

Nurses' Motivation, Altruism and Professional Commitment Levels During the Pandemic: A Descriptive and Correlational Study*

Küresel Salgın Sürecinde Hemşirelerin Güdülenme, Özgeçilik ve Mesleğe Bağlılık Düzeyleri: Tanımlayıcı ve İlişki Arayıcı Bir Çalışma

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*This study is orally presented as a proceeding at the 8. International Health Sciences and Management, held in Trabzon between May 2-6, 2023.

Cite as: Özşaban A, Turan N, Kıyak Y, et al. Nurses' motivation, altruism and professional commitment levels during the pandemic: A descriptive and correlational study. *Journal of Health and Nursing Management*. 2024;11(2):313-322. **DOI:** 10.54304/SHYD.2024.43179

Abstract

Aim: This study aimed to examine the relationship between the motivation, altruism and professional commitment levels of nurses during the COVID-19 pandemic.

Method: This descriptive and correlational study was conducted with 241 nurses working in a university hospital between January 2021 and January 2022. Data were collected using the Nurse Information Form, Nurse Job Motivation Scale, Altruism Scale and Nursing Professional Commitment Scale based on self-report.

Results: The nurses included in this study had an average score of 66.56 (SD=7.70) on the Nurses Job Motivation Scale, 70.24 (SD=10.5) on the Altruism Scale, and 77.81 (SD=12.56) on the Nursing Professional Commitment Scale. Statistically significant relationships were found between nurses' motivation and altruism ($p<0.01$), motivation and professional commitment ($p<0.001$), altruism and professional commitment ($p<0.001$) scores. In addition, willingness to make an effort and maintaining professional membership, two sub-dimensions of professional commitment, were found to have a significant effect on motivation ($p<0.001$).

Conclusion: As a result of the nurses' motivation, altruism and professional commitment levels are above medium. The nurses' motivation, altruism and professional commitment scores were related to each other.

Keywords: Motivation, altruism, professional commitment, nursing.

Öz

Amaç: Bu araştırmanın amacı, hemşirelerin COVID-19 küresel salgın sürecinde güdülenme, özgeçilik ve mesleğe bağlılık düzeyleri arasındaki ilişkiyi incelemektir.

Yöntem: Tanımlayıcı ve ilişki arayıcı türdeki bu çalışma, Ocak 2021-Ocak 2022 tarihleri arasında bir üniversite hastanesinde çalışan 241 hemşire ile yapılmıştır. Veriler, Hemşire Bilgi Formu, Hemşire İş Motivasyonu Ölçeği, Özgeçilik Ölçeği ve Hemşirelikte Mesleğe Bağlılık Ölçeği kullanılarak öz bildirimle dayalı olarak toplanmıştır.

Bulgular: Hemşirelerin Hemşire İş Motivasyonu Ölçeği toplam puan ortalaması 66,56 (SS=10,70), Özgeçilik Ölçeği toplam puan ortalaması 70,24 (SS=10,5) ve Hemşirelik Mesleğe Bağlılık Ölçeği toplam puan ortalaması 77,81 (SS=12,56) olarak belirlenmiştir. Hemşirelerin güdülenme ile özgeçilik ($p<0,01$), güdülenme ve mesleğe bağlılık ($p<0,001$), özgeçilik ve mesleğe bağlılık ($p<0,001$) puanları arasında istatistiksel olarak anlamlı ilişkiler bulunmuştur. Ayrıca Mesleğe Bağlılık Ölçeği'nin iki alt boyutu olan çaba gösterme istekliliği ve meslek üyeliğini sürdürmenin, güdülenme üzerinde anlamlı bir etkiye sahip olduğu bulunmuştur ($p<0,001$).

Sonuç: Sonuç olarak, hemşirelerin güdülenme, özgeçilik ve mesleğe bağlılık düzeylerinin ortalamasının üzerinde olduğu belirlenirken, güdülenme, özgeçilik ve mesleğe bağlılık puanlarının birbiriyle ilişkili olduğu görülmüştür.

