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## Research Article

### Compassion Satisfaction, Compassion Fatigue, and Burnout among Nurses

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### Abstract

**Objective:** This research aimed to explore the compassion satisfaction, compassion fatigue and burnout levels of nurses and the correlations between these variables.

**Materials and Methods:** The research used a correlational descriptive cross-sectional design. This research was conducted with 185 nurses in a state hospital in the Central Anatolia region of Turkey between October-November 2018. Data were collected using a questionnaire form and the professional quality of life scale.

**Results:** Nurses' compassion satisfaction was found to be low, their compassion fatigue was high, and their burnout was moderate. A negative, weak, and significant correlation was found between compassion satisfaction and compassion fatigue. There was a negative, weak, and insignificant correlation between compassion satisfaction and burnout, while a positive and highly significant correlation was found between compassion fatigue and burnout.

**Conclusions:** Some intervention programs can be developed to reduce high levels of compassion fatigue among nurses. Also, stressors in the care environment/medium can be identified, and nurses' exposure to these stressors can be prevented. Thus, compassion fatigue and burnout reduced, compassion satisfaction can be increased.

**Keywords:** Compassion Satisfaction, Compassion Fatigue, Burnout, Nurse.

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## Hemşirelerde Merhamet Memnuniyeti, Merhamet Yorgunluğu ve Tükenmişlik Düzeyi

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### Öz

**Amaç:** Bu çalışmanın amacı, hemşirelerin merhamet memnuniyeti, merhamet yorgunluğu ve tükenmişlik düzeylerini ve merhamet memnuniyeti, merhamet yorgunluğu ve tükenmişlik arasındaki ilişkileri incelemektir.

**Materyal Metod:** Çalışma ilişkisel tanımlayıcı kesitsel bir tasarımdadır. Çalışma Türkiye'nin İç Anadolu Bölgesi'ndeki bir devlet hastanesinde, Ekim-Kasım 2018 tarihleri arasında 185 hemşire ile yapıldı. Veriler anket formu ve çalışanlar için yaşam kalitesi ölçeği ile toplandı.

**Bulgular:** Hemşirelerin merhamet memnuniyeti düşük düzeyde, merhamet yorgunluğu yüksek düzeyde ve tükenmişlik orta düzeyde olduğu belirlendi. Merhamet memnuniyeti ile merhamet yorgunluğu arasında negatif yönde zayıf anlamlı, merhamet memnuniyeti ile tükenmişlik arasında negatif yönde zayıf anlamsız ve merhamet yorgunluğu ile tükenmişlik arasında pozitif yönde yüksek anlamlı ilişki olduğu bulundu.

**Sonuç:** Yüksek düzeyde merhamet yorgunluğunu azaltmak için müdahale programları geliştirilebilir. Ayrıca bakım çevresinde/ortamındaki stresörlerin belirlenerek hemşirenin bu stresörlere maruz kalması önlenabilir. Böylece merhamet yorgunluğu azalabilir dolayısıyla tükenmişlik azalabilir ve merhamet memnuniyeti artabilir.

**Anahtar Kelimeler:** Merhamet Memnuniyeti, Merhamet Yorgunluğu, Tükenmişlik, Hemşire.

## INTRODUCTION

Nurses work under stressful and demanding work conditions. Also, they do not usually have ideal working environments (e.g. long and varying work schedules) (Stamm, 2010). Nurses are hoped to ensure compassionate and empathetic care to anyone in need, regardless of circumstances. However nurses often have to act quickly, make very critical decisions promptly, and give patient care under very insecure conditions since the cases they are engaged in are often a matter of life and death. In this case too much stress in the work environment can lead to problems such as compassion dissatisfaction, compassion fatigue, and burnout in nurses (Hiçdurmaz and Arı İnci, 2015; Kavlu and Pınar, 2009).

For the Turkish equivalent of the word "compassion", the words "compassion, mercy and pity" are used. Compassion, a response to human fragility; By its very nature, it activates people by creating a desire to act on behalf of others. The state of taking action, in other words, compassionate behavior; distinguishes compassion from empathy, sympathy and pity. Compassion, which is seen as a motivation to take action to alleviate the suffering of others, is the ideal of nursing (Ledoux, 2015).

