Clinical and Experimental Health Sciences

Determination of Compassion Fatigue and Work Volition of Nurses Working in Intensive Care Units During COVID-19: A Cross-Sectional Survey

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ABSTRACT

Objective: This study aimed to determine the compassion fatigue and work volition of nurses working in the intensive care units during the COVID-19 pandemic.

Methods: This descriptive, cross-sectional study was conducted with a sample of 308 nurses working in the COVID-19 intensive care units of the pandemic hospitals affiliated with the Ministry of Health in the Istanbul province, Turkey, between February and May 2021. Data were obtained using the Personal Characteristics Form, the Compassion Fatigue-Short Scale and the Work Volition Scale. The obtained data were asses with the SPSS 22.0 statistical program.

Results: It was determined that the mean age of the nurses participating in the study was 30.32±10 years; 80.2% were female, and 23.4% had been working for 1-3 years. The compassion fatigue total mean score was 79.91±25.04, while the work volition total mean score average was 50.28±10.65, which was found to be moderate. In the nurses' compassion fatigue sub-dimensions, the mean for occupational burnout was 49.12±15.61, and the secondary trauma mean was 30.78±10.92. A weak positive correlation was found between the nurses' compassion fatigue and work volition total scores (r= 0.235, p<.001).

Conclusion: Overall, this studyfindings indicated that a significant increase in compassion fatigue was associated with increased work volition. The findings suggest that organizational factors affecting nurses' working conditions are important and should not be ignored.

Keywords: Compassion fatigue; COVID-19; intensive care nurse; work volition.

1. INTRODUCTION

Intensive care units are special areas where the care of patients with critical health conditions is provided; they contain apparatus equipped with advanced technological systems. These units are known to have high mortality and morbidity rates, and the holistic nursing care provided in these units is of critical importance (1,2). Nurses should evaluate the healthy/sick individual and provide care in line with the requirements of contemporary nursing philosophy (3,4). Due to the rapidly increasing number of patients in the novel coronavirus disease (COVID-19) epidemic worldwide, intensive care units in many hospitals were converted into COVID-19 intensive care units, displaying a rising need for nurses (5,6). The insufficientnumber of nurses and the increased number of patients per nurse harmed the care process. In addition, there were ethical problems, such as nurses having to make choices between patients due to limited resources and an insufficient supply of equipment (7). Consequently, in such cases, it is important that nurses use decision-making processes correctly and effectively. It is known that the perception of conscience and compassion closely affects the thoughts and practices of nurses as they go through the decision-making process. Compassion is one of the factors that enable the greatest possible patient care, as well as one of the most significant aspects of the nursing profession. Compassion fatigue, on the other hand, is understood to be the negative effect of aiding sick people who suffer, are in pain, or experience horrific experiences (8). It is known that nurses who take an active role in health care services often experience compassion fatigue (8,9). In view of the COVID-19 pandemic, it was expected that some factors such as the increasing number of patients, nurses having to choose between patients, and insufficient availability of equipment would affect the level of compassion fatigue among nurses. Because of the prevalence of COVID-19 patients requiring critical care in intensive care units, nurses suffered physical, mental, and social exhaustion over time,

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which had the potential to lead to burnout. Burnout among nurses can have a long-term impact on their work motivation. The Work Psychology Framework defines work volition as "the perceived capacity to make occupational choices despite constraints(10-12).As a result, the individual's view of his or her ability to make career-related choices despite the barriers encountered constitutes the individual's work volition (13,14).

It is considered that the compassion fatigue that nurses may have experienced during the COVID-19 pandemic may have affected their work volition. Additionally, it was reported that nurses who were found to have compassion fatigue faced serious issues in their work performance and personal health (15).

This study intented to ascertain the degrees of compassion fatigue and work volition among nurses working in intensive care units during the recent COVID-19 outbreak. Well-designed studies should be undertaken to provide evidence-based knowledge about communities from different socioeconomic and religious backgrounds.High quality research should be planned and carried out to determine possible external factors that may affect employees' work load and an attempt should be made to harmonize these circumstances with their socioeconomic status.

