



Compassion Fatigue, Professional Quality of Life, and Psychological Endurance Among Organ Transplant Coordinators

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ABSTRACT

Purpose. Organ transplant coordinators are affected by the experienced traumas of patients and relatives, which increases their risk of compassion fatigue. This study was conducted to determine the effect of compassion fatigue on organ transplant coordinators and to reveal its relationship with professional quality of life and endurance.

Materials and Methods. This descriptive study was carried out between November 2017 and March 2018 among organ transplant coordinators working in Turkey. Out of the total 187 coordinators, 91 (48.6%) agreed to participate. Data collection was performed via a demographic information questionnaire, the 24-item Compassion Scale developed by Pommier, the 30-item Professional Quality of Life (ProQOL) Scale developed by Stamm, and the 33-item Psychological Endurance Scale developed by Friberg et al.

Findings. Among the compassion subscales, the highest mean scores were in the kindness subscale, while the lowest mean scores were received from the indifference subscale. In the ProQOL, the compassion satisfaction subscale received the highest scores. The scores of the Psychological Endurance Scale were also high. There were statistically significant, weak to moderate correlations between all compassion subdimensions with absolute values of correlation coefficients (r) ranging from 0.260 to 0.690 ($P < .05$). There was a significant positive correlation between the burnout and compassion fatigue/traumatic stress subscales of the ProQOL ($r = 0.660$; $P < .001$).

Conclusions. These results demonstrate that ProQOL and psychological endurance are essential determinants of compassion fatigue among organ transplant coordinators. We suggest that correcting the working quality of organ transplant coordinators will reduce compassion fatigue and increase their psychological stability.

COMPASSION is the consequence of an individual being affected by a bad influence that another person has lived, resulting in feelings of sadness and pity, where the individual is willing to help the situation [1–4].

Compassion fatigue, on the other hand, is expressed as being exposed to suffering in a situation that the person has never expected in individuals who have been subjected to long suffering [5]. According to Young et al [6], compassion fatigue is physical, mental, social, and emotional exhaustion seen among health workers. With its adverse effects, compassion fatigue may lead to reductions in work performance as well as negative impacts on professional quality of life and psychological endurance. Coetzee and Klopper [7]

describe compassion fatigue as the constant and intensive contact of health professionals with patients, resulting in the emergence of stress. This kind of stress is becoming increasingly common among health care workers. Competition among the employees, long working hours, and the feelings of sadness and pity were cited as the reasons for this increase [8].

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Health care workers are striving to provide holistic care to the sick. Although health services are provided by a wide variety of professionals such as doctors, nurses, psychologists, and social workers, the role of organ transplant coordinators is unique in this process. Organ transplant coordinators manage the clinical planning of the patients, coordinate laboratory tests, communicate with the patients' numerous doctors, organize the health records, welcome patients during clinical visits, evaluate patient needs, and communicate with multidisciplinary team members related to patient care [9].

Additionally, organ transplant coordinators provide education to patients, patient relatives, and live donors concerning pre- and post-transplant care as well as the transplantation process. While the recipients are on the waiting list, the coordinators continue to provide necessary medical care for the illness until the transfer call. Patients on the organ transplant list can wait for months, and it is possible that they die while waiting for the transplant. Organ transplant coordinators serve as bridges between the organ donor (or family members) and the surgeon, and they communicate with the patient and the hospital for the scheduling of the operating theater [9,10]. Organ transplant coordinators whose duties do not end here also provide psychosocial support to the patients' families. It appears that the role of organ transplant coordinators is intertwined with the care of patients and living donors, and they are also requested to provide psychosocial support, which can expose them to higher levels of compassion fatigue [11].

The Professional Quality of Life (ProQOL) is a concept that is directly or indirectly influenced by many factors such as wages, working area and conditions, management and organization of the work, the technology used, employee satisfaction and motivation, employment security, social justice, and social security [12]. ProQOL is imperative in meeting the psychological, spiritual, and social needs of the individual. When these needs are not met, the endurance levels of the individual are negatively affected. People may feel powerless and have psychological and physical discomfort if they are not equipped sufficiently to protect themselves against stress and difficulties to which they are exposed.