Compassion satisfaction is the sum of all positive emotions that one perceives from helping others (Rajan et al., 2019). Compassion satisfaction arises from the satisfaction that individuals feel when they are doing their job well and helping others. Compassion satisfaction is said to reduce the risk of compassion fatigue (Flarity et al.) and the harmful effects of compassion fatigue (Najjar et al.). Hunsanker et al. (2015) stated that compassion satisfaction in nursing was related to positive feelings about things that are done for someone (Hunsaker et al., 2015). Hooper et al. (2010) described compassion satisfaction as having the characteristics to keep the negative effects observed while giving care to traumatized patients with serious illnesses in balance. People who can get satisfied with helping others perform their role of helping more, and therefore they reduce their tendency to experience compassion fatigue (Hooper et al., 2010). The relationship between nurse and patient based on compassion satisfaction supports and improves the nurse's ability to maintain care with a positive attitude. Stamm (2010) also stated that compassion satisfaction is a factor preventing both compassion fatigue and burnout development (Stamm, 2010). Compassion satisfaction, enjoying the work done, creating new life values; Compassion fatigue, on the other hand, is defined as the negative effect of helping individuals who have experienced a traumatic event or who are suffering from pain (Stamm, 2010).

Compassion fatigue is a condition that mounts up and progresses as a result of long-term, constant, and dense connection with patients, causes multi-dimensional stress exposure in nurses, and results in compassion discomfort that exceeds the limits that one can stand. Compassion fatigue is a state of exhaustion of compassion energy due to the progression of negative changes in physical, emotional, spiritual, social, and intellectual situations (Coetzee and Kloppe, 2010). As professionals, nurses are compassionate individuals and caregivers who ensure help, cure, and encouragement when personal suffer from physical, emotional, and spiritual issues. The process of providing nursing services may cause compassion fatigue in nurses (Harris and Griffin, 2015). Continuous exposure to stress and traumatic experiences in the natural process of nursing can lead to decreased compassion satisfaction and increased compassion fatigue and burnout (Halfer and Graf, 2006). Burnout is associated with problems in the work environment and is a gradual process (Braunschneider, 2013). Burnout, on the other hand, is a term used to define negative attitudes and behaviors towards work. In burnout, the individual experiences weakness, frustration, difficulty handling work, and disability to meet business targets.

Compassion fatigue and burnout is not only a condition that negatively affects the happiness, satisfaction, and willingness of nurses in their professions but also a negative impact on patient outcomes and satisfaction with health services (Zhang et al., 2018). As is seen, the negative compassion satisfaction, compassion fatigue, and burnout experienced by nurses affect nurses' happiness, health, and nursing service practices negatively. Despite the present situation, there is limited research into compassion satisfaction, compassion fatigue, and burnout among nurses in Turkey. Determining the level of compassion satisfaction, compassion fatigue, and burnout levels of nurses and the correlation of these variables with each other can contribute to nurses in giving patient care under safe conditions and prevent the damage to nurses' professional identities by having necessary measures taken.

### **Research Questions**

What are the nurses' compassion satisfaction, compassion fatigue and burnout levels?

What are the relationships between compassion satisfaction, compassion fatigue and burnout?

### **MATERIALS AND METHODS**

#### **Research Design, Sample, and Data Collection**

The study was a descriptive cross-sectional design.

The research was carried out in a state hospital in the Central Anatolia region of Turkey between October and November 2018. The population of the research was made up of 251 nurses working in medical and surgical clinics and intensive care units at the time of the study. On the other hand, the sample of the research consisted of 185 nurses who volunteered to participate in the study (rate of participation: 73.70%). At the outset, the aim of this study was accounted for the nurses, and volunteer participation was ensured. Then, the data collection forms were delivered, and the subjects were asked to complete the forms. It took about 10-15 minutes to complete the data collection forms.

### **Data Collection Tools**

Data were gathered by using a descriptive information form and the professional quality of life scale (ProQOL R-IV).

### **Descriptive Information Form**

This form consisted of seven questions intending to determine demographic information (age, gender, marital status, educational background, the unit, term of employment, and weekly working hours) and work-related characteristics of nurses.

### **The Professional Quality of Life Scale (ProQOL R-IV)**

The Turkish validity and reliability study of the ProQOL was conducted by Yeşil et al. (Yeşil et al., 2010). It is a 6-point Likert type scale consisting of 30 items and three subscales including compassion satisfaction, burnout, and compassion fatigue. In the scoring of the scale, items 1, 4, 15, 17, and 29 are inversed. Items related to the “compassion satisfaction” subscale cover the satisfaction/contentment and fulfillment that the employee feels as a result of helping another person in need of help in a field related to their profession or job. The maximum score that can be obtained from the compassion satisfaction subscale is 50. Scores between 0 and 33 show low professional satisfaction, scores between 34 and 42 indicate medium satisfaction, and scores between 43 and 50 denote high satisfaction.

