ORIGINAL ARTICLE

The effect of thanatophobia and professional commitment on compassion fatigue in nurses in Türkiye: Cross sectional study

Gönül Gökçay[1] ⓘD   **Yeliz Akkuş**[2] ⓘD

[1] Department of Public Health Nursing, Faculty of Health Sciences, Kafkas University. Kars / Türkiye
[2] Department of Internal Diseases Nursing, Faculty of Health Sciences, Kafkas University. Kars / Türkiye

Abstract

The study was executed as cross-sectional to unearth the effect of thanatophobia and professional commitment on compassion fatigue in nurses in Türkiye. This study is cross-sectional. 521 nurses were reached by using the regional stratified method. Data were collected online via Google forms between July and November 2021. Data were obtained with the Sociodemographic and Occupational Characteristics Questionnaire, the Compassion Fatigue Short Scale, the Thanatophobia Scale and the Scale of Commitment to the Nursing Profession. Data were evaluated using the number, percentage, mean, standard deviation, t-test, One way ANOVA, and using correlation and regression analysis. The mean age of the nurses was 32.22±7.51. Nurses acquired a moderate score on the Compassion Fatigue (64.63±30.89), Thanatophobia (30.69±12.26), and Professional Commitment (67.66±14.33) scales. Thanatophobia predicted Compassion Fatigue at a rate of 41.2% in terms of providing care to a terminally ill patient and thinking about quitting the profession in the near future. Nurses acquired a moderate score on the Compassion Fatigue, Thanatophobia and Professional Commitment scales. It is recommended to evaluate Compassion Fatigue, Thanatophobia, and Professional Commitment in nurses regularly, to provide training for nurses who cared for patients who have fear of death or who have died, to rotate nurses working in this field, and to strengthen the collaboration among employees to increase their commitment to the profession.

Keywords: Nurses, compassion fatigue, thanatophobia, professional commitment

Corresponding Author:
Gönül Gökçay
Email: gokcaygonul22@gmail.com

Introduction

The primary service providers of healthcare are nurses, and in today's rapidly aging population and changing environmental conditions, along with the pandemic and chronic illnesses, due to escalating costs more than ever before, nurses are engaged in demanding treatment processes and high-skill care activities for patients as part of their duties. Nurses are exposed to witnessing the fear, helplessness, stressful, and traumatic experiences of patients and their families, and they are required to establish long-term therapeutic relationships, which subjects them to increased stress and the risk of compassion fatigue. Compassion Fatigue (CF) is the phenomenon of stress resulting from exposure not to the trauma itself, but to an individual who has undergone trauma [1]. Figley (1995), the first to define CF in an academic sense, identified CF as "a state of biological, physiological and emotional exhaustion and dysfunction as a result of prolonged exposure to compassion stress" [2]. Regardless of the reason, nurses experience negative emotions when they are unable to relieve pain, which can lead to CF [3]. Considering the studies conducted in Türkiye, there are studies indicating low or above-average CF [4,5]. Dikmen et al. (2016) stated that 52.7% of intensive care nurses were at high risk for CF [6]. Jakimowicz et al. (2018) [3] studies unearthed that CF was associated with many factors such as being new in the profession, the type of work institution (private or public), and work experience. In the same study, a correlation was found between burnout and CF. Additionally, nurses can experience CF due to the helplessness they feel when exposed to sudden changes in patients' health conditions and deaths [2].

Thanatophobia, a type of fear found in most people, refers to the fear of the end of human life, and it differs from other fears as it is quite overwhelming. The fear of death has great effects on human life; this effect can cause pathological problems and may require one to seek medical support [7]. Nurses are health workers who play a key role in the operation of health care services. Nurses, who undertake the care and treatment of dying patients, often experience the phenomenon of death [8]. The death, suffering, and pain of others cause a variety of emotions in all individuals, more commonly in health care workers, and the most frequent ones are fear and anxiety [9]. During COVID-19 pandemic, such traumatic events have increased the fear of death and anxiety in nurses [10] and this situation can cause feelings of guilt, helplessness, anger, and depression [8]. The fear of death forms the basis of all types of anxiety and fear as well [11]. In a study conducted by Özyalçın and Çevik (2021) [12] in which thanatophobia of patients, patient relatives, and nurses was compared, it was found that the fear of death and death avoidance behaviors were higher in the latter than in patients and their relatives. It was concluded that nurses who works in the intensive care units experience thanatophobia intensely and also that thanatophobia level rises in women, individuals with an associate degree, who are not satisfied with their profession, and those witnessed death [13]. On one hand, nurses bear witness to patients' pain and death, confronting their own fears of death. Sudden deaths or challenges experienced during the dying process can evoke emotional responses such as fear, anxiety, and stress in nurses. This situation can impact professional commitment and diminish nurses' emotional engagement with their work.