2. METHODS

This research is a descriptive, cross-sectional study.

2.1. Research Questions

- What was the level of compassion fatigue of intensive care nurses in the COVID-19 pandemic?
- What was the level of work volition of intensive care nurses in the COVID-19 pandemic?
- Is there a relationship between the compassion fatigue of intensive care nurses and their work volition during the COVID-19 pandemic?
- Is there an effect of their compassion fatigue on the work volition of intensive care nurses during the COVID-19 pandemic?

2.2. Study Design

This research is a descriptive, cross-sectional study.

2.2.1. Participants

This study was conducted between February and May 2021 with nurses working in the intensive care units of nine hospitals affiliated with the Ministry of Health in Istanbul. According to the Raosoft sample calculation program, it was determined that 267 nurses working in intensive care units should be included in the study with a 95% confidence interval and 5% margin of error. The study's sample included 308 nurses who volunteered to participate in the study within the specified period, worked in a COVID-19 Intensive Care Unit, and completed the form in its entirety.

2.2.2. Data Collection Tools

The data of the research were obtained by using the Individual Characteristics Form, the Work Volition Scale, and the Compassion Fatigue Scale.

2.2.3. Individual Characteristics Form

This form, produced by the researchers based on the literature, contains seven questions. The form asks for personal information such as age, gender, marital status, educational status, time working as a nurse, intense care, and COVID-19 intensive care working time (16,17).

2.2.4. Work Volition Scale

The Work Volition Scale (WVS), first known as the Work Volition Scale, was created by Duffy, Diemer, Perry, Laurenzi, and Torrey (12) to assess work volition. Work volition refers to individuals' view of their ability to make professional decisions in spite of challenges. In 2019, a study was undertaken in Turkey to assess the validity and reliability of the scale. The results of the study confirmed that the scale is a valid and reliable tool for measuring(18). The Work Volition Scale comprises three subscales, including willpower, financial restrictions, and structural restraints. A total of 13 items have been assessed and evaluated using a seven-point grading system, ranging from 1 (strongly disagree) to 7 (strongly agree). The 1st, 2nd, 12th and 9th items belong to the Willpower subscale, the 5th, 10th, 6th, 7th and 8th items belong to the Financial constraints subscale, and the 3rd, 11th, 13th and 14th items belong to the Structural constraints subscale. The items in the financial and structural constraints subscales are scored in reverse (3, 4, 5, 6, 7, 8, 10, 11, 13) and summed with the willpower subscale, and the total score yields the work volition score. The researchers determined the internal consistency coefficient to be 86 for the overall scale, 75 for the Willpower subscale, 72 for the Structural limitations subscale, and 82 for the Financial constraints subscale (12). The study determined that the Cronbach's alpha coefficient for the Work Volition Scale was 0.86.

2.2.5. Compassion Fatigue Scale

The Compassion Fatigue Scale was established by Adams et al. (19). The Turkish study on the scale's validity and reliability concluded that it is a dependable and accurate measurement tool (20). The scale is a self-reporting evaluation instrument that prompts users to evaluate the degree to which each scale item accurately represents their personal experience. The Likert scale consists of 10 points, ranging from 1 (rarely/never) to 10 (very often). The scale comprises two sub-dimensions, namely secondary trauma and occupational burnout.The elements ''c, e, h, j, l'' on the scale pertain to secondary trauma, while items "a, b, d, f, g, i, k, m" assess professional burnout. The subscales of the scale exhibit Cronbach's alpha coefficients ranging from 0.80 to 0.90,

indicating satisfactory internal reliability. The scale does not specify any scoring algorithm or cut-off point. The minimum score on this scale is 13, while the maximum value is 130. According to Adams et al. (19), there is a positive correlation between the scores on the scale and the level of compassion fatigue experienced by the individual. Dinc and Ekinci (20) determined Cronbach'salpha coefficientas 0.88, the study determined that the Cronbach's alpha coefficient for the Compassion Fatigue Scale was 0.92.

