

Acil Servis ve 112’de Çalışan Sağlık Personelinin Yaşadığı Rol Çatışması ve Belirsizliğinin İş Stresine Etkisi

The Effect of Role Conflict and Ambiguity on Work Stress in Health Staff Working in Emergency Service and 112

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ÖZ

Amaç: Acil servis ve 112’de çalışan personelin yaşadığı rol belirsizliği, rol çatışması ve iş stresinin etkisini incelemektir.

Yöntem: Tanımlayıcı-kesitsel bir çalışmadır. Ağustos 2016-Ocak 2017 tarihleri arasında iki acil servis ve 112 istasyonlarında çalışan 188 sağlık personeli katılmıştır. Veriler “kişisel bilgi formu”, “rol çatışması ve rol belirsizliği ölçeği” ile “iş stresi ölçeği” kullanılarak toplanmıştır.

Bulgular: Evlilerin, mesleğini sevmeyenlerin, mesleki kanun ve yönetmelik bilgisine sahip olmayanların, mesleki görev ve sorumluluk bilgisine kısmen sahip olanların daha çok rol belirsizliği, mesleğini sevmeyen ve 25-30 yaş aralığındaki kişilerin daha çok rol çatışması, kadınların, mesleğini sevmeyenlerin, 25-30 yaş aralığındaki ve mesleki kanun ve yönetmelik bilgisine kısmen sahip olanların daha çok iş stresi yaşadığı sonucuna ulaşılmıştır.

Sonuç: İş stresi, rol çatışması ve belirsizliğinin birbirini etkilediği sonucuna ulaşılmıştır.

Anahtar Kelimeler: Çatışma, Belirsizlik, Stres, Acil servis, 112.

ABSTRACT

Objective: To investigate the effect of role conflict and ambiguity on work stress in health staff working in emergency service and 112.

Methods: This descriptive cross-sectional study was planned between August 2016 and January 2017. 188 people working at 112 stations and two emergency service participated in the study. Data were collected using “personal information form”, “role conflict and role ambiguity scale” and “work stress scale”.

Results: It has been found more role ambiguity of married people, more role conflict of who do not like their profession and who have between 25-30 years of age, more work stress of women who do not like their profession, women who have between 25-30 years of age.

Conclusion: Role ambiguity and conflict, work stress experienced by employees affect each other.

Key words: Conflict, Ambiguity, Stress, Emergency department, 112.

1. INTRODUCTION

Health service is a service sector that requires intensive efforts to provide services to sick people. The problems experienced in this sector and the unsuccessful management of the labor force have extremely high human and economic costs (1). In order to increase the

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Yazar Katkıları: A) Fikir/Kavram, B) Tasarım, C) Veri Toplama ve/veya İşleme, D) Analiz ve/veya Yorum, E) Literatür Taraması, F) Makale Yazımı, G) Eleştirel İnceleme

efficiency and effectiveness of service delivery, it is absolutely necessary for health workers to work in an environment where they can perform their roles professionally within the framework of a division of work in accordance with their knowledge, training and skills. In order to provide effective and efficient health services in the institution, teamwork approach should be adopted (2). The rapid technological developments, expectations and needs of patients, demand and legal changes in health services inevitably affect the roles of employees in the institution (3).

The role is the set of behaviors expected from individuals working in an organization. If a person who needs to perform a role cannot fulfill the desired roles for various reasons after having detailed the priorities of the expected role, then they experience role ambiguity when they do not have sufficient skills and knowledge of the role they need to perform. If people are exposed to a high level of role conflict and role ambiguity. In studies, people has been shown that increased feelings of hostility, fear, restlessness and stress cause a decrease in self-confidence and organizational productivity (4).

Stress can be defined as a reaction or condition that occurs when a person is physically and mentally exposed to a challenge that exceeds the coping capacity (5). Work stress is generally defined by various and different aspects of the work area in the institution. Factors such as time pressure, difficult patients, heavy responsibilities, difficulties in computing, insufficient resources and working alone are highly effective in job stress (6).