Anahtar Sözcükler: Güdülenme, hemşirelik, mesleğe bağlılık, özgeçilik.

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Received / Geliş: 13.01.2024 ▪ **Accepted / Kabul:** 18.08.2024 ▪ **Published Online / Online Yayın:** 31.08.2024

Introduction

As the pandemic spread around the world, healthcare institutions and the public started to expect more from nurses working on the fore lines of healthcare (Zhang et al., 2020). The expectation was so high that national and international media defined nurses with the metaphor of “hero”. This metaphor implies that nurses are to make any sacrifices necessary in responding to any crisis (Mohammed et al., 2021) and suggested that nurses should make extraordinary efforts for the health and well-being of society under limited resources (personnel, materials, etc.) and risks (physical, psychological, social risks) during the pandemic (Han et al., 2020; Zhang et al., 2020).

The willingness of nurses to work on the front lines of the pandemic was an important consideration for labor protection and quality care (Ke et al., 2021). Nurses experienced many positive and negative emotions and faced various challenges during the pandemic (Sun et al., 2020). This further increased the need for monitoring their motivation to work under the limited resources, increased workload, and risk of contamination during the pandemic and examining the affecting factors (Goktas et al., 2022). The importance of “altruism” and “professional commitment” for nurses to continue to provide care in a motivated way became a current topic during this period (Slettmyr et al., 2022; Sun et al., 2020). Professional commitment, a known internal motivator, and altruism, a basic nursing value, guide the care behaviors of nurses. Nurses with high professional commitment are reported to feel more dedicated to their work, identify more closely with their profession, and feel more responsible for professional outcomes (Chang et al., 2015). Additionally, nurses’ commitment and willingness appeared to have increased during the pandemic, contrary to what would be feared (Slettmyr et al., 2022; Wu et al., 2020). Witnessing patients’ suffering aroused compassion among nurses, which may have served as motivation and drive for altruistic actions for others (Singer and Klimecki, 2014).

The effectiveness of health care for disasters and emergencies depends on an existing, skilled, and motivated health workforce (Varasteh et al., 2022). Examining the motivation levels of nurses and related factors may provide important data for possible future pandemics and crises.

Methodology

Aim and Design: This descriptive and correlational study aimed to examine the relationship between the motivation, altruism, and professional commitment levels of nurses during the COVID-19 pandemic.

Research Questions: (i) What are the motivation, altruism, and professional commitment levels of nurses? (ii) Is there a relationship between the work motivation, altruism, and professional commitment levels of nurses?

Setting and Participants: The study population was 390 nurses working in a university hospital in the study. Power analysis was performed using the G*Power (v3.1.9) software to determine the sample size. According to the effect size coefficients defined by Cohen (1992), at least 82 people should be included in the study to obtain 80% power at the $\alpha=0.05$ level when the correlation between the scale scores is predicted to be at a medium level ($\rho=0.300$). The sample of the study, therefore, included 241 nurses from the population. The sampling inclusion criteria were nurses in charge of patient care for at least one year and working in the internal, surgical, intensive care and emergency units of the hospital where the research was carried out.

Data Collection Tools: *Nurse Information Form:* The form was developed by researchers in light of the literature (Slettmyr et al., 2022; Wu et al., 2020; Zhang et al., 2020) and included questions on nurses’ age, gender, marital status, education, length of experience and descriptive features of the unit they worked in and items describing their working environment during the pandemic.

Nurses Job Motivation Scale (NJMS): It was developed by Engin and Çam (2016) to evaluate the work motivation of nurses and has 25 items. It is a three-point Likert-type scale answered as “1-3 (strongly disagree-agree)”. Scores between 25-75 can be obtained from the scale, with higher scores indicating higher motivation. The Cronbach Alpha coefficient was found to be 0.85 (Engin and Çam, 2016) and was 0.90 in this study.