2.3. Data Collection

The research data was obtained by sending out the link for the survey that was created with Google Forms. In the first part of the prepared questionnaire, a voluntary consent form explaining the purpose and scope of the study was included. The second part of the questionnaire included questions belonging to the Individual Characteristics Form, the Work Volition Scale, and the Compassion Fatigue Scale. The responses of individuals who had approved the voluntary consent form were evaluated. Only the participants accessed the research questions and only the researchers accessed the data. The necessary importance was given to voluntary participation and data privacy. Google Forms link was sent to the participants via WhatsApp.The time for answering the survey questions is approximately 8-10 minutes.

2.4. Ethical Consideration

Firstly the approval was obtained from the Scientific Research Platform established by the Ministry of Health of the Republic of Turkey for carrying out the research and collecting the data. After getting approval from the Ministry of Health,. Ethical approval was obtained from the Ethics Committee of Hamidiye Scientific Research of the T.R. Health Sciences University (Date: 25.12.2020, Decision No: 20/523). Permissions were obtained for the Compassion Fatigue questionnaire and the Work Volition questionnaire applied to the participants in the study.The study was conducted in compliance with the principles of the Helsinki Declaration.

2.5. Data Analysis

The research data was evaluated using the Statistical Package for the Social Sciences (SPSS 22.0 for Windows, SPSS Inc., Chicago, IL) application. In the data evaluation, the Kolmogorov-Smirnov test was used to evaluate the conformity of the relevant variables to normal distribution in order to determine the statistical method to be used. The analysis of descriptive data was evaluated with numbers, percentages, medians, minimum, maximum, mean and standard deviation values. Spearman's correlation coefficient was used to indicate the relationship between the two variables. Regression analysis was used to measure associations between two or more variables.Statistical significance was accepted as $p<.05$. In addition, the survey results were evaluated collectively using Principle Component Analysis (PCA). The analysis was performed using the open-source code of R (V3.6.1, https://www.r-project.org).

3. RESULTS

The survey revealed that 64% of the participating nurses were aged 30 or below. Additionally, 80% of the nurses were female, 58% were unmarried, and the analysis of their educational status showed that 85% held a Bachelor's degree while 14.9% had a Master's degree. Table 1 reveals that 42.5% of the nurses had a work experience of 6 months or less in COVID-19 intensive care units (Table 1).

Table 1. *Distribution of nurses according to descriptive characteristics (N=308)*

Characteristics	n	%
Age		
30 and below	199	64.6
31-40	74	24.0
40 and above	35	11.4
Sex		
Male	61	19.8
Female	247	80.2
Marital status		
Married	129	41.9
Single	179	58.1
Education Degree		
Bachelor's degree	262	85.1
Master's degree	46	14.9
Years Working as a Nurse		
0-1 Years	45	14.6
2-3 Years	72	23.4
4-5 Years	42	13.6
6-10 Years	55	17.9
11-20 Years	65	21.1
20 Years or more	29	9.4
Years Working in an Intensive Care Unit		
0-1 years	87	28.2
2-3 years	87	28.2
4-5 years	47	15.3
6-10 years	48	15.6
10 years or more	39	12.7
Period of working in the COVID-19 intensive care unit		
6 months or less	131	42.5
7-12 months	116	37.7
More thanone year	61	19.8

The compassion fatigue total mean score of the participants was 79.91±25.04. In the subscale sof compassion fatigue, mean occupational burnout was 49.12±15.61, and the mean of secondary traumawas 30.78±10.92. The overall mean of the participants' work volition was found to be 50.28±10.65. In the subscales of work volition, the structural constraints mean was 18.13±5.13, the financial constraints mean was 17.67±7.34, and the willpower mean was 14.48±5.31 (Table 2)

Table 2. *Compassion fatigue and work volition mean scores (N=308)*

Scales	Mean±SD	Min	Max
Work Volition Total	50.28±10.65	14.000	77.000
Willpower	14.48±5.31	4.000	28.000
Financial constraints	17.67±7.34	5.000	35.000
Structural constraints	18.13±5.13	4.000	28.000
Compassion Fatigue total	79.91±25.04	20.000	130.000
Secondary trauma	30.79±10.92	5.000	50.000
Occupational burnout	49.12±15.61	8.000	80.000

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

The study revealed a modest positive link between the overall levels of compassion fatigue and work willingness among the participating nurses (r=.235, *p<.001*). The nurses' compassion fatigue and willpower exhibited a fairly significant negative connection (r= – .367, *p<.001*). The study revealed a significant and moderate association between the total score of the compassion fatigue scale and the subscales of financial limitations (r=.356, *p<.001*) and structural restrictions (r=.356, *p<.001*) in the work volition scale (Table 3).