Professional commitment (PC) is defined as the compliance between beliefs of an individual and their professional goals; higher compliance leads more personal effort. PC consists of three factors: the belief in the values of the chosen profession, an effort to understand these values, and the determination of maintaining professional standards. There are many factors affecting PC, such as working conditions, work-family conflict, sociodemographic characteristics (age, gender, marital status, etc.), and organizational barriers [14]. It is thought that professional and family responsibilities and various physiological and psychological negative conditions, especially during the pandemic process, increase the perception of organizational blockage and decrease professional commitment, which may accelerate the quitting process of health workers [14,15].

There is not a single study in national and international literature has investigated the

effects of thanatophobia and professional commitment on compassion fatigue in nurses. This study is believed to fill a gap in the literature by identifying the levels of compassion fatigue, thanatophobia, and professional commitment among nurses, as well as determining the factors influencing compassion fatigue. Therefore, the aim of the study is to determine the effects that thanatophobia and professional commitment have on CF in nurses in Türkiye.

Research questions:

• What are the levels of CF among nurses in Türkiye?

• What are the levels of Thanatophobia among nurses in Türkiye?

• What are the levels of PC among nurses in Türkiye?

• How do factors such as professional characteristics, PC, and Thanatophobia affect CF in nurses in Türkiye?

Materials and Methods

Aim

The aim of this cross-sectional study is to demonstrate the effect of Thanatophobia and PC on CF in Nurses in Türkiye.

Population-sample

The population of the research consisted of 198,103 nurses registered in the Regional Statistical Data System of the Turkish Statistical Institute (TurkStat) in 2019 [16]. There are 7 regions and 81 provinces in Türkiye. For this reason, the size of the sample included in the study was calculated as a minimum of 383 nurses, with a confidence level of 95%, a confidence interval of 5%, and a sampling error of ±5% for the non-homogeneous population where the regional stratified method was used. The study was completed with the participation of 521 nurses. The strata ratio was calculated by dividing the number of nurses, for instance it is 57,342 for the Marmara region, by the total number of registered nurses (57.342/198.103=0.289). The number of nurses that needed to be reached in each region was determined by multiplying the calculated strata ratio with the total number of samples to be reached (0.289x383=110). The sample sizes for all

regions were calculated as demonstrated in the example and are presented in Table 1.

Data Collection Tools

Sociodemographic Characteristics Questionnaire: The form designed by researchers in line with literature and consists of 12 questions regarding sociodemographic characteristics [8,14,17-19].

Occupational Characteristics Form: The form designed by the researchers in line with literature and consists of 9 questions regarding occupational characteristics [8,14,19].

Compassion Fatigue-Short Scale (CF-SS): The CF-CS scale, developed by Adams et al. (2006) [17], was used in the study to measure the CF level of healthcare workers. The validity and reliability of the scale in Turkish were conducted by Yıldırım and Cavcav (2020) [19]. The scale consists of 13 items, representing the sub-dimensions of secondary trauma and burnout. Each item is scored on a scale from 1 to 10 (1: rarely/never, 10: very often). The secondary trauma sub-scale includes items 3, 5, 8, 10, and 12, while the burnout sub-scale includes items 1, 2, 4, 6, 7, 9, 11, and 13. There is no specific cut-off point for the scale. Scores on the scale can range from 13 to 130, indicating higher CF levels as the scores increase [19]. The original scale and Cronbach's alpha coefficients for this study are presented in Table 4

Thanatophobia Scale (TS): Turkish validity and reliability of the TS, which was developed by Merrill et al (1998) [20], was conducted by Çiftçioğlu and Harmancı Seren (2019) [8]. The scale consists of seven items and a seven-point Likert scale. The scale items were scored from 1 to 7, starting from the "strongly disagree" category to the "strongly agree" category. The increase in the mean score on the scale indicates that the death fear of the individual has increased as well [8]. Original scale and The Cronbach alpha coefficients for this research are presented in table 4.

Professional Commitment Scale (PCS): The scale was developed by Lu et al. (2000) in order to determine the level of PC of nurses [21]. Turkish validity and reliability of the study was

conducted by Çetinkaya and Ozmen (2015) [18]. The scale consists of 26 items and 3 subscales: The Cronbach alpha value was 0.94 in the original version and 0.90 in the Turkish validity and reliability study. The scale is a four-point Likert type scale (1: Strongly disagree - 4: Strongly agree) and consists of 9 reverse-scored items (14, 15, 16, 17, 18, 19, 20, 21 and 25). While the total scale score ranges from 26 to 104, a higher score indicates higher professional commitment. There is not a cutoff point for the scale [13,21]. Original scale and The Cronbach alpha coefficients for this research are presented in table 4.