The items of the “Burnout” subscale measure the feeling of burnout that results from hopelessness and difficulties in coping with problems emerging in work life. The maximum score that can be obtained from this subscale is 50. Scores between 0 and 18 show a low level of burnout, scores between 19 and 27 points indicate medium burnout, and scores between 28 and 50 signify high burnout.

On the other hand, the items in the "compassion fatigue" subscale measure symptoms that arise as a result of encountering stressful events/cases. Individuals getting high scores from this subscale are recommended to get support/assistance. The highest score that can be obtained from this subscale is also 50. Scores between 0 and 8 show a low level of compassion fatigue, scores between 9 and 17 indicate moderate fatigue, and scores between 18 and 50 indicate that secondary traumatic stress is high. Cronbach's alpha values of the subscales are as follows: compassion satisfaction, 0.819; burnout, 0.622; and compassion fatigue, 0.835 (Yeşil et al., 2010). In this study, Cronbach's alpha values of the subscales were calculated as follows: compassion satisfaction, 0.872; burnout, 0.602; and compassion fatigue 0.760.

### **Data Analysis**

SPSS (Statistical Package for Social Science) 22.0 was used to analyze the data. Demographic and work-related variables were assessed with descriptive statistics. The normality analysis of the data was done with the Shapiro-Wilk test. Pearson correlation test was used because the data were normally distributed. Pearson correlations were used to assess the relationships of compassion satisfaction, burnout and compassion fatigue. The statistical significance level was accepted as  $p < .05$ .

### **Ethical Consideration**

At the outset, the ethics committee approval (decision no: 2018.08.89) was obtained from the Ethics Committee of the University where the research was carried out. The institutional permission was obtained from the Provincial Health Directorate to which the State Hospital is affiliated. Also, the nurses were informed about the purpose of the study, and their verbal consent and informed consent forms were obtained.

## **RESULTS**

Of the nurses participating in the research, 90.3% were female, 78.9% were married, 60.0% had an undergraduate degree, and 54.1% were working in the surgical clinic. The mean age was  $37.82 \pm 8.40$  years, the term of employment was  $17.02 \pm 9.45$  years, %48.6 were working continuous daytime, %46.5 were working shift work, %4.9 were working continuous night and weekly working hours were determined as  $44.89 \pm 8.51$  (Table 1).

**Table 1.** Descriptive characteristics of nurses (N=185)

Characteristics	n	%
<b>Gender</b>		
Female	167	90.3
Male	18	9.7
<b>Marital status</b>		
Married	146	78.9
Single	39	21.1
<b>Educational status</b>		
High school	14	7.6
Associate degree	49	26.5
Graduate	111	60.0
Postgraduate	11	5.9
<b>Working unit</b>		
Medical clinic	55	29.7
Surgical clinic	100	54.1
Intensive care unit	30	16.2
<b>Working status</b>		
Continuous daytime	90	48.6
Shift work	86	46.5
Continuous night	9	4.9
<b>Age (years) (M±SD)</b>	37.82±8.40	
<b>Term of employment (years) (M±SD)</b>	17.02±9.45	
<b>Weekly working hours (M±SD)</b>	44.89±8.51	

M: Mean; SD: Standard Deviation

The mean scores of the nurses participating in the research obtained from compassion satisfaction, compassion fatigue, and burnout subscales were  $30.76 \pm 8.94$ ,  $16.23 \pm 7.00$ , and  $27.62 \pm 5.10$ , respectively (Table 2).

**Table 2.** Compassion Satisfaction, Compassion Fatigue and Burnout Scores of Nurses (N=185)

Variables	M±SD
<b>Compassion Satisfaction</b>	30.76±8.94
<b>Compassion Fatigue</b>	16.23±7.00
<b>Burnout</b>	27.62±5.10

M: Mean; SD: Standard Deviation

A negative, weak, and significant correlation was found between compassion satisfaction and compassion fatigue ( $r = -.214$ ,  $p = .003$ ). A negative, weak, and insignificant correlation was found between compassion satisfaction and burnout ( $r = -.029$ ,  $p = .695$ ). Also, a positive and highly significant correlation was determined between compassion fatigue and burnout ( $r = .652$ ,  $p = .001$ ) (Table 3).

