






ORIGINAL ARTICLE / ORJİNAL MAKALE

## The Relationship Between Compassion Fatigue on Caring Behaviors In Nurses

### Hemşirelerde Şefkat Yorgunluğu ile Bakım Davranışları Arasındaki İlişki

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#### Abstract

**Background:** Compassion fatigue is defined as the loss of empathy, affective withdrawal, emotional shutdown, helplessness and anger that occurs after an individual applies intense physical and emotional effort to a suffering person. In addition, compassion fatigue is also used to describe nurses' burnout and loss of ability to provide care.

**Objectives:** The aim of this study is to determine the relationship between compassion fatigue experienced by nurses and their caring behaviors.

**Methods:** The population of this descriptive study consisted of 42,410 nurses working in all hospitals located in the city center of İstanbul. Based on power analysis, the required sample size was determined as 381. However, the study was ultimately conducted with 403 nurses who voluntarily participated through the snowball sampling method. Data were collected with the Introductory Information Form, the Compassion Fatigue Scale, and the Caring Behaviors Scale-24. Descriptive statistics, normality tests, independent samples t-test, ANOVA, post hoc analyses, and Pearson correlation tests were used in the analysis of the data.

**Results:** The mean score on the Compassion Fatigue Scale was  $1.91 \pm .31$ , and the mean score on the Caring Behaviors Scale was  $5.46 \pm .55$  for nurses. Significant and weak correlations were found between compassion fatigue and the sub-dimensions of the caring behaviors scales.

**Conclusion:** It was found that the nurses' perception of compassion fatigue was at a moderate level, and their perception of caring behaviors was at a high level. Additionally, a relationship was found between compassion fatigue and caring behaviors.

**Keywords:** Compassion Fatigue, Caring Behaviors, Nursing

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## Öz

**Giriş:** Şefkat yorgunluğu, bireyin acı çeken bir kişiye yoğun fiziksel ve duygusal güç uygulaması sonrasında ortaya çıkan empati kaybı, duygusal geri çekilme, duygusal kapanma, çaresizlik ve öfke olarak tanımlanmaktadır. Ayrıca şefkat yorgunluğu hemşirelerin tükenmişliğini ve bakım verme becerisindeki kaybı tanımlamak için de kullanılmaktadır.

**Amaç:** Bu çalışmanın amacı hemşirelerin yaşadıkları şefkat yorgunluğunun bakım davranışları ile ilişkisini belirlemektir.

**Yöntem:** Tanımlayıcı tipte olan bu araştırmanın evrenini İstanbul şehir merkezindeki tüm hastanelerde görev yapan 42.410 hemşire, örneklemini ise güç analizi ile belirlenen 381 hemşire oluşturmuş olup, çalışma kartopu yöntemiyle gönüllü olarak katılan 403 hemşire ile gerçekleştirilmiştir. Veriler Tanıtıcı Bilgi Formu, Şefkat Yorgunluğu Ölçeği ve Bakım Davranışları Ölçeği-24 ile toplanmıştır. Verilerin analizinde tanımlayıcı istatistikler, normallik testi, bağımsız gruplarda t-testi, ANOVA, post hoc analizler ve Pearson korelasyon testleri kullanılmıştır.

**Bulgular:** Hemşirelerin Şefkat Yorgunluğu Ölçeği puan ortalamasının  $1.91 \pm .31$ , Bakım Davranışları Ölçeği puan ortalamasının ise  $5.46 \pm .55$  olduğu belirlendi. Şefkat yorgunluğu ile bakım davranışları ölçeklerinin alt boyutları arasında anlamlı ve zayıf ilişkiler bulunmuştur.

**Sonuç:** Hemşirelerin şefkat yorgunluğu algılarının orta düzeyde, bakım davranışları algılarının ise yüksek düzeyde olduğu belirlendi. Ayrıca şefkat yorgunluğu ile bakım davranışlarını arasında ilişki olduğu tespit edilmiştir.

**Anahtar Kelimeler:** Şefkat Yorgunluğu, Bakım Davranışları, Hemşirelik

## INTRODUCTION

The concept of compassion is defined as “kindness” in the Turkish Language Association dictionary ([www.sozluk.gov.tr](http://www.sozluk.gov.tr)). In another definition, it is expressed as an intense desire to approach the other person with sympathy and to reduce the pain experienced (Steffen & Masters, 2005). Compassion is also defined as a quality that promotes effective communication between caregiver and recipient and that provides a positive healing environment (Murphy, 2014).

Compassion Fatigue (CF) is defined as the loss of empathy, affective withdrawal, emotional shutdown, helplessness, and anger that occurs after an individual applies intense physical and emotional effort to a suffering person (Uslu & Korkmaz, 2017). In addition, it is also defined

as “emotional distress that may occur in professionals working in caring professions” in the MeSH medical terms index (MeSH, 2016). CF was first used by Joinson (1992) to describe the burnout of nurses and the loss of the ability to provide care (Maslach & Leiter, 2016).