Data Collection

Data were collected online via Google forms between July and November 2021. Researchers reached out to nurses by sharing the online survey link on their social media accounts (Facebook, Twitter, Instagram, WhatsApp). In the online survey, information of the institution and identity of the nurses participating in the research were not questioned. In the study, nurses were reached through convenience sampling method. Google form is set so that participants can not submit without answering questions. Participants could not move on to the next without answering the questions and the section. The privacy and confidentiality of personal data were protected by being encrypted in Google forms. Only the researchers had access to the obtained data.

Statistical Analysis

The data obtained in the study were analyzed by the researchers using the SPSS (Statistical Package for Social Sciences) 20.0 package software program on computer. For the purpose of data analysis, numbers, percentages, minimum and maximum values, mean and standard deviations are given determined according to a normality distribution analysis of the data (using the skewness and kurtosis − 1.5 to +1.5 coefficients) [22]. To determine the differences between groups, t-test analysis, and one-way variance test (ANOVA) were used for normally distributed variables; and the Mann Whitney-U and the Kruskal Wallis H analyses were used for non-normally distributed variables. Correlation and linear regression analyses were applied to determine the correlation and effect between the data. in the statistical analyses, the level of significance was accepted as $p<0.05$.

Research Strengths and Limitations

The limitations of the study are that the research was conducted online and that the results can only be generalized to the participants who had internet access and agreed to participate in the study. The environment in which the research was conducted and the profile of the participants are limited; therefore, it should be noted that the findings may be generally confined to nurses in Türkiye. All measurement tools used in the study may not accurately reflect individuals' expressions or comprehensively assess their emotional states

Research Ethics

This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Committee of Kafkas University (09.06.2021/81829502.903/197). Permission was received from the authors who developed the measurement tools used in the research. It was stated to the individuals who will participate to the research that data to be gathered from the research would only be used for scientific purposes, and that they could desist the research at any time they want. The first page of the online questionnaire was the consent page that participants were asked whether they agreed to participate in the study or not. While the participants who agreed to participate in the study were allowed to proceed to the next page of the online questionnaire; those who did not agree to participate were not allowed to proceed to see the questions. Identities of the researchers were also provided on the first page of the questionnaire.

Results

Five hundred and twenty-one nurses working in different geographical regions of Türkiye participated in this study.

Of the nurses participating in the research, 69.7% were female, 56.8% were married, 89.8% had children, 21.5% lived in the Marmara Region, 74.9% lived in a province, 89.4% had a middle income, 59.7% did not use any substance,

87.1% had an elementary family, 62.2% had a bachelor's degree, and 84.1% did not have any chronic disease. The mean age of the nurses was 32.22±7.51, and the average working year was 10.01±8.73 (Table 2).

53.4% of the nurses worked in a secondary health institution and 74.9% worked as unit nurses. Additionally, 89.1% of the nurses stated that they provided care to terminally ill patients; 93.5% stated that they intervened in the deceased patient; 63% stated that they were not satisfied with their profession; 81.6% stated that they would choose a different profession if they had the chance; and 66.4% thought of quitting the profession soon (Table 3).

Table 1. Sample Size According to Regions.

Region	Population	Strata ratio	Min Sample size (confidence interval of 5%)	Number of participants
Marmara Region	57342	0.289	110	112
Aegean Region	25059	0.126	48	77
Mediterranean Region	24822	0.125	48	76
Central Anatolia Region	37063	0.187	72	72
Black Sea Region	21741	0.110	42	67
Southeastern Anatolia Region	16858	0.086	33	61
Eastern Anatolia Region	15218	0.077	30	56
Total	198103	1.000	383	521

Table 2. Distribution of Demographic Characteristics (n=521).

		n	%
Gender	Male	158	30.3
	Female	363	69.7
Marital Status	Married	296	56.8
	Single	225	43.2
Children (308)	No	53	10.2
	Yes	468	89.8
Region of residence	Marmara Region	112	21.5
	Mediterranean Region	77	14.8
	Eastern Anatolia Region	76	14.6
	Central Anatolia Region	72	13.8
	Black Sea Region	67	12.9
	Southeastern Anatolia Region	61	11.7
	Aegean Region	56	10.7
Place of residence	Province	390	74.9
	District	131	25.1
Income	Low	44	8.4
	Middle	466	89.4
	High	11	2.1
Substance use	Nonuser	311	59.7
	Cigarette	187	35.9
	Cigarette and/or alcohol	23	4.4
Family structure	Nuclear	454	87.1
	Extended	58	11.1
	Fragmented	9	1.7
Education	High school	33	6.3
	Associate degree	89	17.1
	Bachelor's	324	62.2
	Postgraduate	75	14.4
Chronic disease	Yes	83	15.9
	No	438	84.1
Age	32.22±7.51 (Mean±SD)	0-56 (Min-Max)	
Work Experience	10.01±8.73 (Mean±SD)	0-133 (Min-Max)	

The average scores of the nurses for the various scales were 64.63±30.89 for CF-SS (CF-SS subscales: trauma 23.66±12.51 and occupational burnout 35.18±16.77), 30.69±12.26 for TS, and 67.66±14.33 for PCS respectively (Table 4).