**Table 3.** Compassion Fatigue, Compassion Satisfaction and Burnout Correlations (N=185)

Variables	Compassion Satisfaction	Compassion Fatigue	Burnout
	<b>r (p)</b>	<b>r (p)</b>	<b>r (p)</b>
<b>Compassion Satisfaction</b>	<b>1</b>	-.214** (.003)	-.029 (.695)
<b>Compassion Fatigue</b>	-.214** (.003)	<b>1</b>	.652** (.001)
<b>Burnout</b>	-.029 (.695)	.652** (.001)	<b>1</b>

\*\* Correlation is significant at the 0.01 level (2-tailed). **r**: Pearson Correlation **p**: p value

## DISCUSSION

Nurses who work with patients and their families in the healthcare setting are at risk of negative compassion satisfaction, compassion fatigue, and burnout due to sudden, potentially tragic and complex outcomes (Mason et al., 2014; Oh and Gastmans, 2015). When these situations occur, they not only harm the nurse emotionally, but also cause a decrease in work efficiency and errors (McHolm, 2006). Negative compassion satisfaction, compassion fatigue and burnout experienced by nurses negatively affect nurses' happiness, health and nursing service practices.

This research aimed to investigate the compassion satisfaction, compassion fatigue, and burnout levels of nurses and the correlations between these variables. The study found that the nurses had a low level of compassion satisfaction, a high level of compassion fatigue, and a moderate level of burnout (Table 2). Other studies reported level of compassion satisfaction among nurses low (Choi et al., 2017; Coşkun et al., 2015; Mangoulia et al., 2015; Yu et al., 2016) and moderate (Hinderer et al., 2014; Hooper et al., 2010; Hunsaker et al., 2015; Patricia et al., 2010; Rajan et al., 2019; Vaillancourt and Wasylkiw, 2019; Wentzel and Brysiewicz, 2018; Wu et al., 2016;), level of compassion fatigue among nurses medium (Hooper et al., 2010; Potter et al., 2010) and high (Choi et al., 2017; Coşkun et al., 2015; Hinderer et al., 2014; Hunsaker et al., 2015; Mangoulia et al., 2015; Rajan et al., 2019; Vaillancourt and Wasylkiw, 2019; Wentzel and Brysiewicz, 2018; Wu et al., 2016; Yu et al., 2016), and level of burnout among nurses medium



(Coşkun et al., 2015; Hinderer et al., 2014; Hooper et al., 2010; Hunsaker et al., 2015; Mangoulia et al., 2015; Patricia et al., 2010; Rajan et al., 2019; Vaillancourt and Wasylikiw, 2019; Wentzel and Brysiewicz, 2018; Wu et al., 2016; Yu et al., 2016) and high (Choi et al., 2017).

Nurses may experience physical, emotional, social, and psychological stress that may affect the provision of nursing services in their work environments. Nurses are at risk of experiencing negative effects in terms of compassion satisfaction, compassion fatigue, and burnout related to the stress experienced in the work circumference (Sinclair et al., 2017). Therefore, the results of this research are important in terms of the presence of stressors arising from the work circumference of nurses and adversely affecting compassion satisfaction, compassion fatigue, and burnout levels. For this reason, it is necessary to identify the stressors arising from the work circumference of nurses.

Besides, the results of this study indicated that increased compassion satisfaction would reduce compassion fatigue and burnout and that increased compassion fatigue would result in increased burnout (Table 3). This result obtained from the study also confirmed the findings of previous studies (Choi et al., 2017; Hinderer et al., 2014; Mangoulia et al., 2015; Meyer et al., 2015; Smart et al., 2014; Vaillancourt and Wasylikiw, 2019; Zhang et al., 2018). Accordingly, this finding showed that decreased compassion fatigue would increase compassion satisfaction and reduce burnout. These findings are important in showing that nursing services management should address nurses' exposure to stress in the work circumference and its consequences. Furthermore, the results of this research also emphasize the importance of nursing services management in developing and implementing programs that strengthen nurses' skills for coping with stress in the work environment. Given the fact that exposure to stressful occurrences in the provision of nursing services is frequently experienced, strengthening nurses' skills for dealing with compassion fatigue should be accepted as a vital task.

