 19.431 p = 0.000 ^b [1–2,3] 1–2, p = 0.000 1–3, p = 0.000 [2–3] 2–3, p = 0.000	66.77 ± 29.57	F = 1.790 p = 0.170
	Undergrad (2)	112	113.62 ± 15.46		60.69 ± 29.12	
	Graduate (3)	29	103.31 ± 12.50		52.14 ± 28.65	
Prof. seniority (Years)	1–5(1)	74	114.12 ± 17.40	F = 0.045 p = 0.987	68.42 ± 30.74	F = 6.496 p = 0.000 ^b [1–4] 1–4, p = 0.000
	6–10(2)	35	113.69 ± 17.30		53.77 ± 25.34	
	11–15(3)	30	114.37 ± 12.37		63.33 ± 27.71	
	16+(4)	28	113.04 ± 10.81		42.86 ± 22.55	
ICU seniority (Years)	1–5	96	113.77 ± 16.65	F = 0.690 p = 0.503	66.15 ± 30.14	F = 5.291 p = 0.006 ^b [1–2] 1–2, p = 0.001
	6–10	47	115.60 ± 15.39		50.17 ± 27.09	
	11+	24	111.04 ± 10.12		55.71 ± 24.06	

a = “Independent Samples T Test” was used to compare two groups and “ANOVA” was used to compare three and more groups. “Post Hoc” was used for the differences between groups.

b = Group Difference, [1–2,3]: There are significant differences between 1 and 2 and 1 and 3. [2–3]: There is a significant difference between 2 and 3.

c = ICU, intensive care unit.

Table 3
The Distribution of Mean Spiritual Well-Being and Compassion Fatigue scores of Intensive Care Nurses (n = 167).

	Mean ± SS	Min.-Max.
Spiritual Well-Being	113.89 ± 15.50	77.00–145.00
Transcendence	62.43 ± 10.74	26.00–75.00
Harmony with Nature	31.09 ± 3.82	19.00–35.00
Anomie	20.37 ± 7.70	7.00–35.00
Compassion Fatigue	60.15 ± 29.24	14.00–128.00
Secondary Traumatic Stress	23.04 ± 11.61	5.00–49.00
Burnout	37.11 ± 18.61	8.00–79.00

Min, Minimum; Max, Maximum; SD, Standard Deviation.

Mean spiritual Well-Being and compassion fatigue scores of intensive care nurses

The distribution of mean spiritual well-being and compassion fatigue scores of intensive care nurses is included in Table 3. Mean spiritual well-being score of the nurses was found to be 113.89 ± 15.50. Mean subscale scores were determined to be 62.43 ± 10.74 in Transcendence, 31.09 ± 3.82 in Harmony with Nature and 20.37 ± 7.70 in Anomie subscales. Moreover, mean compassion fatigue score of the participants was found to be 60.15 ± 29.24. The mean scores of the subscales of Compassion Fatigue-Short Scale were 23.04 ± 11.61 for Secondary Traumatic Stress and 37.11 ± 18.61 for Burnout.

Compassion fatigue scores based on sociodemographic and professional experience characteristics

The distribution of scores from the Compassion Fatigue-Short Scale based on the sociodemographic and professional experience

characteristics of intensive care nurses participated in the study was given in Table 2. Statistically significant differences were found between mean compassion fatigue scores based on the participants' age ($F = 5.125, p < 0.007$), marital status ($t = 3.397, p < 0.001$), professional experience ($F = 6.496, p < 0.000$), and working duration in the intensive care ($F = 5.291, p < 0.006$). Further analyses indicated that compassion fatigue levels of the nurses, who were single and younger (1–3, $p = 0.001$) were higher. It was determined that the levels of compassion fatigue of nurses between the ages of 22–27 (1) were higher than those of 34 ages and older (3).

Moreover, a statistically significant difference was found between mean compassion fatigue scores of the nurses based on the duration of their professional experience (1–4, $p = 0.000$). It was determined that compassion fatigue levels of the nurses with a professional experience of 1–5 years (1) were higher than the nurses with an experience of 16 years (4) and more. Similarly, a significant difference was found in the compassion fatigue scores based on their working duration in the intensive care (1–2, $p = 0.001$). Compassion fatigue levels of the nurses with an intensive care seniority of 1–5 years (1) were found to be higher than those with 6–10 years (2). No statistically significant differences were found between mean compassion fatigue scores based on education level of the participants ($F = 1.790, p > 0.170$) (Table 2).

The relationship between spiritual Well-Being and compassion Fatigue-Short Scales of intensive care nurses

Table 4 has shown that spiritual well-being of intensive care nurses has a positive and statistically significant effect on compassion fatigue ($\beta = 0.358, p = 0.000$), secondary traumatic stress ($\beta = 0.314, p = 0.000$) and burnout ($\beta = 0.367, p = 0.000$). In other words, compassion fatigue, secondary traumatic stress and burnout levels also increased as spiritual well-being levels increased.

