Psychosocial Care Competencies and Compassion Fatigue in Intensive Care Nurses: A Cross-Sectional Study

Yoğun Bakım Hemşirelerinde Psikososyal Bakım Yeterlilikleri ve Merhamet Yorgunluğu: Kesitsel Bir Çalışma

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Abstract

Objective: This study was conducted to determine the relationship between intensive care nurses' psychosocial care competencies and compassion fatigue.

Methods: This cross-sectional study was conducted with 199 nurses working actively in the intensive care units of state hospitals in 5 different districts located in the eastern part of Turkey between 01-30.03.2022. Introductory Information Form, Psychosocial Care Competence Self-Assessment Scale and Compassion Fatigue-Short Scale were used to collect data. The study was conducted using the snowball sampling method.

Results: The findings showed that the psychosocial care competence self-evaluation levels of the nurses were above the medium level. In this study, a significant negative relationship was found between the psychosocial care competencies of intensive care nurses and their compassion fatigue levels. Moreover, compassion fatigue, job, and secondary trauma levels of the nurses were below the medium level.

Conclusion: Training programs are recommended to reduce nurses' compassion fatigue and increase their psychosocial care competencies.

Key words: Nurses, compassion fatigue, psychosocial care, intensive care

Öz

Amaç: Bu çalışma, yoğun bakım hemşirelerinin psikososyal bakım yeterlilikleri ile merhamet yorgunluğu arasındaki ilişkiyi belirlemek amacıyla yapıldı. **Yöntemler:** Kesitsel tipteki bu çalışma 01-30 Mart 2022 tarihleri arasında Türkiye'nin doğusunda yer alan 5 farklı ilde bulunan devlet hastanelerinin yoğun bakım ünitelerinde aktif olarak çalışan 199 hemşire ile gerçekleştirildi. Verilerin toplanmasında "Tanıtıcı Bilgi Formu", "Psikososyal Bakım Yeterliği Öz Değerlendirme Ölçeği" ve "Merhamet Yorgunluğu-Kısa Ölçeği" kullanıldı. Çalışma kartopu örnekleme yöntemi ile yapıldı.

Bulgular: Hemşirelerin psikososyal bakım yeterliliği öz değerlendirme düzeyleri orta düzeyin üzerinde saptandı. Bu çalışmada yoğun bakım hemşirelerinin psikososyal bakım yeterlikleri ile merhamet yorgunluğu düzeyleri arasında negatif yönde anlamlı bir ilişki bulunmuştur. Ayrıca hemşirelerin merhamet yorgunluğu, iş ve ikincil travma düzeyleri orta düzeyin altındaydı.

Sonuç: Hemşirelerin merhamet yorgunluğunu azaltmak ve psikososyal bakım yetkinliklerini arttırmaya yönelik eğitim programları önerilmektedir. Anahtar kelimeler: Hemşireler, merhamet yorgunluğu, psikososyal bakım, yoğun bakım

INTRODUCTION

Critical patients are supported in their process of recovery in intensive care units. These units have a privileged position in terms of the following reasons: location and patient care, existence of advanced technological devices, and close monitoring of the vital signs of patients 24 hours a day with a multidisciplinary team.¹ While the significance and necessity of holistic nursing care is well-known, it is observed that the psychosocial aspect of care is generally neglected in practice. However, care cannot be provided without considering the biopsychosocial aspects. Psychosocial reactions must be determined and evaluated in the process of delivering psychosocial care to the patient.² Unmet psychosocial problems will adversely affect patients, their families and society, and will increase the expenditures in the health system.³

Psychosocial care can be defined as attempts to help people who cannot cope with emotional changes caused by an illness, existential crises affecting health, or psychiatric problems.² This encompasses all kinds of relevant support and care for the psychological well-being and health of individuals and communities affected by an event.⁴

Psychosocial care is an inseparable part of the nursing care.² It includes reassuring, comforting and supportive interventions for the patient.⁵ There is ample evidence to support the significance of psychosocial care.³ Recent studies in the literature indicated that providing effective and meaningful psychosocial care can improve patients' health conditions and reduce anxiety, stress, and length of stay in hospital.⁶

Alleviating the pain of patients, minimizing the risk of encountering unexpected and undesirable situations, and ensuring that the patient returns to his normal life as soon as possible are among the primary nursing duties.⁷ Nurses providing care for suffering patients may be satisfied with their job because of empathizing with them and approaching them with a sense of compassion, yet they may also experience burnout and compassion fatigue.^{7,8}

