EJONS
International Journal on Mathematic, Engineering and Natural Sciences
(Ulusalarası Fen,Mühendislik ve Doğa Bilimleri Dergisi)
https://ejons.org/index.php/ejons
e-ISSN: 2602 - 4136
Research Article
Doi: https://doi.org/10.5281/zenodo.13825376

Yoğun Bakım Hemşirelerinin Rol Çatışması ve Stresle Başa Çıkma Düzeylerinin Yaşam Kalitesi Üzerine Etkisi

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Makale Tarihçesi

Geliş: 09.08.2024
Kabul: 11.09.2024

Anahtar Kelimeler

Yoğun bakım hemşiresi,
Rol belirsizliği,
Rol çatışması,
Stres,
Yaşam kalitesi,
Aşırı rol yükü

Öz: Yoğun bakım ünitesi (YBÜ) rol çatışması, rol belirsizliği ve buna bağlı stresin en yoğun yaşandığı çalışma ortamlarından biridir. Bu çalışmanın amacı, rol çatışması ve stres yönetiminin YBÜ hemşirelerinin yaşam kalitesi üzerindeki etkilerini belirlemektir. Bu çalışma 1 Nisan - 1 Temmuz 2021 tarihleri arasında YBÜ hemşireleri ile Google Forms üzerinden online olarak yürütüldü. Bu tarihler arasında formlardaki tüm sorulara eksiksiz cevap veren ve çalışmaya katılmaya gönüllü olan 101 YBÜ hemşiresi ile çalışma tamamlandı. Araştırmada veriler Kişisel Bilgi Formu, Rol Çatışması, Rol Belirsizliği Ölçeği, Aşırı Rol Yükü Ölçeği, Başa Çıkma Yolları Envanteri ve Yaşam Kalitesi Ölçeği kullanılarak toplandı. Veriler Statistical Package for the Social Sciences 23 v. kullanılarak analiz edildi. Verilerin analizinde Pearson korelasyon analizi ve tanımlayıcı istatistikler kullanılmıştır. YBÜ hemşireleri ile yapılan çalışmada, katılımcıların %42.6'sının 25-29 yaş aralığında olduğu saptanmıştır. Hemşirelerin %83.2'sinin kadın, %62.4'ünün bekar ve %73.2'sinin öğrenci olduğu saptanmıştır. Katılımcıların rol belirsizliği alt ölçek puan ortalaması 20.45±2.99 iken, rol çatışması alt ölçek puan ortalaması 27.27±4.03, aşırı rol yükü alt ölçek puan ortalaması 6.49±1.21 ve iyimser yaklaşım alt ölçek puan ortalaması 21.48±2.74 olarak bulunmuştur. YBÜ hemşirelerinde rol çatışması, rol belirsizliği, iş yükü, stres ve yaşam kalitesinin değerlendirilmesi önemlidir.

Atıf Künyesi: Yanmış S., Özyer Güvener, Y., (2024). Yoğun Bakım Hemşirelerinin Rol Çatışması ve Stresle Başa Çıkma Düzeylerinin Yaşam Kalitesi Üzerine Etkisi. International Journal on Mathematic, Engineering and Natural Sciences, 8(3): 336-342. **How to cite:** Yanmış S., Özyer Güvener, Y., (2024). The Impact on Intensive Care Nurses' Quality of Life of Role Conflict and Stress Coping. International Journal on Mathematic, Engineering and Natural Sciences, 8(3):336-342.

The Impact on Intensive Care Nurses' Quality of Life of Role Conflict and Stress Coping

Article Info

Received: 10.08.2024
Accepted: 11.09.2024

The intensive care unit (ICU) is one of the work environments in which role conflict, role ambiguity and resulting stress are experienced most intensely. The aim of the study is to determine the impact of role conflict and stress

Keywords

Intensive care nurse,
Role ambiguity,
Role conflict,
Stress,
Quality of life
Role overload.

management on the quality of life of ICU nurses. The present study was carried out online via Google Forms with ICU nurses between 1 April and 1 July 2021. Between these dates, the present study was completed with 101 ICU nurses who completed all the questions on the forms and volunteered to take part in the present study. Data were collected using the Individual Information Form, the Role Ambiguity, Role Conflict Scale and Role Overload Scale (RCA), the Ways of Coping Inventory (WCI) and the SF-12 Quality of Life Scale. Data were analysed using the Statistical Package for the Social Sciences 23 v. Pearson correlation analysis and descriptive statistics were used in the analysis of the data. In the present study carried out with ICU nurses, it was found that 42.6% of the participants were aged between 25 and 29 years. It was found that 83.2% of the nurses were female, 62.4% were single and 73.2% were students. It was found that the participants had an average role ambiguity subscale score of 20.45±2.99, while they had an average role conflict subscale score of 27.27±4.03, an average role overload subscale score of 6.49±1.21 and an average optimistic approach subscale score of 21.48±2.74. It is crucial to assess role conflict, role ambiguity, workload, stress and quality of life of ICU nurses.