Altruism Scale (AS): This scale was developed by London and Bower in 1968 to determine altruism levels. Cantez, Aşkın and Akbaba adapted and standardized it into Turkish for use in Akbaba's doctoral thesis (Akbaba, 1994; Akbaba, 2001). It is a “five-point Likert-type scale” with a total of 20 items, scored between “1-5 (very little-very much)”. It has 4 sub-dimensions: “family, social, helpfulness and responsibility”. The score that can be obtained from the scale varies between 20-100. The higher the score obtained from the scale, the higher the level of altruism is considered. The Cronbach Alpha coefficient was 0.85 in the adaptation study (Akbaba, 2001) and 0.87 in this study.

Nursing Professional Commitment Scale (NPCS): It was developed by Lu et al. (2000) to determine nurses' professional commitment levels. The Turkish adaptation study was carried out by Çetinkaya et al. (2015). It is a “4-point Likert-type scale” consisting of 26 items. The subdimensions are “willingness to make an effort, maintaining professional membership, belief in goals and values”. Nine items contain reverse statements (items 14, 15, 16, 17, 18, 19, 20, 21, 25). Higher total and sub-dimension scores indicate that nurses have a high level of commitment to the profession (Çetinkaya et al., 2015; Lu et al., 2000). The Cronbach Alpha coefficient was determined as 0.90 by Çetinkaya et al. (2015) and 0.90 in this study.

Data Collection: The research data were collected with the self-reported data collection tools between January 2021 and January 2022. Data collection forms were given to the nurses who met the inclusion criteria and agreed to participate in the study. The average time to fill out the forms was 15-20 minutes.

Data Analyses: Individual characteristics were analyzed with descriptive statistics using R version 2.15.3 (R Core Team, 2013). The fit of the quantitative data to the normal distribution was evaluated with the Shapiro-Wilk test and graphical examinations. The independent groups t-test was used to evaluate the normally distributed variables between the two groups. Kruskal-Wallis test and Dunn-Bonferroni post-hoc test were used for the intergroup evaluations of variables that did not show normal distribution. Linear regression analysis was carried out to examine the effect of altruism and professional commitment scores on job motivation scores. Statistical significance was set at $p < 0.05$.

Ethical Considerations: Approval from the University Non-Interventional Ethics Committee (Date: 31/12/2020, Number: 15512) and institutional permission were obtained before starting the study. After informing the nurses invited for the study about the purpose of the study, its scope, what is expected from them, and that they can withdraw at any time, oral and written consents were obtained from the nurses who agreed to participate.

Limitations: The study was conducted with nurses in a university hospital, and the results cannot be generalized. The studies that examined altruism in nurses were qualitative, and we were unable to obtain quantitative data on levels of altruism in nurses, which may have led to limitations in the discussion of the findings.

Results

In the study 75.1% of the nurses were women, their mean age was 26.10 (SD=4.96) years, 37.3% had a health high school degree, and their mean experience in the profession was 5.70 (SD=5.23) years. Also, 34% worked in surgical units, 36.1% cared for 5/6 patients during the day, 37.4% cared for 5/6 patients during night shifts and 30.7% cared for 5/6 patients at weekends (Table 1).

NJMS total mean score of the nurses included in this study was 66.56 (SD=7.70). Their AS total mean score was 70.24 (SD=10.59), and their scores from the “family, social, helpfulness and responsibility” sub-dimensions were 18.80 (SD=3.10), 16.36 (SD=4.04), 17.20 (SD=3.43) and 17.89 (SD=3.21), respectively. NPCS total mean score was 77.81 (SD=12.56), and their scores from the “willingness to make an effort, maintaining professional membership and belief in the goals and values” sub-dimensions were 39.07 (SD=7.20), 23.31 (SD=5.84) and 15.44 (SD=2.61), respectively.