The concept of compassion fatigue has a significant place in the literature, and it is used to describe the special situation of caregivers who help patients with long-term pain, and at one point or another find themselves in pain.⁷ In other words, compassion fatigue can be expressed as the burnout seen in people who care for and/or serve a patient or an individual with special needs.⁹ Compassion fatigue has become a concept that has received considerable attention in the last few decades.¹⁰ It is stated that the prevalence of compassion fatigue in nurses working in health care institutions varies between 78-86%, depending on the units they work in.⁷ In the study conducted by Flannery, it was determined that 49.3% of nurses working in neonatal intensive care units experienced compassion fatigue.⁸

Physical, cognitive, emotional, behavioral, spiritual, and social negative symptoms are observed in individuals due to compassion fatigue.¹¹ Emotional symptoms such as decreased enthusiasm and excitement, depersonalization, irritability, indecision, depression, and loss of interest are observed in nurses who experience compassion fatigue, moreover a decrease is observed in their performance and work quality.⁸ Along with the decrease in the quality of patient care, it is inevitable that there will be a decrease in patient satisfaction.^{7,10} Since compassion fatigue arising from the care relationship between the nurse and the patient and empathy negatively affects the health services offered, compassion fatigue should be given due importance.⁸ Initiatives to reduce the compassion fatigue of nurses working in intensive care units can increase the quality of care provided to patients.¹²

It is thought that knowing the psychosocial care and compassion fatigue levels of nurses will increase the quality of life of both patients and nurses. It is argued that these data will fill an important gap in the literature. In addition, it will help nurses to determine the relationship between psychosocial care and compassion, which are important factors in patient care and treatment.

Research questions:

1. There is a relationship between psychosocial care competencies and compassion fatigue in intensive care nurses.

2. There is no relationship between psychosocial care competencies and compassion fatigue in intensive care nurses.

METHODS

Study Design: The research was done in cross-sectional and descriptive type.

Sample of the Research: The research was carried out between 01-30.03.2022 with 199 nurses working actively in the intensive care units of public hospitals in five different provinces in the eastern part of Turkey. The universe of the study consisted of nurses working in intensive care units in public hospitals. The research sample was calculated as 183 nurses at 95% confidence interval, and it was completed with 199 nurses.¹³

The criteria for participation in the research: Criteria were determined as working actively in the intensive care unit, being open to communication and cooperation, and not being diagnosed with any psychiatric disorder.

Data Collection: Between 01-30.03.2022, 199 nurses who voluntarily agreed to participate in the study with snowball sampling method were included in the study. Questionnaires of the data were collected online through the WhatsApp social media program. "Introductory Information Form", "Psychosocial Care Competence Self-Assessment Scale and "Compassion Fatigue Scale" were used to collect the data.

Data collection tools

Introductory information form

The introductory information form prepared by the researchers (age, gender, economic status, education level, time spent in the profession, marital status, working unit, weekly working hours, number of patients per nurse, and whether they chose the current working unit on purpose) consists of 10 questions.^{12,14}

Psychosocial care competence self-assessment scale (PCCSS)

The scale evaluates the psychosocial care competence of the nurses working in the clinic and how much they focus on the psychosocial aspect of patients while applying the treatment and care. The validity and reliability of the scale was carried out by Karatas (2019), and it consists of eighteen items and 4 factors (sub-dimensions). The first factor, "Symptom Idenfication", covers the first 5 items. The second factor of "Use of Knowledge" covers items between 6-10. The third factor, "Intervention", covers items 11-14, and the fourth factor, "Diagnosis", covers items between 15-18. The respondents are asked to choose one of the following answers for the 18 items in the scale "it does not describe me at all", "It describes me a little", "I am undecided", "It describes me well", "It describes me very well" to investigate how well the statements apply to them. The points that can be obtained from the first two factors is 4, and the maximum is 20. The lowest score to be taken on the scale is 18, and the highest score is 90. A low score indicates that the employee considers himself/herself inadequate in psychosocial care, and a high score indicates that considers himself/herself sufficient. The Cronbach Alpha reliability coefficient of the scale, which was calculated as a whole, was determined as .93.² In this study, Cronbach's alpha coefficient was found to be .95.