One of the essential features of the organ transplant coordinators providing quick recovery from stressful life events is their psychological endurance. Failure to cope with stress leads to negative consequences, such as long-term productivity decline, inability to enjoy life, and withdrawal from close relationships [13]. The concept of psychological endurance is associated with factors such as stress, burnout, and compassion fatigue [14]. Organizations help employees to cope with stress and burnout (especially emotional exhaustion and compassion fatigue) by increasing their level of psychological endurance, preventing losses due to decreased workforce, and promoting the quality of work life [15]. Hence, it was hypothesized that compassion fatigue could have a negative impact on quality of life and durability. There are studies demonstrating the significance of

compassion fatigue, but studies with organ transplant coordinators are limited. This study aimed to determine the effects of compassion fatigue in organ transplant coordinators on the ProQOL and endurance.

MATERIALS AND METHODS

Population and Sampling

A descriptive and cross-sectional study was conducted between November 2017 and March 2018 among organ transplant coordinators in Turkey. The study sample was obtained by the snowball method. Researchers employed as organ transplant coordinators in a university hospital formed the starting point. They invited the organ transplant coordinators via an email containing information about the study and data collection tools. It was assured that at least 1 organ transplant coordinator was included in the study from each of the 81 cities in Turkey. The participants were asked first to complete the data collection forms themselves and then send them to other organ transplant coordinators they knew. Out of 187 coordinators, 91 filled out and returned the forms (participation rate 48.6%).

Data Collection Tool

The data collection tool consisted of 4 parts: 1. A questionnaire collecting demographic information of the participants. 2. The Compassion Scale (CS) developed by Pommier [16], adapted to Turkish by Akdeniz and Deniz [17]. This scale consists of 6 sub-dimensions and 24 items. 3. ProQOL developed by Stamm [18] and adapted by Yeşil et al to Turkish [19]. The scale consists of 30 items and 3 subdimensions and uses a 5-point Likert-type response. 4. The Psychological Endurance Scale (PES) developed by Friborg et al [20], translated into Turkish by Basım and Çetin [21], which consists of a single dimension with 33 items.

Table 1 shows the scales used in the study with subdimensions and Cronbach alpha values.

Data Collection and Analysis

Survey forms were sent and collected by emails. IBM SPSS Statistics 20.0 (IBM, Armonk, NY, United States) was used for data analysis. The data were presented as frequencies and percentages. Bivariate comparisons were performed with the Student *t* test and the Pearson correlation analysis. Linear regression analysis was done to check for independent factors affecting compassion fatigue scores. The statistical significance level was set to $P < .05$.

Ethical Perspectives of the Study

The study was conducted between November 2017 and March 2018. Ethical approval was obtained from the Çanakkale Onsekiz Mart University Medical Faculty Local Ethics Committee (number: 2017-19, date: 29.11.2017). Participants were informed about the purpose of the study by email. Participation was on a voluntary basis, and no incentives were provided.

RESULTS

The mean age of the participants was 39.77 ± 6.81 years; 74.7% ($n = 68$) were women, 69.2% ($n = 63$) were married, and 78% ($n = 71$) were nurses. Participants in the study reported that they worked as organ transplant coordinators for a mean of 5.03 ± 3.40 years. Of the organ transplant