Compassion Fatigue is seen as an occupational hazard by healthcare professionals working with patients (Uslu & Buldukoğlu, 2017). Nurses, who spend 24 hours with patients and play the role of primary caregivers, are one of the most critical groups at risk of experiencing CF. Especially nurses working in areas such as intensive care, emergency department, dialysis, psychiatry, and oncology are at higher risk of experiencing CF (Uslu & Korkmaz, 2017; 2020 Xie W. et al., 2021.).

The reasons for nurses experiencing CF are di-

vided into three parts: patient-related factors, work-related factors, and individual factors. Patient-related factors are associated with difficult patients, exposure to suffering patients, witnessing death, patient satisfaction, and trying to meet patient expectations. Work-related factors are workload, lack of resources and staff, receiving insufficient positive feedback, role ambiguities, interpersonal relationships, and procedural changes. Beginning to be emotionally involved in patient care beyond professional boundaries, inexperience, and lack of knowledge are among the individual reasons that constitute the risk of occurrence of CF (Özdemir & Kutlu, 2022).

Based on compassion fatigue, nurses may experience consequences that affect the work and relationships, such as anger outbursts, being late for work, the desire to leave work, deterioration in interpersonal relations distancing from the healthcare team, as well as consequences that directly affect the person such as fatigue, lack of energy, headache, anxiety, palpitations, restlessness, chest pain, anxiety, memory problems, muscle tension, sleep, and digestive disorders. In addition, the following symptoms can be seen: apathy, distancing, indifference towards patients, ignoring the patient's pain, spending less time with patients, and unresponsiveness (Boz & Kesbiç, 2020; Özdemir & Kutlu, 2022).

The nurse's empathic approach and compassion during care positively affect the quality of care (Uslu & Korkmaz, 2017). It is known that the symptoms seen in nurses experiencing CF affect the caring function, which is the most important feature of the nursing profession (Uslu & Buldukoğlu, 2017). Nursing care is very important in protecting and improving the

health of the individual, family, and society. It covers the whole set of practices that support the nurse in determining and implementing physical, psychological, and social caring needs of the individual facing current or possible health problems. It covers the whole set of practices that support the nurse in determining and implementing the physical, psychological, and social care needs of individuals facing current or potential health problems. These practices also aim to develop the individual's ability to meet their own needs within the framework of ethical values (Erenoğlu et al., 2019). Therefore, nurses have the duty to provide compassionate care, and care without compassion is not considered humane (Uslu & Korkmaz, 2017; Boz & Kesbiç, 2020). When the literature on CF is evaluated, there are studies on its effects on health workers, reasons, affecting variables, coping methods, and effects on quality of work life (Hiçdurmaz & İnci, 2015; Kelly et al., 2015; Polat & Erdem, 2017; Chen et al., 2018). However, no study was found to determine the relationship between compassion fatigue and caring behaviors (CB) in nurses. Therefore, it is thought that this study will contribute to the literature and the planning of future research. This study was conducted to determine the relationship between compassion fatigue experienced by nurses and their caring behaviours.

### *Research Questions*

1. What are the levels of compassion fatigue and caring behaviors among nurses?
2. Is there a significant relationship between nurses' levels of compassion fatigue and their levels of caring behaviors?

## METHOD

### *Type and Design of the Study*

The aim of this descriptive and correlational study was to examine the relationship between compassion fatigue experienced by nurses and their caring behaviors.

### *Population and Sample of the Study*

The population of the study consisted of 42.410 nurses, all of whom work in the city center of Istanbul, according to the 2021 Health Statistics Yearbook data. In the calculation of the sample, based on power analysis, it was planned to reach a minimum of 381 nurses, using a 95% confidence interval and a 5% margin of error (Yazıcı & Erdoğan, 2004). The study sample consisted of 403 nurses who voluntarily participated in the research by the snowball method and completed the questionnaire completely. The study was conducted only with nurses working in hospitals in the city center of Istanbul. Data collection tools were converted into online questionnaires and shared with the participants, and data were collected online.

### *Data Collection Tools*

The data of the study were collected between January 1 and March 31, 2023, using the Introductory Information Form, the Compassion Fatigue Scale (CFS), and the Caring Behaviors Scale-24 (CBS). Data collection tools were converted into an online questionnaire and shared with the participants, and data were collected online.

**Introductory Information Form:** This form, in which the socio-demographic status of the participants was questioned, consisted of 10 questions including gender, marital status, age, educational status, income status, institution and

unit of employment, duration of employment in the profession and institution, and reasons for choosing the profession.