## CONCLUSION

The findings of this research confirmed the findings of previous researcher. According to the results of the present research, nurses experience high levels of compassion fatigue, low levels of compassion satisfaction, and moderate burnout. We can, therefore, emphasize the need for developing intervention programs to reduce high levels of compassion fatigue. These programs can help nurses to cope with work-related stress. Also, care is the essence of nursing with its unique risks. For this reason, the nurses' exposure to stressors can be prevented by determining these stressors in the care environment/medium.

Thus, compassion fatigue can be reduced, which, in turn, will reduce burnout and increase compassion satisfaction. In addition, qualitative mixed studies can be conducted to clarify the burnout and compassion levels of nurses.

## REFERENCES

- Braunschneider, H. (2013). Preventing and managing compassion fatigue and burnout in nursing. *ESSAI*, 11(1), 11.
- Choi, H., Park, J., Park, M., Park, B., and Kim, Y. (2017). Relationship between job stress and compassion satisfaction, compassion fatigue, burnout for nurses in children's hospital. *Child Health Nurs Res*, 23(4), 459-469. <https://doi.org/10.4094/chnr.2017.23.4.459>
- Coşkun, S., Şarlak, K., and Taştan, H. (2015). An investigation on the level of learned resourcefulness and professional quality of life of psychiatric nurses: A comparative study. *Gümüşhane University Journal of Health Sciences*, 4(1), 84-101.
- Coetzee, S.K., and Klopper, H.C. (2010). Compassion fatigue within nursing practice: a concept analysis. *Nurs Health Sci*, 12(2), 235–43. <https://doi.org/10.1111/j.1442-2018.2010.00526.x>
- Flarity, K., Gentry, J. E., and Mesnikoff, N. (2013). The effectiveness of an educational program on preventing and treating compassion fatigue in emergency nurses. *Adv Emerg Nurs J*, 35(3), 247-258.
- Halfer, D., and Graf, E. (2006). Graduate nurse perceptions of the work experience. *Nursing Economics*, 24(3), 150-155.
- Harris, C., and Griffin, M. T. Q. (2015). Nursing on empty: Compassion fatigue signs, symptoms, and system interventions. *J Christ Nurs*, 32(2), 80-87. <https://doi.org/10.1097/CNJ.0000000000000155>
- Hiçdurmaz, D., and Arı İnci, F. (2015). Compassion fatigue: description, causes and prevention. *Current Approaches in Psychiatry*, 7(3), 295-303. <https://doi.org/10.5455/cap.20141128113430>
- Hinderer, K. A., VonRueden, K. T., Friedmann, E., McQuillan, K. A., Gilmore, R., Kramer, B., and Murray, M. (2014). Burnout, compassion fatigue, compassion satisfaction, and secondary traumatic stress in trauma nurses. *J Trauma Nurs*, 21(4), 160-169. <https://doi.org/10.1097/JTN.0000000000000055>
- Hooper, C., Craig, J., Janvrin, D. R., Wetsel, M. A., and Reimels, E. (2010). Compassion satisfaction, burnout, and compassion fatigue among emergency nurses compared with nurses in other selected inpatient specialties. *J Emerg Nurs*, 36(5), 420-427. <https://doi.org/10.1016/j.jen.2009.11.027>
- Hunsaker, S., Chen, H., Maughan, D., and Heaston, S. (2015). Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses. *J Nurs Scholarsh*, 47(2), 186-194. <https://doi.org/10.1111/jnu.12122>
- Kavlu, İ., and Pınar, R. (2009). Effects of job satisfaction and burnout on quality of life in nurses who work in emergency services. *Turk Klin Med Sci*, 29(6), 1543-1555.
- Ledoux, K. (2015). Understanding compassion fatigue: understanding compassion. *J Adv Nurs*, 71(9), 2041-2050.