Compassion fatigue-short scale (CFSS)

The scale was developed by Adams et al.¹⁵. It has been found that the scale is a valid and reliable measurement tool regarding the evaluation of compassion fatigue. Compassion Fatigue-Short Scale was adapted into Turkish by Dinç and Ekinci in 2019.¹⁶ The scale is a self-report assessment tool that asks participants to indicate to what extent each scale item reflects their experience. It is a 10-point Likert-type scale ranging from rarely/never (1) to very often (10). The scale consists of two sub-dimensions: secondary trauma and job burnout. The "c, e, h, j, l" items in the scale measure secondary trauma, and the "a, b, d, f, g, i, k, m" items measure job burnout. The Cronbach's alpha coefficients of the sub-dimensions of the scale range from .80 to .90 and show sufficient internal reliability.¹⁵ No scoring algorithm and cut-off point are specified for the scale. The lowest and highest scores that can be obtained from the scale are 13 and 130. As the score obtained from the scale increases, the level of compassion fatigue experienced by individuals also increases.^{15, 16} In this study, Cronbach's alpha coefficient was found to be .89.

Statistical analysis

The data obtained in the study were analyzed with the Statistical Package for the Social Sciences (IBM SPSS Corp., Armonk, NY, USA) 25.0 program. In analyzing the data, descriptive features such as number, percentage, mean, and standard deviation were used in the study. The conformity of the data to the normal distribution was calculated through skewness and kurtosis values. Psychosocial Care Competence Self-Assessment Scale (skewness: -.887, kurtosis: .692), Compassion Fatigue Scale (MY-CS) (skewness: -.402, kurtosis: -.082) were found to have normal distribution.¹⁷ Pearson correlation analysis was used to examine the relationship between psychosocial care competence self-assessment and compassion fatigue for nurses.

Ethical Considerations

The study was approved by the Muş Alparslan University Scientific Research and Publication Ethics Committee (Date: 09.02.2022, Number: 39810). The nurses participated in the study were informed about the purpose and method of the research, the duration of the research, and that their participation was completely voluntary. Participating nurses were asked to fill out questionnaires after their online consent was obtained. The principles of the Declaration of Helsinki were adhered to throughout the study.

RESULTS

When the descriptive characteristics of the nurses included in the research is examined (Table 1), it is seen that 50.8% of the participants are between the ages of 20-27, 51.8% are women, 55.8% have a lower income than their expenses, 69.8% have bachelor's degree, 49.7% have been working for 0-4 years, 59.3% are single, 58.3% work in general intensive care, 62.5% work between 45-60 hours, 47.7% care for 1 or 2 patients, and 84.4% voluntarily work in the unit they are employed.

Variables		Number	%
	20-27	101	50.8
Age range	28-35	90	45.2
	36 and above	8	4.0
Gender	Female	103	51.8
	Male	96	48.2
Economic status	Income equals expenses	65	32.7
	Income less than expenses	111	55.8
	Income more than expenses	23	11.5
	High school	12	6.0
Educational Status	Associate degree	28	14.1
	Bachelor's degree	139	69.8
	Graduate	20	10.1
	0-4 years	99	49.7
Experience in Profession	5-9 years	75	37.7
	10 years and above	25	12.6
Marital Status	Married	81	40.7
	Single	118	59.3
	Anesthesia Intensive Care	28	14.1
	General Intensive Care	116	58.3
Working Unit	Coronary Intensive Care	19	9.5
	Internal Medicine Intensive Care	16	8.0
	Palliative Intensive Care	20	10.1
Weekly Working Hours	0-40 hours	10	3.0
	45-60 hours	120	62.5
	62 hours and above	69	34.5
	1-2	95	47.7
Number of patients per nurse	3-4	89	44.7
	5 and above	15	7.6
Did you voluntarily pick the unit you are working in?	Yes	168	84.4
	No	31	15.6

Table 1. Descriptive characteristics of nurses (N = 199)

When the psychosocial care competence self-assessment and compassion fatigue scale scores of the nurses are examined, it is seen that the PCCSS sub-dimensions were 19.11±4.32 in symptom identification, 19.22±3.92 in use of knowledge, 14.83±3.04 in intervention, 15.11±3.29 in diagnosis and 68.29±13.15 in total psychosocial care competence. (Table 2). In addition, it was determined that the CFSS sub-dimensions averaged 38.75±15.63 in occupational burnout, 22.98±9.55 in secondary trauma, and 61.74±23.67 in total. It was determined that while the psychosocial care competence self-evaluation levels of the nurses were above the medium level, their compassion fatigue levels were below the medium.