**Compassion Fatigue Scale:** In 2019, Uçar Özdemir (Uçar, 2022) tested the validity and reliability of the Turkish Version of the scale that was developed by Dennis Portnoy (Portnoy, 1996) in 1996. The scale consists of 40 items and four sub-dimensions, including “Self-Worth/ Value Consciousness (VC),” “Valuing Others (VO),” “Power Perception (PP)” and “Self-Esteem.” The 3-point Likert-type scale has the options of “Very True-1”, “Somewhat True-2”, and “Rarely true-3”. The lowest score that can be obtained from the scale is 40, and the highest score is 120 (Er, 2023). In the validity and reliability study of the Turkish Version of the scale, Cronbach’s Alpha internal consistency coefficient was found to be .87, .71, .66, .37, respectively, in sub-dimensions of VC, VO, PP, and Self-Esteem, and the scale total was .88. In this study, Cronbach’s alpha was found to be .88, .75, .73, and .73, respectively, in sub-dimensions of VC, VO, PP, and Self-Esteem, and the scale total was 0.89.

**Caring Behaviors Scale-24:** It was developed by Wolf et al. (Wolf et al., 1994), revised by Wu et al. (Wu et al., 2006), and the validity and reliability of the Turkish version were evaluated by Kurşun and Kanan (Kurşun & Kanan, 2010). It consists of 24 items and four sub-dimensions: “Assurance,” “Knowledge and Skill (KS),” “Respectfulness (R),” and “Commitment.” The 6-point Likert-type scale has the options of “Never-1”, “Almost Never-2”, “Sometimes-3”, “Usually-4”, “Most of the time-5” and “Always-6”. The total scale score is formed by adding the items of the total scale and dividing by 24, and the sub-dimension scores are formed

by adding the items of the sub-dimensions and dividing by the number of items in the same way. All scores are scored between 1-6. When the average score approaches 6, it indicates that care behaviors are increasing, and when it approaches 1, it indicates that care behaviors are decreasing. In the validity and reliability study of the Turkish Version of the scale, Cronbach's Alpha internal consistency coefficient was found to be .94, .81, .90, and .85, respectively, in sub-dimensions of KS, R, and commitment, and the scale total was .96. In this study, Cronbach's alpha was found to be .90, .85, .87, and .85, respectively, in sub-dimensions of KS, R, and commitment, and the scale total was .96.

#### Data Analysis

The SPSS 22.0 package program was used for statistical analysis of the data. The distribution of the data was determined by Skewness and Kurtosis tests. It was considered that the

Skewness value of 1.253 and the Kurtosis value of 1.498 were between -1.5 and +1.5, and they were normally distributed (Tabachnick & Fidell, 2013). Descriptive statistical methods were used to analyze the data. For intergroup comparisons, advanced analytical methods such as t-tests, one-way analysis of variance (ANOVA), and Tukey HSD were used in independent groups. The significance level was taken as .05. In addition, Pearson correlation tests were also used.

#### Ethical Aspects of the Study

Ethical approval for research was obtained from a university (protocol number 07 dated 18.01.2023), and voluntary verbal consent was obtained from all participants after explaining the purpose of the research and the principles of volunteering, in accordance with the Declaration of Helsinki. Scale usage permissions were obtained.

**Table 1.** Distribution of Personal and Professional Characteristics of Nurses (n:403)

		n	%				
Gender	Female	343	85.1	Working Unit	Internal Clinics	53	13.2
	Male	60	14.9		Surgical Clinics	66	16.4
Marital Status	Married	237	58.8		Specialized Units *	143	35.5
	Single	166	41.2		Polyclinics	38	9.4
Age					Other	103	25.5
	24 and ↓	31	7.7	Years of Professional Work	0-12 months	35	8.6
	25-30	70	17.4		1-5 years	74	18.4
	31-36	82	20.3		6-10 years	78	19.4
	37-41	57	14.1		11-15 years	63	15.6
	42 and ↑	163	40.5		16 years and ↑	153	38.0
Educational status	High school	59	14.7	Year of Employment in the Institution	0-12 months	72	17.9
	Associate degree	73	18.1		1-5 years	150	37.2
	Bachelor's degree	200	49.6		6-10 years	73	18.1
	Postgraduate	71	17.6		11-15 years	50	12.4
Income status	Income less than expenses	159	39.4		16 years and ↑	58	14.4
	Income equals expense	211	52.4	Reason for Choosing the Profession	Voluntarily	211	52.4
	Income more than expenses	33	8.2		Family Referral	124	30.8
Type of Organisation	Public	173	42.9		Accidentally	34	8.4
	Private	176	43.7		Other	34	8.4
	University	54	13.4				

n: Number, %: Percent, \*Specialized units: Operating Room, Dialysis, Emergency, Intensive Care, etc.