The mean *Thanatophobia* scores of nurses who worked as head and unit nurses in a secondary health institution, those who provided care to the terminally ill, those who were not satisfied in their profession, those who would choose a different profession if they had the chance to do so, and those who thought of quitting the profession were higher and statistically significant (Table 5).

The mean *Professional Commitment Scale* scores of the nurses who worked as head nurses and those who were satisfied with their profession were higher and statistically significant (Table 5).

The mean *Trauma* scores of the nurses who worked as head nurses and unit nurses, those who provided care to terminally ill patients, those who intervened in the deceased patient, those who were not satisfied in their profession, those who would choose a different profession if they had the chance to do so, and those who thought of quitting the profession were higher and statistically significant (Table 5). The mean *Occupational Burnout* and *CF-SS* scores of the nurses who worked in secondary health institutions, those who were head and unit nurses, those who provided care to terminally ill patients, those who intervened in deceased

Table 3. Distribution of Occupational Characteristics (n=521).

		n	%
Institution	Primary health institution	50	9.6
	Secondary health institution	273	52.4
	Tertiary health institution	198	38.0
Position	Unit nurse	390	74.9
	Head nurse	41	7.9
	Other	90	17.3
Giving care to the terminally ill patient	Yes	464	89.1
	No	57	10.9
Interference to deceased patient	Yes	487	93.5
	No	34	6.5
Being satisfied with the profession	Yes	193	37.0
	No	328	63.0
Choosing a different profession if possible	Yes	425	81.6
	No	96	18.4
Thinking of quitting the profession soon	Yes	346	66.4
	No	175	33.6

Table 4. Distribution of Participants' Mean Scores on CF-SS and its Subscales, TS, and PCS and Internal Consistency (n=521).

	Minimum	Maximum	Mean	Std. Deviation	Cronbach α	Cronbach α
Trauma	5.00	50.00	23.66	12.51	0.80[†]	0.89
Occupational burnout	7.00	69.00	35.18	16.77	0.90[†]	0.92
CF-SS total	**13.00**	**129.00**	**64.63**	**30.89**	**0.90[†]**	**0.95**
TS	**7.00**	**49.00**	**30.69**	**12.26**	**0.85[‡]**	**0.94**
PCS total	**26.00**	**107.00**	**67.66**	**14.33**	**0.94[§]**	**0.86**

†: Cronbach alpha of the original scale [17]

‡: Cronbach alpha of the scale adapted to Turkish [8]

§: Cronbach alpha of the scale adapted to Turkish [18]

patients, those who were not satisfied in their profession, those would choose a different profession if they had the chance to do so, and those who thought of quitting the profession were higher and statistically significant (Table 5).

It was concluded that there was a positive, weak, significant correlation between the mean TS score of the nurses and their mean scores on CF-SS trauma, the occupational burnout subscales, and the CF-SS (Table 6; $p<0.005$).

The results of the stepwise multiple linear regression analysis performed to examine the variables associated with PC is presented at Table 7. According to the results of the analysis, 41.2% of the variables of TS, providing care to terminally ill patients, and thinking of quitting the profession soon in the model explain CF.

Table 5. Distribution of TS, PCS, CF-SS, and subscale scores according to occupational characteristics.