Table 1. Subscales and Cronbach Alpha Values of the Scales Used in the Study

Scale	Dimensions	Items	Cronbach Alpha of Original Scale	Cronbach Alpha in This Study
Compassion Scale	Kindness	4	0.73	0.75
	Indifference	4	0.64	0.68
	Common humanity	4	0.66	0.63
	Disengagement	4	0.67	0.62
	Mindfulness	4	0.70	0.64
	Separation	4	0.60	0.60
Professional Quality of Life Scale	Compassion satisfaction	10	0.87	0.84
	Burnout	10	0.72	0.73
	Compassion fatigue/traumatic stress	10	0.80	0.75
Psychological Endurance Scale		33	0.86	0.86

coordinators participating in the research, 58.2% ($n = 53$) were working in a state hospital, 51.5% ($n = 47$) of the institutions did not have organ transplantation facilities, and 89.0% ($n = 81$) had a third-stage intensive care unit. While 44.0% ($n = 40$) of the coordinators did not have an organ transplant certificate, 60.4% ($n = 55$) had additional tasks. As the most common second task, 35.3% ($n = 32$) of the participants were working in intensive care units.

Almost all participants ($n = 88$, 97.8%) had compassion fatigue/traumatic stress scores above the threshold of 17, which is suggestive of an abnormality [18]. The mean scores of the participants from the subscales are shown in Table 2. The highest mean score in the compassion scale was in the kindness subscale (17.59 ± 2.16), and the lowest mean score was in the indifference subscale (6.85 ± 2.40). Moderate compassion fatigue was observed among the participants. In the ProQOL scale, the highest scores were observed in the compassion satisfaction subscale, while the burnout dimension received the lowest mean scores. PES scores of the participants were quite high (mean 25.62 ± 10.09) (Table 2).

There were no significant differences in the mean scale scores between men and women ($P > .05$). The mean kindness scores of the nurses were significantly higher than those of the doctors (17.91 ± 2.04 vs 16.45 ± 2.23 , $t = 2.771$, $P = .007$). Also, the mean common humanity scores of the nurses were higher than those of the doctors (17.32 ± 2.23 vs 15.95 ± 2.54 ,

$t = 2.356$, $P = .021$). Having extra duties did not cause any change in the mean scale scores ($P > .05$).

The relationships between the subscales of the Compassion Scale, the subscales of the ProQOL, and the PES are given in Table 3.

The highest correlation between the scales was observed between the mindfulness subscale of the CS and the compassion satisfaction subscale of the ProQOL ($r = 0.556$, $P \leq .001$, Fig 1). A positive correlation was also found between the kindness subscale of the Compassion Scale and the compassion satisfaction subscale of the ProQOL ($r = 0.527$, $P < .001$) and the PES ($r = -0.329$, $P = .002$). A linear regression model was built to check for independent factors affecting the compassion fatigue/traumatic stress score, where all the studied scale scores were included. The regression analysis with the “enter” method revealed the separation subscale of the CS, as well as the compassion satisfaction and burnout subscales of the ProQOL, were independently affecting compassion fatigue (Table 4).

DISCUSSION

This study confirmed the presence of compassion fatigue and high levels of psychological endurance in organ transplant coordinators and demonstrated the relationship of professional quality of life and compassion. Almost all organ transplant coordinators had mean compassion fatigue/

Table 2. Mean (SD) Scores of the Scales and Subscales

Scale	Dimensions	Mean	SD
Compassion Scale	Kindness	17.59	2.16
	Indifference	6.85	2.40
	Common humanity	17.00	2.36
	Disengagement	7.16	2.68
	Mindfulness	17.29	2.14
	Separation	7.21	2.64
Professional Quality of Life Scale	Compassion satisfaction	43.45	4.74
	Burnout	22.55	4.61
	Compassion fatigue/traumatic stress	26.80	5.77
Psychological Endurance Scale		25.62	10.09

SD, standard deviation.