Serious problems caused by job stress in health care workers lead to negativities that affect service provision such as absenteeism, decrease in job efficiency and job satisfaction (7,8). Health care units providing emergency aid are the units where work stress is extremely intense. It is stated that employees in these units are exposed to more stress factors than healthcare professionals working in different units. Unlike healthcare professionals working in different units, they have to deal with various aggressions, dangers and sudden traumatic experiences such as workplace violence (9-11). These traumatic experiences of employees in emergency healthcare units are closely related to the decrease in job satisfaction, role conflict, job stress, role ambiguity and reduction in professional and organizational commitment (11-13).

Aim

The aim of this study was to determine the effects of role conflict and role ambiguity on work stress and factors affecting work stress in emergency department and 112 health personnel.

2. MATERIALS AND METHOD

Type of the Study

This descriptive cross-sectional study was planned between August 2016 and January 2017.

The Universe and the Sample of the Research

Inclusion Criteria

The population of the study consisted of 278 health personnel working in Pamukkale University Hospital emergency service, Servergazi State Hospital emergency service and 12 112 Emergency Health Services Stations in Denizli province in Turkey. It was aimed to reach the whole population which was not taken into sample calculation. Questionnaire filling was done by face to face interview method. People who were randomly chosen during the application, who did not volunteer to participate in the study and who were on leave between August 2016 and January 2017 were excluded from the study. It was found that 47 people did not complete the questionnaire appropriately and 43 did not want to participate in the study. For this reason, a survey of 188 people was included in the data analysis.

Data Collection Tools

Personal information form, role conflict and role ambiguity scale and, work stress scale are the parts of survey application.

Personal Information Form

The personal information form consisted of two sections including sociodemographic and professional information. It consisted of 12 questions related to sociodemographic information such as gender, age, education and marital status of the individuals and the profession of the participants, the unit, weekly working time, professional working year, factors that may cause occupational stress, liking the profession, occupational law and regulation information, professional duties and responsibilities.

Role Conflict and Role Ambiguity Scale

Role Conflict and role ambiguity scale; was developed by Rizzo, House and Lirtzman (14) in 1970 and the validity and reliability were made by Yıldırım (15) in Turkey in 1996. The Cronbach's alpha value of the scale was 0.81 for role conflict and 0.72 for role ambiguity. In our study, Cronbach's alpha value was found to be 0.67 for role conflict and 0.71 for role ambiguity. The scale is seven likert type scale consisting of two sub-dimensions and 14 items (15).

Work Stress Scale

The cronbach's alpha value of the scale developed by Baltaş and Baltaş was found to be 0.83. The job stress scale consists of 15 questions and five likert type scoring (1=never, 2=rarely, 3=sometimes, 4=often, 5=almost always). The total score obtained from the evaluation of the scale is divided into 15 and the average score of the individual is obtained. A, B, E and F are evaluated as stress levels that may affect productivity and threaten health (16).

Data Analysis

Statistical analysis of the data was performed using SPSS (license number: 10241440) 15.0 Windows package program. Kolmogorov-Smirnov and Shapiro-Wilk normality analysis, Q-Q plot and histogram graphs were used to determine whether the data were normally distributed or not. Since the research did not show a normal distribution; it was evaluated as a nonparametric study. Mann-Whitney U was used when two variables were compared, and Kruskal-Wallis, chi-square and correlation analysis were used when more than two variables were compared. Multiple linear regression analysis with stepwise method was used in the selection of variables affecting role conflict, role ambiguity and work stress scores. The $p < 0.05$ result was used to determine the level of significance.

The Ethical Aspect Of Research

During the research, the Human Rights Helsinki Declaration was adhered to. Written permission was obtained from the institutions where research data was collected by applying an information form containing the purpose and scope of the study. Ethics Committee approval was received (Number: 53043469-050.04.04 - Date and Number of Documents: 09/09/2016-E.37542).