		TS	PCS total	Trauma	Occupational burnout	CF-SS total
		X± SD	X± SD	X±SD	X±SD	X± SD
Institution	Primary health institution	3.47±1.71[c]	2.51±.62	4.28±2.52	4.55±2.42[c]	4.49±2.39 [c]
	Secondary health institution	4.69±1.71[a*]	2.64±.56	4.91±2.45	5.31±2.32[a*]	5.22±2.29[a*]
	Tertiary health institution	4.18±1.71 [b]	2.56±.50	4.59±2.55	4.75±2.43[b]	4.74±2.45 [b]
	p value[1]	***p*<0.001**	*p*=0.101	*p*=0.157	***p*=0.015**	***p*=0.037**
Position	Unit nurse	4.44±1.74[b]	2.59±.53[b]	4.86±2.48[b]	5.17±2.36[b]	5.12±2.34[b]
	Head nurse	4.96±1.60[a]	2.87±.48[a*]	5.31±2.63[a]	5.54±2.40[a]	5.51±2.44[a]
	Other	3.84±1.74[c*]	2.52±.59[c]	3.91±2.37[c*]	4.13±2.31[c*]	4.07±2.28[c*]
	p value[1]	***p*=0.001**	***p*=0.002**	***p*=0.002**	***p*<0.001**	***p*<0.001**
Giving care to the terminally ill patient	Yes	4.44±1.77	2.60±.55	4.93±2.50	5.22±2.39	5.17±2.36
	No	4.89±1.78	2.58±.54	3.07±1.75	3.43±1.73	3.33±1.72
	p value[2]	***p*=0.025**	*p*=0.848	***p*<0.001**	***p*<0.001**	***p*<0.001**
Intervening in the deceased patient	Yes	4.42±1.72	2.60±.55	4.80±2.49	5.09±2.37	5.04±2.34
	No	3.85±2.00	2.54±.53	3.70±2.38	3.97±2.44	3.89±2.39
	p value[2]	*p*=0.046	*p*=0.017	***p*=0.013**	***p*=0.008**	***p*=0.006**
Being satisfied with the profession	Yes	3.97±1.74	2.73±.51	3.74±2.07	3.82±2.09	3.83±2.04
	No	4.62±1.71	2.52±.55	5.31±2.55	5.73±2.28	5.64±2.30
	p value[2]	***p*<0.001**	***p*<0.001**	***p*<0.001**	***p*<0.001**	***p*<0.001**
Choosing a different profession if possible	Yes	4.46±1.76	2.58±.55	4.88±2.51	5.24±2.36	5.18±2.35
	No	4.04±1.64	2.63±.55	4.05±2.34	4.04±2.29	4.04±2.28
	p value[2]	***p*=0.035**	*p*=0.536	***p*=0.003**	***p*<0.001**	***p*<0.001**
Thinking of quitting the profession soon	Yes	4.69±1.70	2.57±.57	5.48±2.42	5.84±2.25	5.77±2.24
	No	3.77±1.68	2.65±.49	3.25±1.92	3.40±1.74	3.39±1.76
	p value[2]	***p*<0.001**	*p*=0.150	***p*<0.001**	***p*<0.001**	***p*<0.001**

[1]One-way ANOVA test   [2] Independent samples t-test   **A>B>C**   *Significant Difference-Creating Group

Table 6. Correlation between participants' scores on CF-SS, its subscales, TS, and PCS.

		TS	PCS total	Trauma	Occupational burnout	CF-SS total
TS	**r**	1	0.239**	0.463**	0.462**	0.481**
	p		**<0.001**	**<0.001**	**<0.001**	**<0.001**
PCS	**r**	0.239**	1	0.033	0.020	0.027
	p	**<0.001**		0.454	0.651	0.532
Trauma	**r**	0.463**	0.033	1	0.880**	0.952**
	p	**<0.001**	0.454		**<0.001**	**<0.001**
Occupational burnout	**r**	0.462**	.020	0.880**	1	0.980**
	p	**<0.001**	0.651	**<0.001**		**<0.001**
CF-SS total	**r**	0.481**	0.027	0.952**	0.980**	1
	p	**<0.001**	0.532	**<0.001**	**<0.001**	-

**p<0.001

Table 7. Linear regression analysis results of the dependent variable CF.

	Standardized β coefficient	Std. Error	Beta	t	p
(Constant)	20.412	7.041		2.899	**0.004**
PC Total Score	-0.017	0.078	-0.008	-0.223	0.823
TS Total Score	0.923	0.093	0.367	9.981	**<0.001**
Employment in the COVID-19 unit (No)	1.031	2.934	0.012	0.351	0.725
Giving care to the terminally ill patient (Yes)	-11.673	2.542	-0.183	-4.592	**<0.001**
Choosing a different profession if possible (Yes)	-4.014	3.079	-0.050	-1.303	0.193
Thinking of quitting the profession (Yes)	19.961	2.601	0.305	7.675	**<0.001**

R^2 = 0.412; F (8-512)=44.83; p<0.001; Durbin-Watson=2.007

Discussion

This study is considered important since there is not any study in Türkiye that investigated the effects of TS and PC on CF in nurses according to the region.

What are the levels of CF, TS, and PC of nurses?

When the studies conducted in Türkiye were examined, it was concluded that CF has been frequently evaluated with CF, one of the subscales of the Professional Quality of Life Scale-ProQOL-5 and that CF-SS has also been used in recent years. In this study, the mean CF-SS score was found to be 64.63±30.89 and it can be said that nurses had a moderate level of CF. Similar to this study, CF was found to be at low or moderate levels in previous studies conducted in Türkiye [23,24].