It was found that most of the nurses participating in the study were female (85.1%), married (58.8%), 42 years and older (40.4%), had undergraduate degrees (49.6%), and their income was equal to expenditure (52.4%). It was determined that nurses

mostly worked in private hospitals (43.7%), specialized units (35.5%), had 16 years or more of professional working years (38.0%), had worked in an institution for 1-5 years (37.2%), and chose the profession voluntarily (52.4%) (Table 1).

**Table 2.** Mean Scores of Compassion Fatigue Scale and Caring Behaviors Scale

		Min.	Max.	Mean $\pm$ SD	Mean $\pm$ SD
CFS	Value Consciousness	1	3	2.09 $\pm$ .40	1.91 $\pm$ .31 (Total Mean $\pm$ SD: 76.54 $\pm$ 12.36 Min:42, Max:111)
	Valuing Others	1	3	1.70 $\pm$ .32	
	Power Perception	1	3	1.66 $\pm$ .41	
	Self-Esteem	1	3	2.07 $\pm$ .49	
CBS	Assurance	3	6	5.46 $\pm$ .59	5.46 $\pm$ .55
	Knowledge and Skill	3	6	5.64 $\pm$ .53	
	Respectfulness	3	6	5.41 $\pm$ .64	
	Commitment	2	6	5.32 $\pm$ .67	

CFS:Compassion Fatigue Scale, CBS:Caring Behaviors Scale, Mean $\pm$ SD:Mean $\pm$  Standard deviation, Min.:Minimum, Max.:Maximum

It was determined that the mean score of CFS for the nurses was 1.91 $\pm$ .31; the highest mean score (2.09 $\pm$ .40) was in the sub-dimension of VC, and the lowest mean score (1.66 $\pm$ .41) was in the sub-dimension of PP. Mean total score of the compassion fatigue scale was 76.54 $\pm$ 12.36 (Min:42, Max:111), and it was found to be at a moderate level. It was found that the mean score of CBS was 5.46 $\pm$ .55; the highest mean score (5.64 $\pm$ .53) was in the sub-dimension of KS, and the lowest mean score was (5.32 $\pm$ .67) in the sub-dimension of Commitment (Table 2). Results of the Comparison of Personal and Professional Characteristics of Nurses and Mean Scores of CFS

When the personal and professional characteristics of the nurses and the mean score of CFS were compared, significant differences were found in the variables of gender, marital status, age, education level, working year, and the reason for choosing the profession (Table 3). The scores of women were found to be higher than men in CFS

sub-dimensions of VC, VO, and Self-Esteem ( $p<.05$ ). No significant difference was found between the other sub-dimensions of CFS and gender ( $p>.05$ ). According to marital status, the scores of married people were higher than singles in the sub-dimension of VO ( $p<.05$ ). No significant difference was found between other sub-dimensions and marital status ( $p>.05$ ).

Significance was found in the sub-dimensions of VC and VO according to the ages of the nurses; it was found that the score of the group aged 42 and above was higher than the average of the group aged 37-41 in advanced analysis ( $p<.05$ ). It was found that the score of the group aged 42 and over was higher than the average of the groups aged 37-41 and 25-30 in the sub-dimensions of VO ( $p<.05$ ). No significant difference was found between other sub-dimensions and age ( $p>.05$ ). It was found that there was a difference between educational status and the sub-dimensions of VO and PP, and undergraduate and bachelor's

degree graduates valued others more than high school graduates in the analysis. In addition, it was determined that associate, undergraduate, and bachelor's degree graduates had more PP than high school graduates ( $p < .05$ ). No significance was found between the characteristics of the institution of employment, unit of employment, and years of working in the institution, and CFS for the nurses who participated in the study ( $p > .05$ ). It was found that there was significance between years of working in the profession and VC and VO, nurses with 16 or more years of experience assumed more VO than nurses with 6-10 years of experience, and nurses with 16 or more years of experience valued

others more than nurses with 1-5 years and 6-10 years of experience in the advanced analysis ( $p < .05$ ). No significance was found between the other sub-dimensions of CFS and the years of working in the profession ( $p > .05$ ). Significance was found between the reason for choosing the profession and VO, and the mean of those who chose the other option was higher than those who chose the option of voluntarily and family referral in the advanced analysis ( $p > .05$ ). No significance was found between the other sub-dimensions of CFS and the reason for choosing the profession ( $p > .05$ ).