Table 1. Participants' characteristics (N:241)

Variables	Min-Max (Median)	Mean (SD)
Age	19-47 (24)	26.10 (4.96)
Professional Experience (year)	1-28 (4)	5.70 (5.2)3
	n	%
Gender		
Female	181	75.1
Male	60	24.9
Education		
Health high school	90	37.3
Associate degree	81	33.6
Bachelor's and graduate degree	70	29.1
Unit		
Medical	70	29
Surgical	82	34
Intensive Care Unit	60	25
Emergency	29	12
Patient/Nurse ratio (daily)		
1-2	53	22
3-4	70	29.1
5-6	87	36.1
7 and more	31	12.8
Patient/Nurse ratio (night)		
1-2	51	21.1
3-4	68	28.2
5-6	90	37.4
7 and more	32	13.3
Patient/Nurse ratio (weekend or holidays)		
1-2	67	27.8
3-4	68	28.2
5-6	74	30.7
7 and more	32	13.3
Care to patients who diagnosed with COVID-19		
Yes	181	75.1
No	60	24.9

Max: Maximum, Min: Minimum SD: Standard Deviation

Table 2. Average total scores and sub-dimension scores for the Nurses Job Motivation, Altruism and Nursing Professional Commitment Scales (N:241)

Scales	Min-Max (Median)	Mean (SD)
Nurses Job Motivation Scale Total	36-75 (68)	66.56 (7.70)
Family	10-25 (19)	18.80 (3.10)
Social	5-25 (16)	16.36 (4.04)
Helpfulness	5-25 (17)	17.20 (3.43)
Responsibility	5-25 (18)	17.89 (3.21)
Altruism Scale Total	29-100 (70)	70.24 (10.59)
Willingness to make an effort	20-52 (39)	39.07 (7.20)
Maintaining professional membership	8-32 (24)	23.31 (5.84)
Belief in the goals and values	9-20 (15)	15.44 (2.61)
Nursing Professional Commitment Scale Total	48-104 (77)	77.81 (12.56)

Table 3. Correlation of between nurses' job motivation, altruism and professional commitment levels (N:241)

	Altruism		Professional Commitment				Nurses Job Motivation Scale Total		
	Family	Social	Helpfulness	Responsibility	Altruism Total	Willingness to make an effort		Belief in the goals and values	Belief in the goals and values
Family	r 1.000								
	p -								
Social	r 0.303	1.000							
	p <0.001	-							
Helpfulness	r 0.454	0.547	1.000						
	p <0.001	<0.001	-						
Responsibility	r 0.393	0.407	0.605	1.000					
	p <0.001	<0.001	<0.001	-					
Altruism Total	r 0.674	0.771	0.849	0.769	1.000				
	p <0.001	<0.001	<0.001	<0.001	-				
Willingness to make an effort	r 0.325	0.263	0.340	0.27	0.390	1.000			
	p <0.001	<0.001	<0.001	<0.001*	<0.001	-			
Maintaining professional membership	r 0.043	-0.137	-0.006	-0.127	-0.080	0.328	1.000		
	p 0.504	0.033*	0.924	0.050*	0.215	<0.001	-		
Belief in the goals and values	r 0.294	0.159	0.283	0.196	0.298	0.660	0.418	1.000	
	p <0.001	0.013*	<0.001	0.002**	<0.001	<0.001	<0.001	-	
Nursing Professional Commitment Scale Total	r 0.268	0.120	0.250	0.142	0.248	0.862	0.740	0.780	1.000
	p <0.001	0.064	<0.001	0.027*	<0.001	<0.001	<0.001	<0.001	-
Nurses Job Motivation Scale Total	r 0.136	0.128	0.162	0.155	0.188	0.526	0.361	0.401	0.552
	p 0.035*	0.047*	0.012*	0.016*	0.003**	<0.001	<0.001	<0.001	<0.001

r=Pearson correlation analysis, *p<0.05; **p<0.01

There was a positive, statistically significant relationship between NJMS total scores and AS “family” ($p<0.05$), “social” ($p<0.05$), “helpfulness” ($p<0.05$), “responsibility” ($p<0.05$) sub-dimension and total scale scores ($p<0.01$).