Table 3. *Correlation analysis between compassion fatigue and work volition scores (N=308)*

Scales		Work Volition Total	Willpower	Financial Constraints	Structural Constraints
Compassion Fatigue Total	r	.235**	-.367**	.356**	.356**
	p	.001	.001	.001	.001
Secondary trauma	r	.116*	-.279**	.230**	.199**
	p	.042	.001	.001	.001
Occupational burnout	r	.295**	-.393**	.410**	.432**
	p	.001	.001	.001	.001

**p<.05; **p<.01; r: Spearman's correlation coefficient*

The regression analysis conducted to establish the cause-effect link between the overall compassion fatigue score and the total labor volition score yielded a significant result (F=17.808; *p<.001*).Out of the total change in the level of work volition, 5.2% is explained by the total of compassion fatigue (R2=0.052). It was found that the total level of compassion fatigue increased the total level of work volition (ß=.100) (Table 4).

When we look at the distribution of the participants by gender, approximately 26% of the women and less than 5% of the men were found to have compassion fatigue. High levels of compassion fatigue were detected in approximately 33% of men and 26% of women (Figure 1A-1B). When this distribution was broadened to individuals' marital status, it was found that approximately 11% of women with low compassion fatigue were married, and 15% were single. About 10% of the women with high compassion fatigue were married, and 15% were single. In males, this condition was approximately 20% in married men and 13% in singles (Figure 1C-1D).

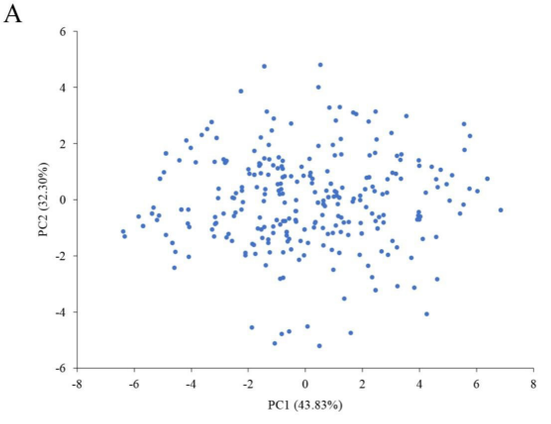
While individuals with low compassion fatigue differed from the others in questions 12, 1, 2 and 9, individuals with high compassion fatigue differed from the others in questions 14, 15, 8, 11, 3, 13, 7, 5, 6, 10 and 4. Individuals with moderate compassion fatigue differed from the others in the rest of the questions (Figure 2A). The highest compassion fatigue was observed in males, with married and university-graduate individuals representing approximately 16% of the total sample, followed by single-female university graduatex (12%), single-male university graduates (11%) and married-female university graduates (9%), respectively. (Figure 2B). The lowest compassion fatigue was observed in female-unmarried university graduates (13%) (Figure 2C) and female-married university graduates (9%) (Figure 2C).

Table 4. *The effect of compassion fatigue on work volition (N=308)*

The Dependent Variable	The Independent Variable	ß	t	p	F	Model (p)	R^2
Work Volition Total	Constant	42.318	21.381	.001	17.808	.001	.052
	Compassion Fatigue Total	.100	4.220	.001			
Work Volition Total	Constant	41.553	21.621	.001	20.450	.001	.112
	Secondary Trauma	-.272	-3.290	.001			
	Occupational Burnout	.349	6.020	.001			
Willpower	Constant	20.927	22.319	.001	28.237	.001	.151
	Secondary Trauma	.031	.770	.442			
	Occupational Burnout	-.151	-5.331	.001			
Financial Constraints	Constant	8.800	6.918	.001	35.119	.001	.182
	Secondary Trauma	-.146	-2.660	.008			
	Occupational Burnout	.272	7.092	.001			
Structural Constraints	Constant	11.826	13.668	.001	45.907	.001	.226
	Secondary Trauma	-.158	-4.232	.001			
	Occupational Burnout	.227	8.720	.001			

Regression analysis, p<.05 value indicates statistically significant.