**Table3.** Comparison of Compassion Fatigue Scale by Personal and Professional Characteristics of Nurses (n:403)

	Characteristics	n	Value Consciousness Mean $\pm$ SD	Valuing Others Mean $\pm$ SD	Power Perception Mean $\pm$ SD	Self-Esteem Mean $\pm$ SD
Gender	Female	343	2.13 $\pm$ .39	1.72 $\pm$ .32	1.67 $\pm$ .42	2.11 $\pm$ .49
	Male	60	1.89 $\pm$ .36	1.56 $\pm$ .28	1.58 $\pm$ .32	1.86 $\pm$ .46
			t=4.563 p=.000	t=3.872 p=.000	t=1.588 p=.113	t=3.824 p=.000
Marital Status	Married	237	2.09 $\pm$ .39	1.73 $\pm$ .32	1.66 $\pm$ .41	2.09 $\pm$ .48
	Single	166	2.09 $\pm$ .41	1.65 $\pm$ .32	1.65 $\pm$ .40	2.04 $\pm$ .50
			t=.133 p=.894	t=2.385 p=.018	t=.377 p=.706	t=.986 p=.325
Age	<sup>a</sup> 24 and $\downarrow$ years	31	2.21 $\pm$ .48	1.70 $\pm$ .31	1.77 $\pm$ .46	2.17 $\pm$ .47
	<sup>b</sup> 25-30 years	70	2.03 $\pm$ .35	1.61 $\pm$ .32	1.58 $\pm$ .34	2.05 $\pm$ .49
	<sup>c</sup> 31-36 years	82	1.62 $\pm$ .29	1.62 $\pm$ .29	1.60 $\pm$ .40	1.99 $\pm$ .50
	<sup>c</sup> 37-41 years	57	2.00 $\pm$ .37	1.72 $\pm$ .30	1.66 $\pm$ .45	1.98 $\pm$ .43
	<sup>d</sup> 42 and $\uparrow$ years	163	2.09 $\pm$ .40	1.76 $\pm$ .32	1.70 $\pm$ .41	2.13 $\pm$ .50
			F=3.124 p=.015 d>c	F=4.256 p=.002 d>c,b	F=2.013 p=.092	F=2.039 p=.088
Educational Status	<sup>a</sup> High school	59	2.04 $\pm$ .30	1.56 $\pm$ .27	1.50 $\pm$ .32	1.99 $\pm$ .42
	Associate Degree	73	2.14 $\pm$ .42	1.63 $\pm$ .34	1.72 $\pm$ .42	2.13 $\pm$ .49
	<sup>c</sup> Bachelor's Degree	200	2.08 $\pm$ .40	1.74 $\pm$ .31	1.65 $\pm$ .40	2.06 $\pm$ .49
	Postgraduate	71	2.11 $\pm$ .42	1.75 $\pm$ .30	1.74 $\pm$ 1.46	2.11 $\pm$ .55
			F=.841 p=.472	F=7.035 p=.000 c,d>a	F=4.850 p=.003 b,c,d>a	F=1.091 p=.353
Income Status	Income less than expenses	159	2.07 $\pm$ .39	1.67 $\pm$ .31	1.62 $\pm$ .42	2.05 $\pm$ .49
	Income equals expense	211	2.13 $\pm$ .39	1.73 $\pm$ .33	1.70 $\pm$ .41	2.10 $\pm$ .50
	Income more than expenses	33	1.97 $\pm$ .44	1.61 $\pm$ .29	1.61 $\pm$ .33	2.02 $\pm$ .47
			F=2.680 p=.070	F=3.268 p=.059	F=1.871 p=.155	F=.630 p=.533
Type of Organisation	Public	173	2.04 $\pm$ .42	1.73 $\pm$ .31	1.66 $\pm$ .42	2.03 $\pm$ .51
	Private	176	2.14 $\pm$ .38	1.66 $\pm$ .32	1.65 $\pm$ .41	2.10 $\pm$ .47
	University	54	2.11 $\pm$ .33	1.71 $\pm$ .33	1.68 $\pm$ .38	2.11 $\pm$ .49
			F=2.841 p=.060	F=2.452 p=.087	F=.091 p=.913	F=1.038 p=.355