Table 2. Distribution of nurses	average scores from	compassion fatigue	e and psychosocial	care competence self-
assessment scale				

Scale		Min	Max	Average Score
PCCSS	Symptom Identification	5.00	25.00	19.11±4.32
	Use of Knowledge	5.00	25.00	19.22±3.92
	Intervention	4.00	20.00	14.83±3.04
	Diagnosis	4.00	20.00	15.11±3.29
	Toplam	18.00	90.00	68.29±13.15
CFSS	Occupational Burnout	8.00	80.00	38.75±15.63
	Secondary Trauma	5.00	50.00	22.98±9.55
	Total	13.00	130.00	61.74±23.67

PCCSS: Psychosocial care competence self-assessment scale; CFSS: Compassion fatigue-short scale

When the relationship between nurses' compassion fatigue and PCCSS mean scores (Table 3.) was examined, a weak negative significant correlation was investigated among secondary trauma and symptom identification (r = -.156, P < .05), use of knowledge (r = -.217, P < .05), sub-dimensions and PCCSS total mean scores (r = -.179, P < .05). There was a weak negative significant correlation between job burnout and use of knowledge (r = -.148, P < .05), intervention (r = -.157, P < .05), sub-dimensions, and PCCSS total score (r = -.161, p < .05). Symptom identification (r = -.142, P < .05), use of knowledge (r = -.185, P < .05), intervention (r = -.134, P < .05), and diagnosis (r = -.136, P < .05) from CFSS total score average and PCCSS sub-dimension mean score and diagnosis (r = -.136, P < .05) were weakly negatively correlated. There was a weak negative significant correlation between CFSS and PCCSS total score averages (r = -.180, P < .05).

 Table 3. Distribution of Nurses' Average Scores from Compassion Fatigue and Psychosocial Care Competence Self-Assessment Scale

		Compassion Fatigue (CFSS)		
		Secondary Trauma	Job Burnout	Total
(PCCSS)	Symptom Identification	r =156* <i>P</i> = .028	r =114 P = .109	r =142* <i>P</i> = .046
	Use of Knowledge	r =217* <i>P</i> = .002	r =148* <i>P</i> = .038	r =185* <i>P</i> = .009
	Intervention	r =081 P = .258	r =157* <i>P</i> = .027	r =134 P = .060
	Diagnosis	r =117 P = .100	r =126 <i>P</i> = .075	r =136 <i>P</i> = .055
	Total	r =179* <i>P</i> = .011	r =161* <i>P</i> = .023	r =180* P = .011

*P < .05 significant. PCCSS: Psychosocial care competence self-assessment scale; CFSS: Compassion fatigue-short scale

DISCUSSION

The present study conducted to determine the relationship between the psychosocial care competencies selfassessment and compassion fatigue of nurses working in intensive care units is discussed below. It is observed that in adults with compassion fatigue, their functioning in emotional, physical, work and social areas is seriously affected. The occurrence of compassion fatigue in nurses will lead to a decrease in the quality of care, which is a common need of patients.¹²

Nurses' compassion fatigue levels were found to be above the middle level in the present study. It is seen in the present study that most of the nurses working in the intensive care units are young, nurses with limited experience are employed in intensive care units, and the participating nurses are satisfied with working in the intensive care unit despite the long working hours. In the study conducted by Sung et al. ¹⁸, it is stated that compassion fatigue is higher in those who work in the same unit for less than two years and who have a total experience of less than three years in the profession.¹⁸ In a study conducted by Cao & Chen¹⁹, it was reported that nurses' compassion fatigue levels in this study being below the medium level is due to the low number of patients per nurse in the intensive care units where the nurses work.

Nurses' psychosocial care competence self-evaluation levels were found to be above the middle level in the present study. Davut employed the same scale in his study, and the overall PCCSS score was found to be above the medium level and showed similarities with the results of this study.²⁰ In the study conducted by Karataş with nurses, the values were above the average level from PCCSS, and it is similar to the results of the present study.² Sancak found that the total score obtained from the scale was high, which is similar to the results of the current study. It can be indicated that the total score averages obtained from the PCCSS are above the average, and this reveals that the nurses consider psychosocial care necessary and their awareness on this issue has improved.