There was a positive, statistically significant relationship between NJMS total scores and NPCS “willingness to make an effort” ($p<0.001$), “maintaining professional membership” ($p<0.001$), “belief in the goals and values” ($p<0.001$) sub-dimension and total scores ($p<0.001$). There was a positive, statistically significant relationship between AS total scores and NPCS “willingness to make an effort” ($p<0.001$) and “belief in the goals and values” ($p<0.001$) sub-dimension and total scores ($p<0.001$).

There was a positive, statistically significant relationship between AS “family, helpfulness and responsibility” sub-dimension scores and NPCS total scores ($p<0.05$). There was also a positive, statistically significant relationship between AS “family, social, helpfulness and responsibility” sub-dimension scores and NPCS “willingness to make an effort” ($p<0.001$) and “belief in the goals and values” sub-dimension scores ($p<0.05$).

Finally, there was a negative, statistically significant relationship between nurses’ “social”, “responsibility” and “maintaining professional membership” sub-dimension scores ($p<0.05$).

Table 4. Linear regression analysis of factors affecting nurses’ job motivation (N:241)

	Beta (95 % CI)	t	p
Constant	40.671 (33.344, 47.998)	10.937	<0.001
Care to patients who diagnosed with COVID-19 (Yes)	-1.494 (-3.399, 0.411)	-1.545	0.124
Altruism			
Family	-0.12 (-0.426, 0.186)	-0.771	0.441
Social	0.104 (-0.145, 0.354)	0.825	0.410
Helpfulness	-0.1 (-0.443, 0.243)	-0.575	0.566
Responsibility	0.203 (-0.128, 0.534)	1.208	0.228
Professional Commitment			
Willingness to make an effort	0.463 (0.304, 0.621)	5.750	<0.001
Maintaining professional membership	0.293 (0.13, 0.456)	3.550	<0.001
Belief in the goals and values	0.049 (-0.391, 0.488)	0.218	0.828

Linear regression analysis was performed in this study to examine the effect of the Altruism Scale and NPCS scores on NJMS scores. NJMS total score was included as a dependent variable, and caring for patients with COVID-19, AS “family, social, helpfulness, responsibility” sub-dimension scores, NPCS “willingness to make an effort, maintaining professional membership, belief in the goals and values” sub-dimension scores were included as independent variables in the model. The obtained model was found to be statistically significant ($F=14.315$, $p<0.001$, $R^2_{adj}=0.307$). The effect of the NPCS “willingness to make an effort and maintaining professional membership” sub-dimension scores were found to be statistically significant in the model. A 1-unit increase in the NPCS “willingness to make an effort” sub-dimension score caused a 0.463 increase in the NJMS total score [Beta (95% CI) = 0.463 (0.304, 0.621), $p<0.001$]. A 1-unit increase in the NPCS “maintaining professional membership” sub-dimension score caused a 0.293 increase in the NJMS total score [Beta (95% CI) = 0.293 (0.130, 0.456), $p<0.001$].

Discussion

The main results of this study showed that the work motivation, altruism, and professional commitment levels of the nurses were above average and there were statistically significant relationships between them. In addition, the willingness to make an effort and to maintain professional membership, which are sub-dimensions of the NPCS, significantly affect nurses’ work motivation..

The above-medium motivation scores of the nurses included in this study were similar to the results of other studies conducted during the pandemic (Akbiyık et al., 2022; Ardiç et al., 2022). Interestingly, this finding was also similar to the results of the study conducted before the pandemic (Abu Yahya et al., 2019; Göktepe et al., 2020; Yeşilçınar et al., 2020). Also, a significant correlation was determined between providing care to a patient with a diagnosis of COVID-19 and the motivation levels of the nurses, but this variable did not have a significant effect in the regression analysis. Work