**Table3.** Comparison of Compassion Fatigue Scale by Personal and Professional Characteristics of Nurses (n:403)

Working Unit	<sup>a</sup> Internal Clinics	53	1.98±.42	1.69±.38	1.64±.38	1.99±.56
	<sup>b</sup> Surgical Clinics	66	2.11±.37	1.72±.28	1.63±.40	2.06±.43
	<sup>c</sup> Specialized Units	143	2.07±.39	1.66±.32	1.61±.39	2.03±.51
	<sup>d</sup> Polyclinics	38	2.07±.43	1.66±.32	1.68±.41	2.13±.39
	<sup>e</sup> Other	103	2.17±.39	1.75±.30	1.75±.44	2.15±.49
			F=2.123 p=.077	F=1.558 p=.185	F=2.114 p=.078	F=1.420 p=.226
Working Unit	<sup>a</sup> Internal Clinics	53	1.98±.42	1.69±.38	1.64±.38	1.99±.56
	<sup>b</sup> Surgical Clinics	66	2.11±.37	1.72±.28	1.63±.40	2.06±.43
	<sup>c</sup> Specialized Units	143	2.07±.39	1.66±.32	1.61±.39	2.03±.51
	<sup>d</sup> Polyclinics	38	2.07±.43	1.66±.32	1.68±.41	2.13±.39
	<sup>e</sup> Other	103	2.17±.39	1.75±.30	1.75±.44	2.15±.49
			F=2.123 p=.077	F=1.558 p=.185	F=2.114 p=.078	F=1.420 p=.226
Years of Professional Work	<sup>a</sup> 0-12 months	35	2.15±.48	1.70±.29	1.75±.46	2.15±.47
	<sup>b</sup> 1-5 years	74	2.05±.35	1.61±.32	1.57±.33	2.06±.51
	<sup>c</sup> 6-10 years	78	1.99±.38	1.64±.30	1.61±.40	1.97±.48
	<sup>d</sup> 11-15 years	63	2.09±.42	1.71±.31	1.65±.46	2.03±.45
	<sup>e</sup> 16 years and ↑	153	2.15±.39	1.76±.32	1.70±.40	2.13±.50
			F=2.799 p=.026 e>c	F=3.659 p=.006 e>b,c	F=2.044 p=.088	F=1.749 p=.138
Year of Employment in the Institution	<sup>a</sup> 0-12 months	72	2.15±.45	1.67±.28	1.72±.46	2.14±.50
	<sup>b</sup> 1-5 years	150	2.07±.37	1.66±.33	1.59±.38	2.05±.52
	<sup>c</sup> 6-10 years	73	2.03±.39	1.71±.33	1.72±.41	2.06±.42
	<sup>d</sup> 11-15 years	50	2.12±.37	1.72±.30	1.71±.38	2.08±.42
	<sup>e</sup> 16 years and ↑	58	2.11±.43	1.79±.30	1.64±.42	2.03±.53
			F=.987 p=.414	F=2.182 p=.070	F=2.032 p=.089	F=.535 p=.710
Reason for Choosing the Profession	<sup>a</sup> Voluntarily	211	2.13±.38	1.66±.33	1.64±.40	2.08±.46
	<sup>b</sup> Family Referral	124	2.02±.42	1.69±.27	1.65±.40	2.05±.54
	<sup>c</sup> Accidentally	34	2.09±.38	1.76±.35	1.72±.40	2.02±.43
	Other	34	2.09±.41	1.86±.33	1.76±.48	2.16±.54
			F=2.058	F=4.390	F=1.173	F=.551

t: T-test in independent groups, Mean.±SD:Mean± Standard deviation, F:One Way ANOVA, p<.05

Results of the Comparison of Personal and Professional Characteristics of Nurses and Mean Scores of CBS

As seen in Table 3, when the personal and professional characteristics of the nurses were compared with CBS, significant differences were found between the characteristics of gender, marital status, education level, income status, institution and unit of employment, and reason for choosing the profession ( $p < .05$ ). No significant differences were found between the characteristics of age, years of working in the profession, and years of working in the institution ( $p > .05$ ). A significant difference was found between VC and gender characteristics of nurses ( $p < .05$ ). Female nurses were found to have more knowledge and skills than male nurses. It was found that

there was a significant difference between marital status and CBS, and single nurses showed more assurance, respectfulness, and commitment than married nurses ( $p < .05$ ).

It was found that there was a statistically significant difference between the educational levels of the nurses and all sub-dimensions of CBS; those with high school and associate degree education showed more caring behaviors than those with undergraduate and graduate education ( $p < .05$ ) in the advanced analysis. It was found that there was a significant difference between the income status of the nurses and all sub-dimensions of CBS; those with less income showed more caring behaviors than the group with income equal to expenses and income more than expenses ( $p < .05$ ) in the advanced analysis.



It was determined that there was a significant difference between the institution of employment and CBS; those working in private hospitals showed more CBS than those working in public hospitals ( $p < .05$ ) in the advanced analysis. There was a significant difference between CBS and the unit of employment ( $p > .05$ ). It was determined that those working in internal clinics showed

#### *Results of Correlation Between CFS and CBS*

more VC and R behaviors than those working in surgical clinics. Statistical significance was found between the characteristics of the nurses' choice of profession and CBS; it was determined that those who chose the nursing profession voluntarily had more assurance, respectfulness, and commitment behaviors than those who chose the profession with family referral in the advanced analysis.