It was determined that the levels of compassion fatigue, job burnout and secondary trauma of the nurses included in the study were below the moderate level. In the study conducted by Yaman with nurses working in oncology and palliative care services, and by Tanrıkulu and Ceylan with nurses working in pediatric clinics, it was reported that nurses' compassion fatigue levels were at a low level.^{21,22} Dikyol indicated that the levels of compassion fatigue, job burnout and secondary trauma were below the moderate level.²³ Unlike these reported findings, Müdüt reported that the levels of compassion fatigue were moderate.²⁴ It was reported in another study that intensive care nurses experienced moderate compassion fatigue.²⁵ In the studies conducted by Koca with nurses working in different units in a private hospital, and by Kılıç et al. with nurses working in oncology and intensive care units, it was reported that the levels of compassion fatigue of nurses were moderate.²⁶

Adanır conducted a study with nurses taking care of oncology and palliative care patients and reported that the levels of compassion fatigue of nurses were high.²⁷ In Yoder's study with oncology, intensive care, emergency care, surgical clinics, and home care nurses, it was reported that 15.8% of the nurses experienced compassion fatigue and 7.6% had scores indicating the risk of burnout.²⁸ Hooper et al. carried out a study with nurses working in emergency department, intensive care, nephrology, and oncology units. They reported that 28.4% of the nurses had a high risk of compassion fatigue, 56% had a moderate risk of compassion fatigue, and 26.6% of the nurses had a high risk of burnout.²⁹ In the study conducted by Mangoulia et al. with psychiatric nurses in 12 public hospitals in Greece, 44.8% of nurses were found to be at high risk, 43.7% at medium risk, and 11.5% at low risk in terms of compassion fatigue.³⁰ When the results of the studies are examined, it is thought that the level of compassion fatigue is low in some of the working nurses and high in some, because the socio-demographic characteristics of the individuals participating in the study are different.

The fact that the level of compassion fatigue was lower than expected in the present study is thought to be caused by the fact that the most of the nurses participating in the study had a low average age, had a bachelor's degree, had just started working in the profession, the number of patients per nurse was low, and they chose the service they would work on purpose. In the qualitative study conducted by Gaye Atilla, the fact that compassion fatigue is more common in nurses who are afraid of not being able to catch up with patients due to the heavy workload of the services they work in supports our study in this respect.³¹ The participating nurses' compassion fatigue levels were found to be below the moderate level, while their psychosocial care competence self-evaluation levels were found to be above the moderate level in the present study. Compassion fatigue negatively affects the professional and private lives of nurses, while reducing the quality of care they offer to patients. It is emphasized that there is a strong relationship between nurses' compassion fatigue and low quality of care.³²

There was a weak negative significant correlation between nurses' secondary trauma levels and self-assessment levels of identifying disease symptoms, use of knowledge, and psychosocial care competence. It is thought that nurses working in intensive care can better use their knowledge and skills and describe symptoms, which would reduce the level of second trauma.

A weak negative significant relationship was found between nurses' level of professional burnout and selfevaluation of knowledge use and psychosocial care competence. This study suggests that nurses experience less job burnout because they can use their knowledge and skills well and intervene to meet the psychosocial care needs of patients. The increase in the quality of care given by nurses to patients will make patients feel more secure and will facilitate their adaptation to care/treatment. A weak, negative, and significant relationship was found between compassion fatigue levels and the levels of identifying the symptoms of the disease and use of knowledge about the disease. Moreover, the same relationship was found between compassion fatigue levels and psychosocial care competence self-evaluation levels.

It was found that there was a negative relationship between compassion fatigue and identifying disease symptoms, use of knowledge, intervention, and diagnosis. Compassion fatigue causes depersonalization and diminish professional commitment in nurses, and this leads them to work only to finish the day, it becomes difficult for them to care for the patient.³³ Nurses having administrative positions are expected to carry out and implement training and empowerment programs, prevention, and elimination of compassion fatigue to ensure that the service provided is not disrupted and that the engaged nurses continue to work in the institution.³⁴

This study revealed that the decrease in the compassion fatigue of nurses will lead to better identification of disease symptoms and that nurses can use their knowledge in care practices better. Labraque et al. reported that the increase in compassion fatigue negatively affects the quality of care given to patients.³⁵ Hunsaker et al. conducted a study with nurses and emphasized that when nurses experience compassion fatigue, the care they offer to patients would be negatively affected.³⁶ All in all, existing studies in the literature show that compassion fatigue affects the quality of nursing care. Low compassion fatigue will allow nurses to practice their most important duty of patient care properly.