A



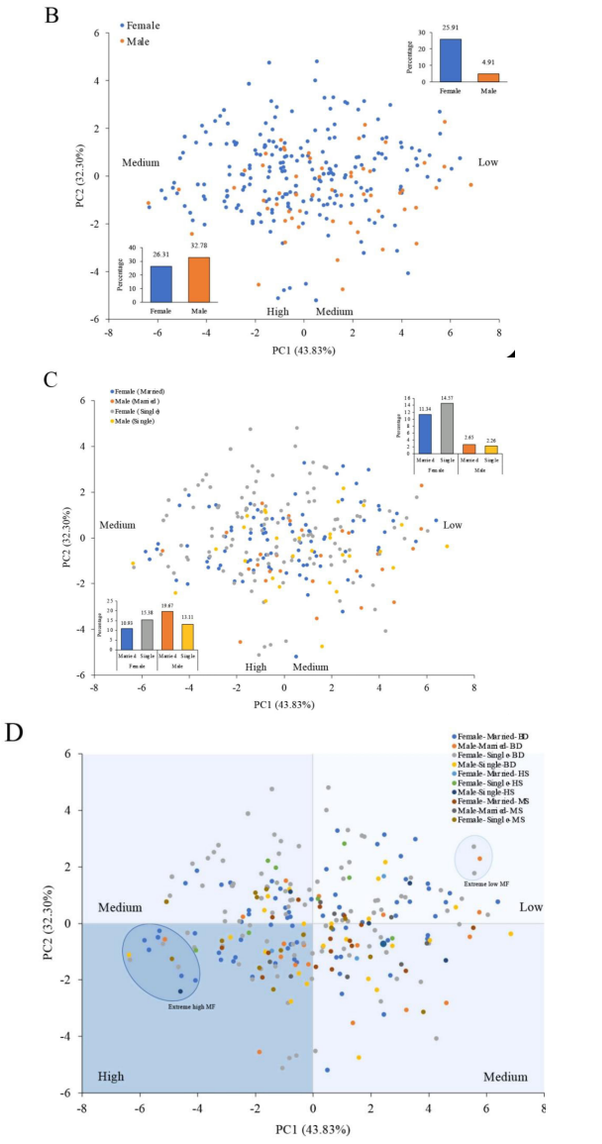


Figure 1. *Differentiation of compassion fatigue scores by descriptive characteristic*

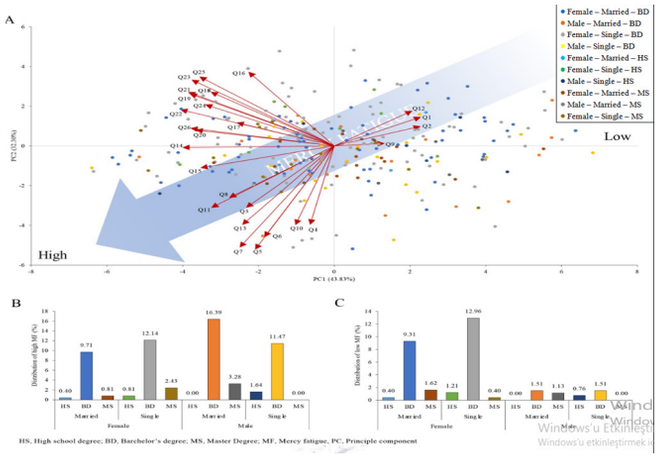


Figure 2. *Variation of will to work scores according to descriptive characteristics*

4. DISCUSSION

This study aimed to assess the prevalence of compassion fatigue and work volition among intensive care nurses who had been employed in intensive care units during the COVID-19 pandemic. The study revealed notable demographic characteristics among participating nurses, with a significant majority being young and predominantly female. A considerable portion of the nurses were unmarried, and the majority held at least a Bachelor's degree.These results are similar to other studies (21-23). These demographics provide context for understanding the profile of nurses working in intensive care units during the COVID-19 pandemic, highlighting potential factors influencing their experiences of compassion fatigue and work volition.