In this study, it was concluded that the mean TS score of the nurses was 30.69±12.26 and it was at a moderate level. Similarly, in a study conducted by Kösedağ (2021) [12], it was found to be 29.44±9.13. Likewise, in other studies conducted in Türkiye, nurses were found to have a moderate level of fear of death [25,26]. In studies conducted after the pandemic, it was determined that level of death fear of nurses was moderate or high [10,27]. According to the pre-pandemic and post-pandemic comparison, the fact that the fear of death increased due to the uncertainty experienced by nurses was an expected result.

In this study, it can be concluded that the mean PCS score of the nurses (67.66±14.33) was at a moderate level. Similar results were obtained in previous studies [28,29]. In a study conducted after the COVID-19 pandemic, it was stated that the PCS score of the nurses was at a moderate level [13,30]. On the other hand, there are studies stating that PC is at low or high levels among nurses [31,32].

How do factors such as occupational characteristics, PC and TS affect CF in nurses?

The mean CF-SS score was found to be higher in those nurses working at the secondary health institution and head nurses. CF is a natural consequence of caring for individuals who are sick or suffering. Other than that, it is also known as the stress of trying to help someone through a traumatic experience and who is important to the person trying to help. Especially during the COVID-19 pandemic, the increase in exposure of the secondary health institution workers to traumatic events, the exposure of service personnel to traumatic events, and the difficulties in managing this process may have increased CF.

The mean CF score was found to be significantly higher in nurses who provided care to terminally ill and deceased patients. Similarly, in the study conducted by Ju Cho and Cho (2021) [23], it was stated that the CF score of the caregivers who provided end-stage care once a week was significantly higher. Yang and Kim (2016) reported that there is a significant correlation between work-related trauma and CF [33]. In particular, one of the factors affecting CF is that nurses are empathetic [34]. It can be said that CF increases due to the empathetic nature of nurses who provide care to terminally ill or deceased patients.

The mean CF-SS score was found to be significantly higher in those who were not satisfied in their profession, those who would choose a different profession if they had the chance to do so, and those who thought of quitting the profession. Likewise, in previous studies, CF was found to be high in those who did not choose the profession willingly [35]. Ju Cho and Cho (2021) [23] stated that those nurses who were not satisfied with the hospice unit had a higher CF score. Sung et al. (2012) [36] stated that there is a correlation between CF and intention to quit. It is known that there are significant changes in work performance, work-related attitudes and behaviors, and the personal health of nurses with CF [37]. On the contrary, burnout and high job stress also increase CF in nurses [36]. As seen in Table 6, the correlation between burnout and CF identified in this study also supports the literature.

In this study, the model established as a result of linear regression was significant whereas it was determined that the mean PCS score was not effective on CF-SS (Table 7). A similar study supports this result [38]. In another study, it was stated that monthly salary and colleague

relations strongly predicted CF in nurses [39]. Bell et al. (2019) stated that a positive work environment predicted whether CF would be present [40]. It can be said that the differences in these results are the result of the varying sample groups of the different studies.

In this study, more than half of the nurses (66.4%) thought of quitting the profession. In the regression model established in the study, 41.2% of CS showed significant results with the thought of quitting the profession. According to the study conducted by Baysal et al. (2022) with the participation of several nations, it was reported that almost one-third of the nurses (28.6%) thought of quitting the profession and that there was a significant correlation between the thought of quitting the profession and CS [41].

Conclusion

As a result of this study, it was determined that the nurses had moderate CF, TSa, and PC scores. Because of this reason, longitudinal studies should be conducted to evaluate CF among nurses, more emphasis should be given to the well-being of nurses, and preventive strategies and experimental studies should be planned.

41.2% of CF is explained by factors such as TS, provided care to terminally ill patients, and thinking of quitting the profession soon. 58.8% of CF is explained by other factors. Because of that phenomenon, it is recommended to provide training regarding the fear of death and care of deceased patients to nurses who provide care to deceased or dying patients, to ensure that nurses work in rotation, if necessary, to create institutional measures to increase PC, to ensure collaboration and empowerment among colleagues, and to take measures to reduce occupational burnout.

Implications for Nursing Practice

Considering that a safe and high-quality working environment affects the quality of care provided by nurses to patients, nurses should be supported against the risk of CF, and strategies to cope with this situation after the COVID-19 pandemic should be provided. Studies that include many nurses from different hospitals in Türkiye, that investigate CF and the affecting

conditions, that are quantitative and qualitative to investigate the current situation and assist in taking the necessary measures will reduce CF, while it will increase the PC of nurses and the quality of care. Furthermore, this study will contribute to the investigation of other factors affecting CF.

References

1. Pehlivan T. Güner P. Compassion fatigue: The known, unknown. J Psychiatr Nurs. 2017:9;129-34. doi: 10.14744/phd.2017.25582.

2. Chu LC. The influence of compassion fatigue on job performance and organizational citizenship behaviors: The moderating effect of person-job fit. J Nurs Scholarsh. 2021;53:500-10. doi: 10.1111/ jnu.12644.