Limitations and generalizability of the study: The results can be generalized to nurses working in intensive care.

CONCLUSION

The findings of the present study investigated that the psychosocial care competence self-evaluation levels of the nurses were above the medium level, while the levels of compassion fatigue, job burnout, and secondary trauma of the nurses were below the medium level. In addition, a weak negative significant relationship was found between nurses' compassion fatigue levels and their psychosocial care competence self-assessment levels. Organizing trainings on burnout and stress that focus on the true nature of nursing profession and quality of life can be recommended to reduce the compassion fatigue of nurses.

Ethics Committee Approval: Ethics committee approval was received for this study from the ethics committee of Muş Alparslan University (Date: 09.02.2022, Number: 39810).

Informed Consent: Participant consent was obtained from all participants in this study.

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REFERENCES

1. Başak T, Uzun Ş, Arslan F. Yoğun bakım hemşirelerinin etik duyarlılıklarının incelenmesi. *Gülhane Tıp Derg.*. 2010;52:76-81.

2. Karataş H, Kelleci M. Psikososyal bakım yetkinliği öz değerlendirme ölçeğinin geliştirilmesi geçerlik ve güvenirlik çalışması. *Psikiyatri Hemşireliği Dergisi*. 2021;12:263-271.

3. Güner P, Hiçdurmaz D, Yıldırım NK, et al. Psychosocial care from the perspective of nurses working in oncology: A qualitative study. *EJON*. 2018;34:68-75.

4. Demiralp N, Demiralp K, Ayşe Ü, ve ark. Kimyasal, biyolojik, radyasyon ve nükleer (KBRN) olaylarda psikososyal bakım. *Afet ve Risk Dergisi*. 2020;3:80-88.

5. Arslan Y, Yazici G. Yoğun bakım hemşirelerinin psikososyal bakım yaklaşımı ve konsültasyon liyezon psikiyatri hemşireliğinin rolü. *Türkiye Sağlık Araştırmaları Dergisi*. 2021;2:29-35.

6. Chen CS, Chan SW-C, Chan MF, et al. Nurses' perceptions of psychosocial care and barriers to its provision: A qualitative study. *J. Nurs. Res.* 2017;25:411-418.

7. Bülbüloğlu S, Çinar F. Cerrahi hemşirelerde merhamet yorgunluğunun bakım memnuniyetine etkisi. *ATAUNIHEM.* 2021;24:255-263.

8. Kirçi T, Kiziler E. Buzdağının görünmeyen yüzü: Hemşirelerde merhamet yorgunluğu. *Türkiye Sağlık Bilimleri* ve Araştırmaları Dergisi. 2021;4:11-21.

9. Ahmet E, Tarakci D, Doğan S. Özel gereksinimli çocukların annelerinde bakım veren yükü ve merhamet yorgunluğunun incelenmesi. *Haliç Üniversitesi Sağlık Bilimleri Dergisi*. 2020;3:153-160.

10. Nolte AG, Downing C, Temane A, et al. Compassion fatigue in nurses: A metasynthesis. *J. Clin. Nurs.* 2017;26:4364-4378.

11. Yılmaz G, Üstün B. Hemşirelerde profesyonel yaşam kalitesi: Merhamet memnuniyeti ve merhamet yorgunluğu. *Psikiyatri Hemşireliği Dergisi*. 2018;9:205-211.

12. Katran HB, Gür S, Arpag N, Çavuşlu M. COVID-19 pandemisinde yoğun bakım hemşirelerinde merhamet yorgunluğu. *Yoğun Bakım Hemşireliği Dergisi*. 2021;*25*(2):42-50.

13. Cohen L, Manion L, Morrison K. *Research methods in education*. Routledge; 2013.

14. Durmuş M, Yıldız OF, Köse H. Hemşirelerin koronavirüs korku düzeylerini etkileyen faktörler. Ordu Üniversitesi Hemşirelik Çalışmaları Dergisi. 2021;4:189-196.

15. Adams RE, Boscarino JA, Figley CR. Compassion fatigue and psychological distress among social workers: A validation study. *Am J Orthopsychiatry*. 2006;76:103-108.

16. Sevgi D , Ekinci M. Merhamet yorgunluğu kısa ölçeğinin Türkçe'ye uyarlanması, geçerlilik ve güvenirliği. *Psikiyatride Güncel Yaklaşımlar*. 2019;11:192-202.