Discussion

In this study, the effect of spiritual well-being levels of intensive care nurses on compassion fatigue was evaluated. No such study has been found in the literature. Therefore, the study results were discussed with the relevant literature. In this study, it was determined that the mean score of the spiritual well-being of the nurses was moderate. In similar studies in the literature, it is stated that the levels of spiritual well-being are at average levels (Azarsa et al., 2015; Kim & Yeom, 2018; Kutlu et al., 2020). This finding might be interpreted as that nurses included in the study perceived their lives as important and meaningful, they could establish balanced relationships and they were aware of their tasks. Moreover, it was found that intensive care nurses with a high school degree had a higher spiritual well-being level compared to those with an undergraduate and graduate degree; and the nurses with an undergraduate degree had a higher spiritual well-being level than the nurses with a graduate degree. This reveals a different outcome than the studies

indicating that spiritual well-being is increased with education level (Jahandideh et al., 2018; Kim & Yeom, 2018; Kula Sahin & Bulbuloglu, 2022). When literature was examined, no studies could be found consistent with these results. It is estimated that other factors in the cultural, work and social lives of the nurses might have been effective in enhancing their spiritual well-being. In addition, it is thought that nurses who are high school graduates work longer in terms of professional seniority years, and accordingly, these people can be team leaders or unit supervisors.

In this study, the compassion fatigue score of intensive care nurses was determined as moderate. Compassion fatigue can be experienced more prominently among intensive care nurses who witness the pain and suffering of others and care for critically ill patients (Alharbi et al., 2019; Duarte et al., 2016; Kelly et al., 2015; Kelly, 2020). In this case, nurses can internalise the pain and show an excessive and faulty empathic reaction (Todaro-Franceschi, 2013; Wentzel & Brysiewicz, 2014; Yilmaz & Ustun, 2018). There are also some other studies in the literature reporting similar results (Alharbi, et al., 2019; Katran et al., 2021; Xie et al., 2021).

The studies examining compassion fatigue among the nurses have reported that sociodemographic variables such as age and duration of professional experience are important determinants (Hunsaker et al., 2015; Kolthoff and Hickman, 2017; Peters, 2018; Sodeke-Gregson et al., 2013). Sacco et al. (2015) have indicated that nurses acquire more professional experience as their age gets older and compassion fatigue risk decreases with age. Similarly, Hunsaker et al. (2015) found a significant difference between compassion fatigue levels based on age and nursing experience. They emphasised that nurses had higher knowledge and skills and a lower risk of compassion fatigue as their age and experience increased. Also in this study, young nurses aged between 22 and 27 years old were found to have significantly higher compassion fatigue scores compared to those who were aged 34 years and older; and besides, nurses with a professional and intensive care experience for 1–5 years had significantly higher compassion fatigue levels than the ones who had long-term seniority (Table 2). It is estimated that young nurses with less work experience have difficulties while working in intensive care settings where new information is learned and where speed and skills are critical. In this context, provision of a supportive and collaborative environment for new nurses by unit supervisors and experienced nurses is important. Pairing experienced nurses with new nurses by matching their shifts might help to overcome these challenges for new nurses.

In this study, it was determined that single nurses had a higher compassion fatigue compared to married ones. Similar outcomes have been found in the studies examining compassion fatigue in the literature (Kim et al., 2015; Kismir & Irge, 2020; Sacco et al., 2015). There is information in the literature that being married can have a positive effect on coping with stress and increasing mental well-being compared to singles (Vahedian-Azimi et al., 2019; Suryavanshi et al., 2020; Yu et al., 2020). Bouzanjani et al. (2020) in a study examining the empathic

Table 4
The Effect of Spiritual Well-Being on Compassion Fatigue, Secondary Traumatic Stress and Burnout (N = 167).

	Non-standardised coefficients		Standardised coefficients			F	R ²
	B	Std. error	β	T	p		
Constant	-16.845	15.756		-1.069	0.287	24.320	0.128
Spiritual Well- Being	0.676	0.137	0.358	4.932	0.000		
Dependent Variable: Compassion Fatigue							
Constant	-3.739	6.362		-0.588	0.557	18.039	0.099
Spiritual Well- Being	0.235	0.055	0.314	4.247	0.000		
Dependent Variable: Secondary Traumatic Stress							
Constant	-13.105	9.988		-1.312	0.191	25.744	0.135
Spiritual Well- Being	0.441	0.087	0.367	5.074	0.000		
Dependent Variable: Burnout							

Simple Linear Regression Analysis.

behaviors and spiritual orientations of nurses, states that married nurses have more spiritual orientation and engage in more empathetic behaviors. This can be interpreted as that married nurses lead a more regular life, experience more spirituality in their private lives, and that these positive effects of spirituality may also be a protective factor on compassion fatigue.