Table 3. Correlations Among the Study Variables

Compassion Fatigue Scale	1 (r, P)	2 (r, P)	3 (r, P)	4 (r, P)	5 (r, P)	6 (r, P)	7 (r, P)	8 (r, P)	9 (r, P)
Kindness (1)									
Indifference (2)	-0.532 <.001*								
Common humanity (3)	0.326 .002*	-0.324 .002*							
Disengagement (4)	-0.498 <.001*	0.593 <.001*	-0.330 .001*						
Mindfulness (5)	0.526 <.001*	-0.43 <.001*	0.472 <.001*	-0.486 <.001*					
Separation (6)	-0.565 <.001*	0.690 <.001*	-0.262 .012*	0.578 <.001*	-0.260 .013*				
ProQOL									
Compassion satisfaction (7)	0.527 <.001*	-0.401 <.001*	0.337 .001*	-0.368 <.001*	0.556 <.001*	-0.277 .008*			
Burnout (8)	-0.305 .003*	0.365 <.001*	-0.209 .047*	0.222 .035*	-0.341 .001*	0.178 .091	-0.528 <.001*		
Compassion fatigue/traumatic stress(9)	-0.006 .953	0.229 .03*	-0.074 .487	0.231 .028*	-0.119 .262	0.204 .054	-0.126 .236	0.660 <.001*	
Psychological Endurance Scale									
Psychological endurance (10)	-0.329 .002*	0.133 .212	-0.197 .063	0.187 .078	0.315 .002*	0.137 .198	0.414 <.001*	0.327 .002*	-0.073 .492

Abbreviations: ProQOL, Professional Quality of Life Scale.
*P < .05.

traumatic stress scores above the threshold of 17. As to the suggestion of the authors [18], if the score is above 17, the person may want to take some time to think about what at work may be frightening him/her or if there is some other reason for the high score. These scores indicate that investigated organ transplant coordinators have moderate levels of compassion fatigue and work quality of life and a high level of psychological endurance. Moderate levels of compassion fatigue in transplant nurses were also demonstrated by the study of Kim [10].

Compassion fatigue is the acute onset of physical, emotional, and psychological symptoms that affect work-related patient care and relationships [22]. It is important that the compassion fatigue be well understood, prevented, and treated. There is literature emphasizing that compassion fatigue is more frequent among health care personnel working in critical care units [23,24]. However, the number of studies performed with organ transplant coordinators, which are closely related to patients with chronic organ failure and live donors, is relatively small.

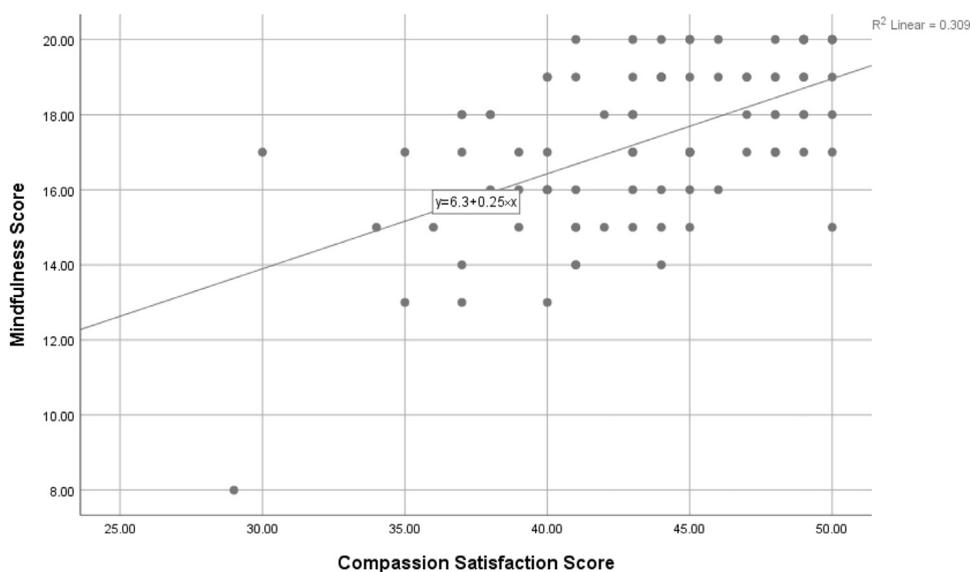


Fig 1. Correlation between mindfulness and compassion satisfaction scores.