motivation in healthcare is a critical factor that affects quality and outcomes (Toode et al., 2011). Nurses working at the forefront of the pandemic have gone through a crisis where the health of themselves and their loved ones was at risk, along with a stressful work environment, increased workload, traumatic experiences, and changing service delivery styles (Erkoç et al., 2023). Such a challenging environment could have affected nurses' willingness and motivation to continue providing care. However, nurses continued to provide care with motivation despite intense workloads and stress, driven by their confidence in the benefits they provided to patients during the pandemic (Tong et al., 2022). According to Gray et al. (2021), nurses were motivated by ethical duty to care for patients with COVID-19 during the pandemic despite all the risks. In the study by Muz and Erdoğan Cüce (2021), nurses stated that it was important for them that patients and society appreciated them for fulfilling their duties during the pandemic, adding that society's understanding of the meaning and value of nursing strengthened their motivation. These findings show that nurses acted with great self-sacrifice, were aware of their professional responsibilities, and acted to be beneficial to the society during the pandemic, and the pandemic did not lessen their motivation.

When the professional commitment levels of the nurses participating in this study were examined, their scores were above the medium level and were similar to the findings of the studies conducted before the pandemic by Can et al., (2021) and Haydari et al., (2016). In the studies conducted during the pandemic period, nurses' professional commitment levels were above the medium level (Duran et al., 2021; Goldfarb et al., 2020; Kleier et al., 2022). As with motivation, nurses' professional commitment was also good, and the pandemic did not reduce their commitment levels. Professional commitment explains an individual's commitment to professional goals and values, acting in line with these values, working towards professional activities, and taking pride in their professional career (Bara'c et al., 2018). Commitment to the in nursing creates a sense of belonging to the profession, allowing the formation of a moral view, acquisition of knowledge and skills, autonomy inherent in the nursing profession, and self-control and acceptance of responsibility through the values of providing good care (García-Moyano et al., 2019). One of the most important and basic reasons why nurses continue their profession and volunteer to work despite the fear of infection is their sense of commitment (Varasteh et al., 2022). Professional commitment is a strong, protective motivation that allows the nurse to overcome professional challenges, difficulties, and personal dangers (Kleier et al., 2022). These findings suggest that there has been no decline in nurses' commitment to their professional activities and values and that they continued to provide care willingly during the pandemic.

The nurses participating in this study had above-medium altruism levels. Altruism is one of the professional values that reflect nursing standards of care (van der Wath and van Wyk, 2020). A qualitative study conducted before the pandemic highlighted the current emphasis on individualization in today's societies and suggested that the altruism expectations of society may conflict with the altruism perceptions of the nurses. The authors argued that in the event of a disaster, conflicts may occur between society's expectation of altruism and the professional perspective of nurses when the personal safety, life, and health of nurses are at risk (Slettmyr et al., 2019). Altruism should be considered an important element of qualified nursing care, not an outdated virtue. In fact, the moral stance of nurses during the pandemic has shown that altruism is a fundamental value that guides the care process and is still pertinent in today's world (Morley et al., 2020). Nurses provide altruistic care when they put patients first, care about their well-being, and provide patient-centered care in a safe recovery environment (van der Wath and van Wyk, 2020). Nurses act altruistically in meeting the care needs of society during the pandemic when resources are limited, as they have in various crises throughout history. Such behaviors are of course desirable and seem to be the reflection of professional values to actual care, but these altruistic actions should be rewarded by creating healthy working environments and ensuring nurses' personal safety and adopting these as a basic principle.