17. Tabachnick BG, Fidell LS, Ullman JB. Using multivariate statistics (sixth ed.). Pearson Boston, MA; 2013.

18. Sung K, Seo Y, Kim JH. Relationships between compassion fatigue, burnout, and turnover intention in Korean hospital nurses. *JKANA*. 2012;42:1087-1094.

19. Cao X, Chen L. Relationships between resilience, empathy, compassion fatigue, work engagement and turnover intention in haemodialysis nurses: A cross-sectional study. *J. Nurs. Manag.* 2021;29:1054-1063.

20. Davut E, Doğan S. Hemşirelerin psikososyal bakım yetkinliklerinin ve ilişkili faktörlerin incelenmesi. Yüksek Lisans Tezi, Üsküdar Üniversitesi, İstanbul; 2022.

21. Yaman E, Özdelikara A. Onkoloji ve palyatif bakım hemşirelerinin merhamet yorgunluğunun iş ve yaşam doyumuna etkisi. Ondokuz Mayıs Üniversitesi, Samsun; 2020.

22. Tanrikulu G, Ceylan B. Çocuk kliniklerinde çalışan hemşirelerde merhamet düzeyi ve merhamet yorgunluğu. *Sağlık Bilimleri Dergisi*. 2021;30:31-36.

23. Dikyol S, Mersin S. Hemşirelerde merhamet yorgunluğu ve yaşam memnuniyeti arasındaki ilişki. İstanbul Okan Üniversitesi, İstanbul; 2022.

24. Müdüt T, Kulakaç Ö. Covid-19 pandemisi öncesi ve sırasında hemşirelerin bakım algısı ve merhamet yorgunluğu. Ondokuz Mayıs Üniversitesi, Samsun; 2022.

25. Hür S, Ekinci M. Yoğun bakım hemşirelerine verilen stres yönetimi eğitiminin merhamet yorgunluğuna etkisi. Atatürk Üniversitesi, Erzurum; 2018.

26. Bakan AB, Kiliç D, Aslan G, ve ark. Onkoloji birimleri ve yoğun bakım ünitelerinde çalışan hemşirelerde etik duyarlılık ve merhamet yorgunluğu arasındaki ilişkinin incelenmesi. *Adnan Menderes Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*. 2020;4:20-29.

27. Adanir A, Özden D. Onkoloji ve palyatif bakim kliniklerinde çalişan hemşirelerin merhamet yorgunluğu ve stresle başa çikma tarzlarinin belirlenmesi. Dokuz Eylül Üniversites*i*, İzmir; 2019.

28. Yoder EA. Compassion fatigue in nurses. Appl Nurs Res. 2010;23:191-197.

29. Hooper C, Craig J, Janvrin DR, et al. Compassion satisfaction, burnout, and compassion fatigue among emergency nurses compared with nurses in other selected inpatient specialties. *J Emerg Nurs*. 2010;36:420-427.

30. Mangoulia P, Koukia E, Alevizopoulos G, et al. Prevalence of secondary traumatic stress among psychiatric nurses in Greece. *Arc of Psychiatr Nurs*. 2015;29:333-338.

31. Gök GA. Merhamet etmenin dayanılmaz ağırlığı: Hemşirelerde merhamet yorgunluğu. Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi. 2015;20:299-313.

32. Diğin F, Özkan ZK, Şahin AD. Cerrahi hemşirelerinin merhamet yorgunluğu ile bakım davranışları arasındaki ilişkinin belirlenmesi. *Online Türk Sağlık Bilimleri Dergisi*. 2022;7:272-277.

33. Zeren S, Özçelik SK. Hemşirelerde merhamet yorgunluğu ve işten ayrılma niyeti arasındaki ilişki. Marmara Üniversitesi, İstanbul, 2022.

34. Alan H. Merhamet yorgunluğu ve yönetici hemşirenin rolü. *Sağlık ve Hemşirelik Yönetimi Dergisi*. 2018;5:141-146.

35. Labrague LJ, De Los Santos JAA. Resilience as a mediator between compassion fatigue, nurses' work outcomes, and quality of care during the COVID-19 pandemic. *Appl Nurs Res.* 2021;61:151-476.

36. Hunsaker S, Chen HC, Maughan D, et al. Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses. *J Nurs Scholarsh*. 2015;47:186-194.