- Mangoulia, P., Koukia, E., Alevizopoulos, G., Fildissis, G., and Katostaras, T. (2015). Prevalence of secondary traumatic stress among psychiatric nurses in greece. *Arch Psychiatr Nurs*, 29(5), 333-338. <https://doi.org/10.1016/j.apnu.2015.06.001>
- Mason, V. M., Leslie, G., Clark, K., Lyons, P., Walke, E., Butler, C., and Griffin, M. (2014). Compassion fatigue, moral distress, and work engagement in surgical intensive care unit trauma nurses: a pilot study. *Dimens Crit Care Nurs*, 33(4), 215-225. <https://doi.org/10.1097/DCC.0000000000000056>
- McHolm, F. (2006). Rx for compassion fatigue. *J Christ Nurs*, 23, 12-19.
- Meyer, R. M., Li, A., Klaristenfeld, J., and Gold, J. I. (2015). Pediatric novice nurses: examining compassion fatigue as a mediator between stress exposure and compassion satisfaction, burnout, and job satisfaction. *J Pediatr Nurs*, 30(1), 174-183. <https://doi.org/10.1016/j.pedn.2013.12.008>
- Najjar, N., Davis, L. W., Beck-Coon, K., and Carney Doebbeling, C. (2009). Compassion fatigue: A review of the research to date and relevance to cancer-care providers. *J Health Psychol*, 14(2), 267-277. <https://doi.org/10.1177/1359105308100211>
- Oh, Y., and Gastmans, C. (2015). Moral distress experienced by nurses: a quantitative literature review. *Nurs ethics*, 22(1), 15-31. <https://doi.org/10.1177/0969733013502803>
- Potter, P., Divanbeigi, J., DMin, JB., Norris, L., and Olsen, S. (2010). Compassion fatigue and burnout: Prevalence among oncology nurses. *Clin J Oncol Nurs*, 14(5), E56-62. <https://doi.org/10.1188/10.CJON.E56-E62>
- Rajan, A., Varghese, J., Krishnankutty, S., Philip, R., and Reni, C. S. (2019). Relationship of compassion satisfaction, compassion fatigue and burnout among nurses. *Int. J. Nur. Edu. and Research*, 7(1), 87-91. <https://doi.org/10.5958/2454-2660.2019.00018.8>
- Sinclair, S., Raffin-Bouchal, S., Venturato, L., Mijovic-Kondejewski, J., and Smith-MacDonald, L. (2017). Compassion fatigue: A meta-narrative review of the healthcare literature. *Int J Nurs Study*, 69, 9-24. <https://doi.org/10.1016/j.ijnurstu.2017.01.003>
- Smart, D., English, A., James, J., Wilson, M., Daratha, K. B., Childers, B., and Magera, C. (2014). Compassion fatigue and satisfaction: A cross-sectional survey among US healthcare workers. *Nurs Health Sci*, 16(1), 3-10. <https://doi.org/10.1111/nhs.12068>
- Stamm, B. H. (2010). The cincimse ProQOL manual, (2nd Ed.). <https://jpo.wrlc.org/bitstream/handle/11204>
- Vaillancourt, E. S., and Wasylikiw, L. (2020). The intermediary role of burnout in the relationship between self-compassion and job satisfaction among nurses. *Can J Nur Res*, 52(4), 246-254. <https://doi.org/10.1177/0844562119846274>
- Wu, S., Singh-Carlson, S., Odell, A., Reynolds, G., and Su, Y. (2016). Compassion fatigue, burnout, and compassion satisfaction among oncology nurses in the United States and Canada. *In Oncol Nurs Forum*, 43(4), 161-69. <https://doi.org/10.1188/16.ONF.E161-E169>

- Wentzel, D. L., and Brysiewicz, P. (2018). A survey of compassion satisfaction, burnout and compassion fatigue in nurses practicing in three oncology departments in Durban, South Africa. *Int J Afr Nurs Sci*, 8, 82-86. <https://doi.org/10.1016/j.ijans.2018.03.004>
- Yesil, A., Ergun, U., Amasyali, C., Er, F., Olgun, N. N., and Aker, A. T. (2010). Validity and reliability of the Turkish version of the professional quality of life scale. *Noro Psikiyatr Ars*, 47(2), 111-118.
- Yu, H., Jiang, A., and Shen, J. (2016). Prevalence and predictors of compassion fatigue, burnout and compassion satisfaction among oncology nurses: A cross-sectional survey. *Int J Nurs Stud*, 57, 28-38. <https://doi.org/10.1016/j.ijnurstu.2016.01.012>
- Zhang, Y. Y., Zhang, C., Han, X. R., Li, W., and Wang, Y. L. (2018). Determinants of compassion satisfaction, compassion fatigue and burn out in nursing: A correlative meta-analysis. *Medicine*, 97(26), 1-7. <https://doi.org/10.1097/MD.00000000000011086>