The results revealed a high prevalence of compassion fatigue and a moderate level of work volition. Another study among emergency department health professionals in Turkey found a strong negative association between burnout and job satisfaction. (24). Additionally, it has been reported that as nurses' compassion fatigue levels increase, they do not reflect their knowledge and skills in their care practices (25-27). These scores underscore the challenges faced by ıntensıve care units nurses in maintaining motivation and overcoming various barriers to effective job performance amidst the demanding conditions imposed by the pandemic.

The study identified a substantial causal link between work volition, secondary trauma, and professional burnout.The study observed that the overall score of compassion fatigue among critical care nurses was found to correlate with an increase in their whole degree of job motivation.Professional burnout heightened the overall degree of work motivation. Compared with study among Chinese clinical nurses in Shanghai (28), our current findings represent similar levels of compassion fatigue, but higher burnout and secondary traumatic stress. Studies have also, nurses with secondary traumatic stress were more likely to consider a change of career (29). This suggests that the results might be related to societal cultural values and the socioeconomic status of the individuals in the community. More well-designed studies are needed in different socioeconomic and social surroundings so that evidence in this context can be produced.

The study underscore the multifaceted nature of compassion fatigue and its implications for nurses' work volition in intensive care settings. It is reported that nurses who choose their profession voluntarily develop better professional relations and work with greater satisfaction (30,31). It is believed in the context of work volition that when nurses willingly choose their profession, they are more successful in achieving holistic care in crucial units of the hospital, such as intensive care; they are better able to make and apply decisions quickly, are less affected emotionally, and are generally more equipped to cope with any professional difficulties they may encounter.

The regression analysis conducted to establish the cause-effect link between the overall compassion fatigue score and

the total labor volition score yielded a significant result. Five percent of the total change in the level of willingness to work is explained by total compassion fatigue. Total compassion fatigue level was found to increase total willingness to work level. In studies, it was stated that nurses with compassion fatigue had changes in their work performance, work-related attitudes and behaviours (32,33). The regression findings highlight the critical role of compassion fatigue, secondary trauma, and occupational burnout in shaping nurses' work volition and overall job engagement in intensive care settings. Healthcare organizations should prioritize interventions aimed at reducing compassion fatigue and mitigating its detrimental effects on nurse well-being and performance.

Gender and marital status differences were evident in the distribution of compassion fatigue levels among participants.Higher proportions of men exhibited high levels of compassion fatigue compared to women, despite women overall experiencing compassion fatigue more frequently. The study conducted by Sacco et al. revealed that the prevalence of compassion fatigue was greater among unmarried nurses employed in the intensive care unit (34).This may be attributed to the fact that since men were perhaps taking on more financial and social responsibilities in their marriage, they felt the burden of added responsibility as a result of the new situation.

The results thus indicate that in critical periods such as a global pandemic, healthcare personnel who face an increased workload need to be supported in their social environment, family life, and financial situation to ensure improvements in healthcare.

There are various constraints in this study. Firstly, the study is limited to intensive care nurses working in nine hospitals in Istanbul. Furthermore, the data obtained from the participants are limited to their responses to the Compassion Fatigue Scale and the Work Volition Scale via Google Forms. Consequently, the findings cannot be extrapolated to encompass all nurses employed in intensive care units.

5. CONCLUSION

The findings of our study revealed a positive correlation between the escalation of compassion fatigue among intensive care nurses during the COVID-19 epidemic and an increase in their work volition. The findings underscore the complex interplay between compassion fatigue, work volition, and demographic factors among intensive care nurses during the COVID-19 pandemic. Addressing compassion fatigue requires multifaceted interventions that encompass organizational support, mental health resources, and policy initiatives aimed at promoting resilience and well-being among healthcare professionals. By understanding these dynamics, healthcare organizations, and policymakers can better support intensive care nurses and ensure sustainable healthcare delivery.Further research is recommended to explore longitudinal effects and interventions that effectively mitigate compassion fatigue in intensive care settings, thereby fostering a resilient and motivated nursing workforce.