**Table 4.** Correlation Between Compassion Fatigue and Caring Behaviors

Scale	Sub-Dimension	1	2	3	4	5	6	7	8
CFS	1. Value Consciousness	1							
	2. Valuing Others	,233**	1						
	3. Power Perception	,618**	,372**	1					
	4. Self-Esteem	,526**	,118*	,374**	1				
CBS	5. Assurance	,069	-,210**	-,134**	,072	1			
	6. Knowledge and Skill	,173**	-,119*	-,048	,132**	,679**	1		
	7. Respectfulness	,070	-,241**	-,180**	,084	-,799**	,694**	1	
	8. Commitment	,062	-,247**	-,162**	,088	,771**	,661**	,881**	1

CFS: Compassion Fatigue Scale, CBS: Caring Behaviors Scale,  $r$ : Pearson Correlation Coefficient, \*\* $p < .001$  \* $p < .05$

In the study, it was found that there was a high-level positive correlation ( $r=.618$ ) between the VC subdimension of CFS and PP, and a moderate level positive correlation ( $r=.526$ ) with Self-Esteem. In addition, there was a positive weak correlation ( $r=.233$ ) between VC and VO, and a positive very weak correlation ( $r=.173$ ) with the sub-dimension of KS. There was a positive weak correlation between VO and PP ( $r=.372$ ), a negative, weak correlation between A, R, and C, and a negative, very weak correlation with KS ( $r=-.119$ ). There was a positive weak correlation between PP and S ( $r=.374$ ), and a negative, very weak correlation between A, R, and C. There was a positive, very weak correlation ( $r=.132$ ) between S and KS.

It was found that there was a positive correlation between A and KS, and C sub-dimensions

of CBS, and a negative high-level relationship between Respectfulness sub-dimension. There was a positive high correlation between KS and R and C sub-dimensions and a positive very high correlation between R and C ( $r=.881$ ) (Table 4).

#### **DISCUSSION**

The aim of this study was to examine the relationship between nurses' compassion fatigue and their care behaviours. The lowest score that can be obtained from the Compassion Fatigue Scale is 40, and the highest score is 120 (Er, 2023). In this study, the total mean score of compassion fatigue was calculated as  $76.54 \pm 12.36$ , indicating that nurses' compassion fatigue was at a moderate level, falling within the 'partially correct' range. Studies on compassion fatigue

among nurses found that nurses working in pediatric clinics and pediatric outpatient clinics (Bağcıvan, 2019). There are also studies showing that compassion fatigue is at a moderate level in nurses (Uslu & Korkmaz, 2020; Kılıç et al., 2020; Katran et al., 2021; Xie W. et al., 2021). In addition, there are also studies showing that compassion fatigue is at a low level (Özcan, 2019; Dığın et al., 2022). In general, when the literature is evaluated, it is seen that compassion fatigue is experienced at high, medium, and low levels. It is known that CF is an important concept in terms of ensuring patient satisfaction and patient safety. The depersonalization caused by compassion fatigue leads to misinterpretation of the information given, which increases the margin of error in decisions made regarding the patient. This situation causes an increase in medical errors and a decrease in patient satisfaction (Dikmen & Aydın 2016). In addition, it can be said that managers should produce formulas for taking forward-looking intervention measures to increase compassion satisfaction and reduce fatigue among employees, and support them in coping with stress.

In this study, it was found that women experienced more CF than men. In a similar study, it was found that women experienced more CF than male nurses (Mangoulia et al., 2015). In addition, there are also studies indicating that the gender variable is not effective in the development of CF (Zhang et al., 2018; Sacco et al., 2015; Uslu & Korkmaz, 2020). The literature also includes a study determining that male nurses experienced more CF than females (Özcan, 2019). When these results are evaluated, it is seen that different results were obtained regarding the relationship between the gender variable and CF. It can be said that compassion fatigue affects male and female nurses at the same rate. The higher compassion fatigue levels in female nurses observed in this

study may be attributed to the greater proportion of female participants.

Nurses aged 42 years and over were found to experience compassion fatigue more than nurses aged 41 years and less. In addition, it was determined that nurses with 16 or more years of work experience experienced more compassion fatigue. Similarly, there are studies that found higher levels of CF in nurses with more working years and over 50 years of age, as well as nurses with postgraduate education (Sacco, 2015; Yu et al., 2016). There are also studies in which age and working years in the profession were not effective (Uslu & Korkmaz, 2020). According to these results, that age has different relationships with compassion fatigue. The higher levels of compassion fatigue observed among older nurses and those with more professional experience in this study are thought to be due to working conditions, excessive workload, increased duration and intensity of exposure to negative situations with age and years of service, as well as insufficient support received by nurses during this process.