3. Jakimowicz S, Perry L, Lewis J. Compassion satisfaction and fatigue: A cross-sectional survey of Australian intensive care nurses. Aust Crit Care. 2018;31(6):396-405. doi: 10.1016/j.aucc.2017.10.003.

4. Bülbüloğlu S, Çınar F. The effect of compassion fatigue on care satisfaction in surgical nurses [in Turkish]. J Anatolia Nurs Heal Sci. 2021;24(2):255-63. doi: 10.17049/ataunihem.866886.

5. Dığın F, Kızılcık ÖZ, Düzgün ŞA. Determining the relationship between compassion fatigue of surgical nurses and care behaviors [in Turkish]. OTJHS. 2022;7(2):272-7. doi: 10.26453/otjhs.1055157.

6. Dikmen Y, Aydın Y, Tabakoğlu P. Compassion fatigue: A study of critical care nurses in Turkey. J Hum Sci. 2016;13(2):2879. doi: 10.14687/jhs.v13i2.3752.

7. Nizam F, Gündüz Ö. The use of fear elements in the news of the COVID-19 outbreak: Fear appeal or persuasion? Res Rev Soc Hum Adm Sci. 2021:167-185.

8. Çiftçioğlu Z, Harmancı Seren AK. The validity and reliability study of the Turkish form of the Thanatophobia Scale among nurses. [Master's thesis]. İstanbul Okan University Health Science Institute. 2019.

9. Fernández-Martínez E, Martín-Pérez I, Liébana-Presa C, Martínez-Fernández McC, López-Alonso AI. Fear of death and its relationship to resilience in nursing students: A longitudinal study. Nurse Educ Pract. 2021;55:103175. doi: 10.1016/j.nepr.2021.103175.

10. Aydın Karabağ A, Fidan H. The effect of nurses' death anxiety on life satisfaction during the COVID-19 pandemic in Turkey. J Relig Health. 2022;61:811-26. doi: 10.1007/s10943-021-01357-9.

11. Ifdil I, Zola N, Putri YE, Zatrahadi MF, Darmawati D, Ardi Z. Thanatophobia and its treatment using neurolinguistic programming. Addict Disord Their Treat. 2019;19(2):84-7. doi: 10.1097/ADT.0000000000000186.

12. Özyalçın Özcan DÖ, Çevik B. Opinions of cancer patients, their relatives, and nurses on good death. Omega-J Death Dying. 2023;86(4);1473-92. doi: 10.1177/00302228211053473.

13. Kösedağ D. Investigation of Thanatophobia of Intensive Care Nurses. [Master's thesis], Biruni University Graduate Education Institute, İstanbul. 2021.

14. Duran S, Celik I, Ertugrul B, Ok S, Albayrak S. Factors affecting nurses' professional commitment during the COVID-19 pandemic: A cross-sectional study. J Nurs Manag. 2021;29(7):1906-15. doi: 10.1111/jonm.13327.

15. Bueno-Notivol J, Gracia-García P, Olaya B, Lasheras I, López-Antón R, Santabárbara J. Prevalence of depression during the COVID-19 outbreak: A meta-analysis of community-based studies. Int J Clin Health Psychol. 2021;21(1):100196. doi: 10.1016/j.ijchp.2020.07.007.

16. TUIK. Turkish Statistical Institute; Health Statistics: https://biruni.tuik.gov.tr/bolgeselistatistik/ sorguGiris.do. 2021. (Accedded: 20.05.2021)

17. Adams RE, Boscarino JA, Figley CR. Compassion fatigue and psychological distress among social workers: A validation study. Am J Orthopsychiatry. 2006;76(1):103-8. doi:10.1037/00029432.76.1.103.

18. Cetinkaya A, Ozmen DBTA. Validity and reliability study of the nursing professional commitment scale. Dokuz Eylul Univ Fac Nurs Electron J. 2015;8:54-60.

19. Yıldırım S, Cavcav F. The compassion Fatigue-Short Scale for healthcare professionals: A Turkish study of validity and reliability. Perspect Psychiatr Care. 2021;57(3):1459-65. doi: 10.1111/ppc. 12712.

20. Merrill J, Lorimor R, Thornby J, Woods A. Caring for terminally ill persons: Comparative analysis of attitudes (thanatophobia) of practicing physicians, student nurses, and medical students. Psychol Rep. 1998;83(1):123-8. doi: 10.2466/pr0.1998.83.1.123.

21. Lu KY, Chiou SL, Chang YY. A study of the professional commitment changes from nursing students to registered nurses. Kaohsiung J Med Sci. 2000;16(1):39-46.