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Design of the study: FŞ, SG
Acquisition of data for the study: FŞ, SG, EG
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REFERENCES

[1] Kıraner, E., Terzi, B., Türkmen, E., Kebapcı, A., Bozkurt, G. Experiences of Turkish intensive care nurses in the COVID-19 outbreak. J Educ Res Nurs. 2020;17(3): 284-286. DOI: 10.5222/HEAD.2020.35556

[2] Yılmaz E, Vermişli S. The effect of professionalization on job satisfaction of nurses working in intensive care units. Journals of AYBU. 2016;4(1): 17-27.

[3] Dalcalı BK, Şendir M. Determining the relationship between nurses' personal values and ethical sensitivities. Flor Night J Nurs. 2016;24(1): 1-9.

[4] Filizöz B, Mesci G, Aşcı A, Bağcıvan E. Ethical sensitivity in nurses: A study in Sivas province central public hospitals. J Bus Ethics. 2015;8(1):47-66. DOI: 10.12711/tjbe.2015.8.1.0144

[5] Buheji M, Buhaid N. Nursing human factor during COVID-19 pandemic. Int J Nurs Sci. 2020;10(1):12-24. DOI: 10.5923/j.nursing.20201001.02

[6] Kıraner E, Terzi B, Yayık AK, Aydoğan S, Doğanay Ö, Yakut T, Kars DG. The role of the intensive care nurse in the COVID-19 pandemic process. Journal of Izmir Katip Celebi University Faculty of Health Sciences 2021;6(1): 45-48.

[7] Morley G, Grady C, McCarthy J, Ulrich CM. Covid-19: Ethical challenges for nurses. Hastings Center Report 2020;50(3): 35-39.DOI:10.1002/hast.1110

[8] Şirin M, Yurttaş A. The price of nursing care: Compassion fatigue. Electronic Journal of Dokuz Eylul University Faculty of Nursing 2015;8(2):123-130.

[9] Alharbi J, Jackson D, Usher K. Compassion fatigue in critical care nurses. An integrative review of the literature. Saudi Med J. 2019;40(11):1087-1097. DOI: 10.15537/smj.2019.11.24569.

[10] Blustein DL. The psychology of working: Exploring the inner world of dreams and disappointments. Lawrence Erlbaum; 2006.p. 110-120.

[11] Blustein DL. The role of work in Psychological health and well-being: A conceptual, historical, and public policy perspective. American Psychologist. 2008;63(4):228-240. DOI:10.1037/0003-066X.63.4.228

[12] Duffy RD, Diemer MA, Perry JC, Laurenzi C, Torrey CL. The construction and initial validation of the Work Volition

Scale. J Vocat Behav. 2012;80(2),400-411. DOI:10.1016/j.jvb.2011.04.002

[13] Duffy RD, Blustein DL, Diemer MA, Autin KL. The psychology of working theory. J Couns psychol. 2016;63(2):127. DOI:10.1037/cou0000140

[14] Figley CR. Compassion Fatigue as Secondary Traumatic Stress Disorder: An Overview. In: Figley CR, editor. Compassion fatigue: Coping with secondary traumatic stress disorder. New York: Brunner/Mazel; 1995. p. 1–17.

[15] Joinson C. Coping with compassion fatigue. Nursing 1992;22(4):116-118.

[16] Yesilcinar I, Yanik D, Sahin E. Determination of relationship between moral sensitivity, job motivation and hopelessness in intensive care nurses. J Contemp Med. 2020;10(4):578-584. DOI: 10.16899/jcm.706285

[17] Hinderer KA, Von Rueden KT, Friedmann E, A Mc Quillan K, Gilmore R, Kramer B, Murrey M. Burnout Compassion fatigue, compassion satisfaction, and secondary traumatic stress in trauma nurses. J Trauma Nurs. 2014;21(4):160-169. DOI: 10.1097/JTN.000.000.0000000055.