1.Introduction

Nurses working in health care institutions play an active role in health care services (Camci and Kavuran, 2021). In this regard, it is inevitable that nurses experience more intense stress than other health professionals (Mert et al., 2019). Stress is when an individual is under internal and external pressure and tension due to negative physical, mental and social conditions (Adiguzel, 2012). Individuals are exposed to many stressors in the workplace and as a result, they develop different strategies to cope with stress. Coping with stress is the cognitive, emotional, dynamic and behavioural efforts that individuals develop to get rid of situations that force their inner and outer world (Adiguzel, 2012; Baltas and Baltas, 2004). Nurses experience more work stress in their working environment compared to other working environments due to factors such as fear of medical errors, working in shifts, time pressure, emergencies, role ambiguity-role conflict (Adiguzel, 2012).

Problems such as uncertainty, conflict, ineffective management and ineffective care in health care institutions due to role ambiguity-role conflict lead to a decrease in the quality of health care services (Adiguzel, 2012). The concept of role consists of the responsibilities, obligations and rights that the individual is expected to create in both private and business life. Role ambiguity refers to the shortcomings in reporting how the methods and expectations of the role expected of individuals are evaluated (Boz, 2019). Role conflict, on the other hand, occurs when more than one role that an individual has to play at the same time causes conflict within the individual. Situations such as the individual being stuck between two roles, cultural structure, social change, different role expectations cause role conflict. Increased stress, low morale, feelings of frustration, difficulties in communication, lack of job satisfaction and thus a serious reduction in quality of life can occur as a result of role conflict (Boz, 2019).

As a working environment, the ICU is one of the areas where role conflict, role ambiguity and the resulting stress are experienced most intensely (Altitoprak et al., 2008). In the absence of a healthy working environment and safe workplaces, and in the presence of excessive workloads, the mental status of critical care nurses is affected (Yuksel, 2019; Basci et al., 2016) and quality of life decreases significantly (Celik and Kilic, 2019; Yuzugullu et al., 2018). Therefore, it is significant to identify the levels of stress and quality of life of ICU nurses caused by role ambiguity and role conflict.

2. Materials and methods

The study was carried out as a descriptive cross-sectional study. This present study was conducted with ICU nurses who volunteered to take part in this study between 1 April - 1 July 2021. The surveys created by the investigators on Google Forms were delivered online to the participants via

social media (watsapp, instagram). 101 ICU nurses who answered the survey questions completely between these dates were included in the present study.

"*Individual* Information Form", "Role Ambiguity and Role Conflict Scales (RCA)" and "Role Overload Scale", "Ways of Coping Inventory (WCI)" and "SF-12 Quality of Life Scale" was used to collecting the data of study.

Individual Information Form: The form consists of a total of twelve questions, such as gender, age, marital status, total years of working, unit of work and working style, etc.

Role Overload Scale: The scale developed to measure role overload by Beehr et al. (1976). Low scores from the scale indicate lower workload, while high scores indicate higher workload (Boz, 2019). The statements "I never had enough time to do everything related to my job" and "I have to work much harder to perform my duties well" are positive statements while "The amount of work I am asked to do is fair" includes a negative statement (Boz, 2019).

Role Ambiguity and Role Conflict Scales (RCA): The scale developed to measure role conflict-role ambiguity by Rizzo et al. (1970), and its Turkish validity and reliability was repeated in different studies (Boz, 2019). The subscales of scale are role conflict scale and role ambiguity scale. In Turkish adaptation of the surveys, the items are responded on a 5-Likert between (1) very incorrect and (5) very correct. Low role ambiguity score in the scale indicates high role ambiguity (Boz, 2019).

Ways of Coping Inventory (WCI): The scale developed to measure ways of coping by Folkman and Lazarus (1980). Turkish validity and reliability study of the inventory carried out by Sahin and Durak (1995).The WCI consists of five factors and 30 questions. In the scale, the total score is not evaluated. High scores in submissive approach and helpless factors show that stress coping is ineffective, while increased scores in optimistic, self-confident, and seeking of social support factors show that stress coping is effective (Mert et al., 2019).

SF-12 Quality of Life Scale: This scale consists of 12 items and 8 sub-dimensions. The scale is scored between 3 and 6. While PCS-12 score is consisted of the domains of general health, body pain, physical functioning, and physical role, MCS is consisted of the domains of vitality, emotional role, social functioning and mental health. Both MCS-12 and PCS-12 scores vary between 0 and 100 and high scores show a better quality of life. Total score is not evaluated in this scale (Soylu and Kutuk, 2021).