22. Tabachnick BG, Fidell LS, Ullman JB. Using multivariate statistics (Vol. 6, 497-516). Boston, MA: Pearson. 2013.

23. Cho EJ, Cho HH. Factors influencing compassion fatigue among hospice and palliative care unit nurses. Korean J Hosp Palliat Care. 2021;4(1):13-25. doi: 10.14475/jhpc.2021.24.1.13.

24. Okgün Alcan A, Yıldız K. Intensive care nursing during the pandemia process: The effect of perceived stress on compassion fatigue [in Turkish]. Forbes J Med. 2021;2(3):175-81. doi: 10.4274/forbes.galenos.2021.53825.

25. Üstükuş A, Eskimez Z. The effect of death anxiety in nurses on their approach to dying patients: A cross-sectional study. Perspect Psychiatr Care. 2021;57(4):1929-36. doi: 10.1111/ppc.12768.

26. Yorulmaz D, Kurt Sezer H. Investigation of death anxiety and affecting factors of nurses and doctors' working in a state hospital: Artvin example [in Turkish]. J Tradit Complem Med. 2020;3(2):171-7. doi: 10.5336/jtracom.2020-73402.

27. Özkan F, Ödek Ö, Turhan İ. Laboring health: Death anxiety and depression levels of nurses working in Covid-19 Intensive care. BSJ Health Sci. 2022;5(2):212-8. doi: 10.19127/bshealthscience.1003294.

28. Dönmez S, Karakuş E. Investigation of professional commitment of the newly graduated nurses [in Turkish]. Kocaeli Med J. 2019;8(1):146-52. doi: 10.5505/ktd.2019.93695.

29. Uysal A, Karakurt P. The effect of nurses' profession commitment situation to tendency of making medical error [in Turkish]. TJFMPC. 2020;14(3):349-61. doi: 10.21763/tjfmpc.646889.

30. Shayestehazar M, Heydarian S, Gharib M, Ghaffari S, Fateh S, Ghadiri A, et al. Influential factors in job retention and organizational commitment among the nurses working in COVID-19 outbreak. J Nurs Midwifery Sci. 2022;9:58-65. doi: 10.4103/JNMS.JNMS.

31. Derin N, Şimşek Ilkım N, Yayan H. Expression of professional adherence by professional prestige in nurses [in Turkish]. J Hacettepe Univ Fac Nurs. 2017;4(3):24-37.

32. Tuna R, Sahin S. The effect of attitude towards work on professional commitment. Nurs Ethics. 2021;28(7-8):1359-74. doi: 10.1177/0969733021999770.

33. Yang YH, Kim JK. Factors influencing turnover intention in clinical nurses: Compassion fatigue, coping, social support, and job satisfaction. J Korean Acad Nurs Adm. 2016;22(5):562. doi: 10.11111/jkana.2016.22.5.562.

34. Hunsaker S, Chen, HC, Maughan D, Heaston S. Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses. J Nurs Scholarship. 2015;47(2):186-94. doi: 10.1111/jnu.12122.

35. Tanrıkulu G, Ceylan B. Level of compassion and compassion fatigue in nurses working in pediatric clinics. J Heal Sci. 2021;30:31-6. doi: 10.34108/eujhs.727445.

36. Sung K, Seo Y, Kim JH. Relationships between compassion fatigue, burnout, and turnover intention in Korean hospital nurses. J Korean Acad Nurs. 2012;42(7):1087. doi: 10.4040/jkan.2012.42.7.1087.

37. Konal E, Ardahan M. Compassion fatigue and nursing. Health and Society. 2018;28(1):3-8.

38. Kaya Ş, Kaya DŞ, Mehmet N, Şafak K. Professional commitment of nurses professional commitment, satisfaction and quality of life of nurses during the COVID-19 pandemic in Konya, Turkey. Ethiop J Health Sci. 2022;32(2):393. doi: 10.4314/ejhs.v329i2.20.

39. Balinbin CBV, Balatbat KTR, Balayan ANB, Balcueva MIC, Balicat MGB, Balidoy TAS, et al. Occupational determinants of compassion satisfaction and compassion fatigue among Filipino registered nurses. J Clin Nurs. 2020;29(5-6)9:955-63. doi: 10.1111/jocn.15163.

40. Bell S, Hopkin G, Forrester A. Exposure to traumatic events and the experience of burnout, compassion fatigue and compassion satisfaction among prison mental health staff: An exploratory survey. Issues Ment Health Nurs. 2019;40(4):304-9. doi: 10.1080/01612840.2018.1534911.

41. Baysal E, Selçuk Karakus A, Aktan GG, Andrade EF, Notarnicola I, Stievano A, et al. An examination of the fear of COVID-19 and professional quality of life among nurses: A multicultural study. J Nurs Manag. 2022;30:849-63. doi: 10.1111/jonm.13550.