An important indicator of nursing care is caring behaviors. It is important to evaluate the caring behaviors of nurses and to reveal the factors affecting satisfaction in order to provide quality service in the patient care process (Uslu & Korkmaz, 2020). In this study, it was determined that nurses' caring behaviors were at a high level. When other studies conducted with nurses were evaluated, it was found that nurses working in the clinics of a university hospital (Çolak Okumuş & Uğur, 2017) and nurses working in two different public hospitals (Erenoğlu et al., 2019; Dığın et al., 2022) had high levels of VC. Measuring, evaluating, and improving the quality of care is an important factor. The results of this study are similar to the literature. It is pleasing that the caring behavior scores are high.

In this study, it was determined that female nurses had more knowledge and skills in caring behaviors than male nurses, single nurses showed more assurance, respectfulness, and commitment than married nurses, and those with high school and associate degree education showed more caring behaviors than those with undergraduate and graduate education. In addition, it was concluded that those working in private hospitals showed more caring behaviors than those working in public hospitals, and those working in internal clinics showed more KS and R behaviors than those working in surgical clinics. It is seen that there are similarities and differences in studies examining caring behaviors in nurses. For example, while there was no difference according to gender and educational status in one study, it was found that nurses in the 36-45 age group showed more caring behaviors than younger nurses, and married nurses showed more caring behaviors than single nurses (Okumuş & Uğur, 2017). As a result of another study, no significant difference was found between the demographic characteristics of nurses and VC (Erenoğlu et al., 2019). In another study, there was a significant difference between the age and working years of nurses and VC, and no difference was found according to gender and educational status (Erol & Türk, 2019). In another study, it was found that the level of VC of nurses was high; there was no significance with generation, gender, marital status, educational level, and working order (Lafcı & Canlı, 2023). Care is a process based on mutual communication and trust, and it is a concept that includes moral dimensions (Erenoğlu et al., 2019). It is seen that nurses use their knowledge and skills and reflect them in their caring behaviors. The reason why female nurses in this study are more knowledgeable and skilled in care than men may be that care has been accepted as a woman's job throughout history, and that fe-

male nurses exhibit care behaviors while performing roles outside their professional roles (being a mother, being a wife, etc.). In addition, the fact that single nurses do not have many roles other than their professional roles compared to married nurses may be the reason for their greater commitment. It is thought that the reason why nurses with higher education levels exhibit less caring behavior is due to the fact that this group has an increased tendency towards the academic and theoretical side of the profession. The reason why nurses in private hospitals display more compassionate behavior than those in public hospitals may be their working conditions.

In this study examining the correlation between CFS and CBS, it was found that there were significant weak correlations between the two scales. Similarly, in a study examining the effect of compassion fatigue on VC, a weak correlation was found between the two scales (Diğın et al., 2022). In international studies, there are results showing that compassion fatigue is a factor that negatively affects the quality of care and that nurses with low levels of compassion fatigue provide better quality care (Labraque et al., 2021; Una Cidon et al., 2012). In studies on the subject, it is mentioned that CF has physical, spiritual, social, emotional and intellectual consequences, causing a decrease in professional performance in nurses, poor decision-making, an increase in work errors and occupational accidents (Peters, 2018). Consequently, these situations inevitably adversely affect the nursing care. However, it is reported that CF increases turnover rates, staff turnover, and causes a shortage of nurses (Nolte et al., 2017). Since the nursing shortage increases the workload and the turnover rate is high, the adaptation process of new recruits to the organization affects the quality of care.

The result of this study supports the literature, namely that compassion fatigue affects caring behavior. Therefore, it is crucial for healthcare professionals to effectively manage and receive support for the emotions they experience. In this context, it will be an inevitable result that in-service training will improve patient and employee satisfaction in health institutions and organizations. In addition, it may be recommended that nurses undergo psychological evaluation, that they be evaluated for CF at regular intervals, and that they receive professional help when necessary. From an organizational perspective, reducing the nurse workload and making necessary arrangements to motivate employees can be recommended as precautions.

### Limitations

Since this study was conducted with nurses working in the city center of Istanbul, the results cannot be generalized to all nurses.

### IMPLICATIONS FOR PRACTICE

In the study, it was determined that nurses' perception of compassion fatigue was at a moderate level, and their perception of caring behaviors was at a high level. It was also concluded that the perception of compassion fatigue affected caring behaviors. Managing nurses should create healthy working environments by detecting compassion fatigue in nurses early and organizing preventive activities. In this way, the quality of care provided will also increase. In order to achieve improvements in compassion fatigue, it is necessary to emphasize the factors that cause these conditions and to plan and support managerial and individual interventions. It is seen that the number of studies evaluating compassion fatigue in nursing is limited. For this reason, it is recommended that the number of studies should be increased by conducting studies in larger and

different groups in order to increase the awareness of nurses, institutions, and managers about this concept.

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