Table 4. Linear Regression Analysis Computer Output (Dependent Variable: Compassion Fatigue/Traumatic Stress Scores)

	Unstandardized Coefficients		<i>t</i>	<i>P</i>	95% CI for B	
	B	SE			Lower	Upper
(Constant)	-26.302	8.606	-3.056	.003	-43.429	-9.175
Kindness	0.806	0.276	2.918	.005*	0.256	1.355
Indifference	-0.344	0.273	-1.263	.210	-0.887	0.198
Common humanity	0.079	0.201	0.392	.696	-0.322	0.479
Disengagement	0.355	0.218	1.629	.107	-0.079	0.788
Mindfulness	-0.173	0.276	-0.626	.533	-0.723	0.377
Separation	0.626	0.246	2.539	.013*	0.135	1.116
Compassion satisfaction	0.295	0.124	2.385	.019*	0.049	0.541
Burnout	1.066	0.110	9.648	<.001*	0.846	1.286
Psychological endurance	-0.040	0.046	-0.862	.391	-0.133	0.052

Abbreviations: CI, confidence interval; SE, standard error.

**P* < .05.

According to the research results of Doman [25], trying to help people who have been exposed to trauma and are in difficulty and loving to be with them in difficult times leads to a feeling of compassion fatigue in health professionals. Participants in this study are thought to bear the risk of compassion fatigue in relation to the work-related problems and helping patients with highly stressful events. There was no significant reduction in professional quality of life and psychological endurance, which should not be interpreted as the absence of compassion fatigue. Together with other health professionals, organ transplant coordinators play an integral role in ensuring quality care for the patients with end-stage organ failure and live donors. Given the unique medical environment they work in and the special population served by organ transplant coordinators, it is expected that the participants experience compassion fatigue.

According to Smith [26], health workers act with empathy while treating patients suffering from pain; this, in turn, increases the risk of compassion fatigue. Studies conducted with health professionals indicate that an employee feeling happy, conscious, and aware of many things while serving reduces the risk of suffering from compassion fatigue, which helps employees to provide more efficient service [25,27,28]. On the other hand, the compassion fatigue of organ transplant coordinators can also adversely affect patient care. Thus, circumstances that trigger compassion fatigue among organ transplant coordinators should be further investigated and prevented.

Statistically, a significant relationship was found in the analysis of correlations between compassion fatigue, professional quality of life, and psychological endurance of organ transplant coordinators. This finding suggests that the professional quality of life and psychological well-being may affect the level of compassion fatigue in the studied population. The trend in this study is toward high levels of professional quality of life and psychological endurance leading to lower levels of compassion fatigue.

It is important to understand that health care workers, including organ transplant coordinators, are exposed to compassionate tiredness due to the nature of their duties. This study, despite some limitations, provides useful

findings for a small population. Understanding the level of compassion fatigue among organ transplant coordinators may affect the work performance of organ coordinators, career satisfaction, and quality of life, as well as the quality of patient care. This information can help institutional managers to develop strategies to improve workplace environments, reduce work-related stress, and provide support for the development of effective coping mechanisms, which can improve patient care and safety.

Limitations

The reliability of the study instruments, as well as the relatively high sample size, are some strengths of this study. On the other hand, a nonrandom sampling method was employed for convenience reasons. The results should be interpreted in the light of potential confounders such as environmental factors, which were not included in this study.

CONCLUSION

This study provides valuable information that organ transplant coordinators' low level of professional quality of life may be a factor contributing to compassion fatigue; thus, higher professional quality of life may be associated with lower compassionate fatigue and higher levels of psychological endurance. There were positive and negative strong correlations between the subscales of the compassion scale and the subscales of the quality of life and the psychological endurance scales. These findings can help hospital managers to make better decisions. They can be used to identify other potentially influential factors that reduce levels of compassion fatigue among employees. Future studies may provide better solutions by investigating the circumstances that triggered compassion fatigue by adding qualitative work that delves into existing quantitative studies.

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