Altruism and professional commitment emerged as two important internal motivators for nurses to continue to provide motivated care during the pandemic (Ke et al., 2021; Slettmyr et al., 2023). This study demonstrated that there was a significant relationship between motivation, altruism, and professional commitment, and that willingness to make an effort and maintaining professional membership, two dimensions of professional commitment, had a significant effect on motivation. It can be said that nurses' perceptions of meeting the expectations of and being beneficial to society have an impact on maintaining their professional commitment despite all the risks and unfavorable conditions during the pandemic. These findings of the study support the information in the literature that work motivation is closely related to professional commitment (Lu et al., 2019) and that professional commitment is the most important individual factor in nurses' voluntariness/willingness to work on the front lines of the pandemic. (Ke et al., 2021). In fact, professional commitment as an internal motivator was shown to be superior to the external motivator of financial rewards (Varasteh et al., 2022). Altruism, also a value that governs nurses' care behaviors, motivates them to approach patients and their families with compassion, kindness, commitment, and empathy, to protect patient dignity, and to provide safe care (van der Wath and van Wyk, 2020). Altruism seems to have increased the nurses' willingness to provide care during the pandemic.

Conclusion

The study found that nurses' motivation, altruism, and professional commitment levels are above medium. Based on the findings obtained from this study, we can conclude that the motivation and professional commitment levels of nurses during the pandemic are similar to those before the pandemic, and their care behaviors are driven by altruism. In addition, nurses' motivation, professional commitment and altruism levels were interrelated.

In preparation for potential crises, we can recommend monitoring and increasing the motivation, professional commitment, and altruism levels of nurses to ensure quality care and maintain the workforce, and identifying strategies to maintain professional commitment and altruism in the event of a crisis. These strategies can be recommended within the framework of risk management as organizational activities to strengthen nurses by acquiring professional knowledge and skills in crisis situations, to carry out studies to increase psychological resilience, to structure personnel planning and workflow processes for potential crisis situations, and to ensure the continuity of studies to maintain and increase motivation. The work motivation of nurses should not only take into account the practice environment, but also the internal factors of the nurses. We can suggest focusing on the necessary planning and initiatives to maintain the motivation and professional commitment of nurses and help them achieve altruistic values. In this context, it is recommended that planning and initiatives focus on reviewing the nursing curriculum and emphasizing in-service training programs. These efforts should aim at adopting a value-based nursing care philosophy, developing caring behaviors, and enhancing professional belonging and positive attitudes both during nursing education and after graduation.

Acknowledgements: The authors would like to thank all the nurses who participated in this study.

Author Contribution: The authors confirm contribution to the paper as follows; study conception and design: AÖ, NT, YK, TA; data collection: NT, YK, AK, GAT, GÖ; analysis and interpretation of results: AÖ, NT, YK, TA; draft manuscript preparation: AÖ, NT, YK, AK, GAT, GÖ, TA. All authors reviewed the results and approved the final version of the manuscript.

Ethics Committee Approval: Non-Interventional Researches Ethics Committee of Bezmialem Vakıf University approval was obtained (Date: 31.12.2020 - Number: 15512).

Conflict of Interest: The authors declare that there is no conflict of interest.

Funding: The authors declare that the study has no financial support.

Informed Consent: Informed consent of the participants were obtained.

Teşekkür: Yazarlar bu çalışmaya katılan tüm hemşirelere teşekkür ederler.

Yazarlık Katkısı: Yazarlar makaleye katkılarını şu şekilde beyan etmektedir; çalışma fikri ve tasarımı: AÖ, NT, YK, TA; veri toplama: NT, YK, AK,GAT,GÖ; sonuçların analizi ve yorumlanması: AÖ,NT, YK, TA; aday makalenin hazırlaması: AÖ,NT, YK, AK,GAT,GÖ,TA. Tüm yazarlar sonuçları gözden geçirdi ve makalenin son halini onayladı.

Etik Kurul Onayı: Bezmialem Vakıf Üniversitesi Girişimsel Olmayan Araştırmalar Etik Kurulu tarafından onaylanmıştır (Tarih: 31.12.2020 - Karar No: 15512).

Çıkar Çatışması: Yazarlar herhangi bir çıkar çatışması olmadığını beyan ederler.

Finansal Destek: Yazarlar, çalışmanın finansman desteği olmadığını beyan eder.

Katılımcı Onamı: Katılımcıların bilgilendirilmiş onamları alınmıştır.

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