[18] Büyükgöze KA, Unal S. Will to Work Scale: Validity and Reliability Study. J Employ Couns. 2019;2(2):194-214.

[19] Adams RE, Boscarino JA, Figley CR. Compassion fatigue and psychological distress among social workers: A validation study. AJO. 2006;76(1):103-108. DOI:10.1037/0002-9432.76.1.103

[20] Dinç S, Ekinci M. Turkish adaptation, validity and reliability of compassion fatigue short scale. Current Approaches in Psychiatry 2019;11:192-202. DOI:10.18863/pgy.590616

[21] Salmond E, Salmond S, Ames M, Kamienski M, Holly C. Experiences of compassion fatigue in direct care nurses: A qualitative systematic review. JBI Evidence Synthesis. 2019;17(5):682-753.DOI: 10.11124/JBISRIR-2017-003818.

[22] Wijdenes KL, Badger TA, Sheppard KG. Assessing compassion fatigue risk among nurses in a large urban trauma center. J Nurs Adm. 2019;49(1):19-23. DOI:10.1097/NNA.000.000.0000000702.

[23] .,Xie W, Wang J, Okoli CT, He H, Feng F, Zhuang L, Tang P, Zeng L, Jin M. Prevalence and factors of compassion fatigue among Chinese psychiatric nurses: A cross-sectional study. Medicine 2020;99(29): e21083. DOI:10.1097/MD.000.000.0000021083

[24] Tarcan M, Hikmet N, Schooley B, Top M, Tarcan GY. An analysis of the relationship between burnout, socio-demographic and workplace factors and job satisfaction among emergency department health professionals. Appl Nurs Res. 2017;34:40-47. DOI:10.1016/j.apnr.2017.02.011

[25] Alharbi J, Jackson D, Usher K. Personal characteristics, coping strategies, and resilience impact on compassion fatigue in critical care nurses: A cross-sectional study. Nurs Health Sci. 2020;22(1):20-27.DOI:10.1111/nhs.12650

[26] Dığın F, Özkan ZK, Şahin AD. Determination of the relationship between compassion fatigue and caring behaviors of surgical nurses. Turk J Med Sci. 2022;7(2): 272-277. DOI:10.26453/otjhs.1055157

[27] 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;61:151476. DOI:10.1016/j.apnr.2021.151476

[28] Yu H, Jiang A, Shen J. Prevalence and predictors of compassion fatigue, burnout and compassion satisfaction among oncology nurses: A cross-sectional survey. Int J Nurs Stud. 2016;57:28-38. DOI:10.1016/j.ijnurstu.2016.01.012

[29] Duffy E, Avalos G, Dowling M. Secondary traumatic stress among emergency nurses: A cross-sectional study. Int Emerg Nurs. 2015;23(2):53-58. DOI:10.1016/j.ienj.2014.05.001

[30] Kişmir Ş, İrge NT. The Effect of compassion fatigue level on employee motivation and job satisfaction: An application on healthcare professionals. R&S-Research Studies Anatolia Journal 2020;3(1),1-18. DOI:10.33723/rs.672142

[31] Bitek DE, Akyol A. Research on the relationship between intensive care nurses' perceptions of the working environment and their job satisfaction. Journal of Intensive Care Nursing 2017;21(1):1-6.

[32] Mollaoğlu M, Fertelli TK, Tuncay FÖ. Evaluation of the perceptions of nurses working in the hospital about their working environment. Fırat Journal of Health Services 2010;5(15):17-30.

[33] Mohammadi M, Peyrovi H, Mahmoodi M. The relationship between professional quality of life and caring ability in critical care nurses. Dimens Crit Care Nurse. 2017;36:273-277. DOI: 10.1097/DCC.000.000.0000000263

[34] Sacco TL, Ciurzynski SM, Harvey ME, Ingersoll GL. Compassion satisfaction and compassion fatigue among critical care nurses. Crit Care Nurse. 2015;35(4):32-42. DOI:10.4037/ccn2015392

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