"Individual Information Form", "RCA" and "Role Overload Scale", "WCI" and "Quality of Life Scale" was used to collecting the data of study. "Snowball sampling method" was used in this present study. The forms created by the investigators on Google Forms were delivered online to the participants via social media (watsapp, instagram). They were also asked to share with the ICU nurses around the forms.

Pearson correlation analysis and descriptive statistics (average, standard deviation, number, percentage, minimum and maximum) were used in the analysis of the data. Data analysis was carried out using the Statistical Package for the Social Sciences (SPSS) 25 v. In the evaluations, $p<0.05$ was accepted as significance.

This study was conducted with to in line with the Declaration of Helsinki. Permission for the study was obtained from the Human Research Ethics Committee of a State University (date: 03.02.2021 and issue 2021/22). Before starting the present study, the participants were informed in Google Forms about the purpose of the study and that the data obtained would be kept confidential. The present study was carried out with the participants who gave their consent to participate in the study online.

3. Result

It was found that 83.2% were women, 42.6% were between the ages of 25-29, 85.1% had nuclear families, 62.4% were single, 71.3% had no children. It was found that 73.2% of the nurses had an undergraduate degree, 53.5% worked between 1-5 years, 33.7% worked from 16 to 08, 55.5% provided care to 3 or less patients (Table 1).

Table 1: Sociodemographic Features of The ICU Nurses (n=101)

Variables		n	%
Age ($\bar{X}^{\dagger}$±$SD^{\ddagger}$ = 28.36±6.45)	≤24 years	31	30.7
	25-29	43	42.6
	≥30 years	27	26.7
Gender	Male	17	16.8
	Female	84	83.2
Family type	Nuclear	86	85.1
	Extended	15	14.9
Marital status	Married	38	37.6
	Single	63	62.4
The state of having children	No	72	71.3
	Yes	29	28.7
Place of residence	Rural	10	9.9
	Urban	91	90.1
Educational status	High school	5	5.0
	Associate degree	22	21.8
	Undergraduate degree	74	73.2
Total working years	1-10 years	81	80.2
	11-20 years	10	9.9
	≥21 years	10	9.9
Working hours	16-08	34	33.7
	08-08	38	37.6
	Other	29	28.7
Average number of patients cared for in each shift	≤3	56	55.5
	4-9	29	28.7
	≥10	16	15.8
Health status	Poor	11	10.9
	Moderate	53	52.5
	Good	37	36.6
Working conditions	Perfect	27	26.7
	Very good	52	51.5
	Good	22	21.8

† Average, ‡, Standard Deviation.

PCS average score of nurses was 51.90±23.27, while MCS average score was 47.60±19.66, Role Ambiguity average score was 20.45±2.99, Role Conflict average score was 27.27±4.03, Role Overload average score was found as 6.49±1.21, Self-confident Approach average score was found as 30.47±3.12, Helpless Approach average score was found as 30.18±5.99, Submissive Approach average score was found as 21.07±5.32, Optimistic Approach average score was found as 21.48±2.74, and Seeking of Social Support average score was found as 16.55±2.30 (Table 2).

Table 2: Descriptive Features of the RCA, WCI, SF-12 Quality of Life Scale, and Role Overload Scale, and their Sub-Dimensions (n=101)

Scales and Sub-Dimensions	**Min**§	**Max**$^{||}$	$\bar{\mathbf{X}}^{\dagger}$	**SD**‡
SF-12 Quality of Life Scale				
PCS-12	14.29	100.00	51.90	23.27
MCS-12	15.38	100.00	47.60	19.66

RCA				
Role Ambiguity	12.00	24.00	20.45	2.99
Role Conflict	18.00	32.00	27.27	4.03
Role Overload Scale	4.00	8.00	6.49	1.21
WCI				
Self-confident approach	22.00	35.00	30.47	3.12
Helpless approach	14.00	40.00	30.18	5.99
Submissive approach	6.00	30.00	21.07	5.32
Optimistic approach	14.00	25.00	21.48	2.74
Seeking of social support	10.00	20.00	16.55	2.30

WCI, Ways of Coping Inventory, RCA, Role Ambiguity and Role Conflict Scale, † Average, ‡ Standard Deviation, § Minimum, ‖ Maximum.

When the correlations between the sub-dimensions and total scores of the scales used in the study were examined, statistically important and negative relationship was determined between PCS and role conflict ($p<0.05$). Statistically important and negative relationship was determined between MCS and role conflict and role overload ($p<0.05$) (Table 3).