Today, it is of the utmost importance for the nurses to use therapeutic approaches such as being kind, showing empathy, listening to the concerns of the patients, establishing secure relationships and showing respect to patients' values (Polat et al., 2020; Taylor et al., 2019). However, empathy and devotion behaviors bring along the risk of compassion fatigue (Duarte & Pinto-Gouveia, 2017; Harris & Griffin, 2015; Peters, 2018). Gok (2015) states in her study that nurses prefer the strategy of being isolated from the intensive care environment both mentally and physically in order to cope with compassion fatigue at work and outside of work. Similarly, Goodrich (2012) has reported that nurses generally try to protect their feelings while working in intensive care settings where major difficulties are experienced, and complex care needs should be fulfilled. This natural avoidance or self-defense process may create obstacles in their compassion and empathy capacities (Duarte et al., 2016). In literature it has been reported that variables such as empathy skill, empathetic concern, exposure to patient's trauma, empathetic behavior, compassion stress, long-term care for patient and traumatic memories interact and contribute to the development of compassion fatigue (Dikmen & Aydin, 2016; Figley, 2002). In the results obtained from our study, a significant relationship was observed between the spiritual well-being levels of nurses and compassion fatigue, similar to the relevant literature. Theoretical assumption underlying this situation can be explained as follows: spiritual well-being tries to buffer the effect of stress experienced by the nurses, who understand and internalise the problems and pains of the patients deeply within critical working environment, on their feelings of compassion. Despite this, the accumulation of these adverse factors triggering compassion and the stress of caregiving cause changes in empathising skill of the nurse and thus, a compassion fatigue may develop. However, it is estimated that this result may be reflected in the negative effects experienced during the Covid-19 pandemic (Coppola et al., 2021; Katran et al., 2021; Ruiz-Fernández et al., 2020). During this process, intensive care nurses who were in close contact with the patients, became isolated from the society and their families due to the threat of infection. It is thought that reasons such as heavy and long working hours, insufficient number of nurses and inadequacy of emergency action plans during the pandemic may have negatively affected the mental health of nurses and caused them to experience compassion fatigue. In the literature, there is no other study revealing the effect of spiritual well-being levels of nurses on their compassion fatigue. Therefore, the outcomes of this study may guide other relevant studies. It is required to provide time and space for nurses who spend the longest time with patients during treatment and care, in order to allow them to reflect their responses towards stressful working environments. It is necessary to provide awareness against compassion fatigue in both individual and institutional aspects. The American Association of Critical Care Nurses (AACN) indicates the necessity of 6 basic standards for nursing practices and patient care to provide a healthy working environment. These are skilled communication, true collaboration, effective decision-making, appropriate staffing, meaningful recognition, and authentic leadership. Working in a healthy work environment will decrease both burnout and compassion fatigue levels of the nurses; and this safe environment will create a higher job satisfaction (Alharbi et al., 2019; Kelly, 2020; Wei et al., 2018).

Limitations

The descriptive design of the study, small sample size and participation of only a small group of intensive care nurses working in public and university hospitals in Turkey were the limitations of this study. Therefore, the outcomes cannot be generalised to other regions or

cultures; but they can contribute to generalisation.

Conclusion

It was determined that spiritual well-being levels of the intensive care nurses included in the study were at a moderate level and they were significantly correlational with compassion fatigue levels. It was also concluded that young, single, and less experienced intensive care nurses constituted a group at risk for the increase in the compassion fatigue level. A good management of the feelings of compassion and empathy may be a protective factor for compassion fatigue and may be used as a prevention strategy in the context of promoting spiritual well-being among intensive care nurses. Therefore, it is quite important to organise in-service trainings for the healthcare staff about the management of compassion. Intensive care nurses should be provided time and space to enable them to reflect their responses towards their stressful work environment. Thus, nurses may manage the increased feeling of inner fatigue. Moreover, it is required to increase the number of improvement studies for patient and employee satisfaction in the healthcare institutions.

It is thought that this unexpected result obtained from our study may have resulted from the stressful working conditions experienced during the Covid 19 pandemic. It is assumed that the feeling of compassion that is not well managed despite the mental well-being of intensive care nurses may cause compassion fatigue. It can be recommended to plan similar studies with better designed, larger samples, including nurse groups working in different regions and units, to compare the results and to determine the effects of various environmental factors.

Author contributions

Criteria	Author Initials
Made substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data;	MÜ, EA.
Involved in drafting the manuscript or revising it critically for important intellectual content;	MÜ, EA.
Given final approval of the version to be published. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content;	MÜ, EA.
Agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.	MÜ, EA.

Ethics committee permission

Approval was granted by the Ethics Committee of Istanbul Health Sciences University Kanuni Sultan Suleyman Training and Research Hospital (Date: 23.06.2022-E.80929729.000.11251 and Decision no: 2022.06.157) before the start of the study. Informed consent was taken from all participants in compliance with the Declaration of Helsinki; and those who were voluntary to participate in the study were included.

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Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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