Table 3: Relationship between RCA, Role Overload Scale, and WCI, and their Sub-Dimensions with SF-12 Quality of Life Scale (n=101)

Scales and Sub-Dimensions			RCA		Role Overload Scale	WCI				
			Role Ambiguity	Role Conflict		Helpless Approach	Self-Confident Approach	Submissive Approach	Seeking of Social Support	Optimistic Approach
SF-12 Quality of	PCS-12	r††	-0.169	**-0.231***	-0.036	0.179	-0.064	0.152	-0.012	0.178
		p	0.091	**0.020**	0.723	0.073	0.528	0.129	0.906	0.075
	MCS-12	r††	-0.044	**-0.225***	**-0.251***	-0.127	-0.111	0.025	-0.097	0.172
		p	0.664	**0.024**	**0.011**	0.206	0.268	0.801	0.332	0.085

* $p<0.05$, †† Pearson Corelation Analysis.

4. Discussion

ICU nurses were found to have high role conflict average scores and low role ambiguity average scores. The study of Adiguzel (2012) shown that nurses experienced moderate role ambiguity-role conflict due to deficiencies and mistakes in practice. According to a study, it was found that nurses did not have role ambiguity-role conflict (Basci et al., 2016). In the study of Akpolat (2011), it was concluded that average scores of role ambiguity-role conflict in healthcare workers were above moderate. The reason for the difference in the average scores of role conflict- role ambiguity in studies in the literature may be that the studies were carried out with healthcare workers in different hospitals. The reason for the high average score of role conflict in the study may be that nurses have more than one role in the ICU; while the low average score of role ambiguity may be due to the fact that the roles of nurses in the hospital and ICU where they work are clearly defined.

In our study, the average role overload score of ICU nurses was high. In a study, it was concluded that the factor nurses had the most difficulty in the workplace was the workload, and that it was important for nurses to carry out activities to reduce this factor (Nehir and Gungor, 2019). In a study, it was also reported that the workload of nurses is very high and their working conditions should be reviewed and improved (Ozsoylu et al., 2017). In another study, it was also stated that the workload of ICU nurses was high and this situation reduced the quality care provided to patients (Avci et al., 2013).

In our study, the average quality of life score of the ICU nurses was found to be moderate. In the literature, it has been stated that the quality of life scores of nurses working in shifts are low (Ezer

and Ustun, 2022). In similar study, it has been reported that gender, age, marital status and the number of weekly shifts is among the factors that reduce the quality of life in nurses (Ezer and Ustun, 2022). It has also been reported that the quality of life decreases with the increase in negative conditions in work areas where work intensity is high, such as intensive care (Yuzugullu et al., 2018). The results of another study shown that the quality of life in ICU nurses decreases due to long working hours (Andrades Barrientos et al., 2007). Considering that there is shift system in ICU, the workload is high and there are long working hours, the decrease in the quality of life in nurses working in these environments is an expected result.

In our study, it was observed that ICU nurses used ineffective mechanisms in coping with stress. It was concluded that the nurses' PCS score increased as role conflict decreased ($p<0.05$) and the nurses' MCS score increased as role conflict and workload decreased ($p<0.05$). The study of Andrades Barrientos et al. (2007) shown that the stress level of ICU nurses was high. It is also reported that the use of effective coping mechanisms with stress-inducing factors will increase the quality of care in nurses (Mert et al., 2019). However, in studies similar to our study, it was reported that nurses use ineffective mechanisms in coping with stress (Mert et al., 2019; Yuksel, 2019; Nehir and Gungor, 2019). It was found in a study that in coping with increasing stress, nurses used the submissive style and helpless style at most (Mert et al., 2019). In another study, it was determined that nurses mostly used self-confident, optimistic and social support seeking approaches in stress management (Yuksel, 2019).

In our study, it was found that the quality of life increased with the reduction of role conflict and the realisation of effective stress management in ICU nurses. As a working environment, ICU are one of the areas where role conflict, role ambiguity and the resulting stress are experienced intensely (Altitoprak et al., 2008). In case of lack of healthy work environment and safe employment, and presence of excessive workload, mental status of ICU nurses is affected (Yuksel, 2019; Basci et al., 2016) and quality of life decreases significantly (Celik and Kilic, 2019; Yuzugullu et al., 2018).

5. Conclusion

It was determined that average score of role conflict and workload of ICU nurses was high, average score of role ambiguity was low, and average score of quality of life was moderate. It was determined that nurses used ineffective mechanisms in coping with stress. It was also concluded that the quality of life increased in ICU nurses as a result of the reduction of role conflict and development of effective stress coping mechanisms. In the direction of this information, it is critically important to do job descriptions of nurses in intensive care, to increase nurse employment in this area, to determine the stressors in the working environment and for nurses to use effective stress coping mechanisms in increasing their quality of life.

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