3. RESULTS

Table 1 shows the distribution of the emergency department participating in the study and the health personnel working in 112 according to the descriptive characteristics. The mean age of the participants was 32.08 ± 8.32 (min:19-max:61). 38.8% (n=73) of the participants were between the ages of 31-40, 53.7% (n=101) were males and 68.6% (n=129) were married. When the graduation status is examined, 35.1% (n=66) are associate degree graduates. The participants consisted of 26.6% (n=50) nurses, 23.4% (n=44) emergency medical technicians and 19.1% (n=36) physicians. Looking at the unit studied, 54.8% (n=103) of the participants worked in emergency health stations and 45.2% (n=85) of them worked in emergency services. 21.3% (n=40) were working 40 hours or less. 78.7% (n=148) of those working for 41 hours or more per week. The average weekly working time was 51.21 ± 10.47 hours (min:24-max:80). When the working period of the institution is examined, it is seen that 42% (n=79) of the participants worked for 1-6 years. The average working years in the institution is 9.39 ± 7.28 (min:1-max:40) years. It was found that 88.8% (n=167) of the employees liked their profession. It was found that 65.4% (n=123) of the employees had partially knowledge of professional law and regulation and 78.8% (n=148) had professional duty and responsibility information.

Married people, people who do not like their profession, people who do not have professional law and regulation knowledge, people who have partial knowledge of their professional duties and responsibilities experience more role ambiguity. It was concluded that people who do not like their profession and health personnel between 25-30 years of age have more role conflicts. It was concluded that women, people who do not like their profession, health personnel between 25-30 years of age and people who have partial knowledge of professional laws and regulations experience more work stress.

In Table 2, 53.2% of the emergency personnel and 112 health personnel working in the emergency department see workload as the most important factor in work stress.

Table 1. Distribution of The Participants in Terms of Descriptive Statistics and Comparison of The Characteristics With Obesity Prejudice Scale (n=229)

Characteristic	Number	Percent	X±SS	Test, p
Gender				
Female	224	97.8	78.71±11.35	F=1.774
Male	5	2.2	72.20±7.53	p=0.172
Marital Status				
Married	157	68.6	79.19±10.87	t=1.224
Single	72	31.4	77.22±712.19	p=0.222
Monthly Income				
Income higher than expenditure	38	16.6	77.74±8.99	F= 0.312
Income equal to expenditure	136	59.4	79.06±11.64	p=0.732
Income lower than expenditure	55	24.0	77.95±12.02	
Level of Education				
High school	71	31.0	78.72±11.14	F=1.265
Associate degree	85	37.1	77.19±11.32	p=0.284
Undergraduate and graduate	73	31.9	80.06±11.43	
Profession				
Nurse	104	45.4	78.84±10.72	t=0.322
Midwife	125	54.6	78.35±11.82	p=0.748
BMI and range (kg/m²)				
Slim (18.49 and less)	8	3.5	82.00±8.94	F=2.551
Normal weight (18.5- 24.99)	122	53.3	77.73±10.72	p=0.56
Overweight (25.0- 29.99)	66	28.8	77.42±11.99	
Obese (> 30.0)	33	14.4	83.15±11.73	
Participants' assesment of their body structure				
Slim	8	3.5	81.63±8.81	F=0.595
Normal	106	46.3	77.88±11.45	p=0.704
Slightly overweight	52	22.7	77.46±10.38	
Overweight	41	17.9	80.00±12.50	
Fat	17	7.4	81.00±11.26	
Obese	5	2.2	80.0±13.44	
Attitude towards obese invidiuals				
Prejudiced	13	5.7	75.62±14.59	F=1.147
Unprejudiced	176	76.9	79.18±11.30	p=0.319
Undecided	40	17.5	76.88±10.10	
Presence of obese individuals in the family				
No	135	59.0	78.61±11.19	F=0.954
Mother	37	16.2	76.57±9.73	p=0.415
Father	6	2.6	75.33±10.37	
Other (sibling, child, uncle, aunt)	51	22.3	80.31±12.870	
The Cut-Off Points of The Obesity Prejudice Scale				
Unprejudiced (68.00 and lower)	37	16.2		
Inclined to prejudiced (68.01-84.99)	129	56.3		
Prejudiced (85.00 and higher)	63	27.5		
Obesity Prejudice Scale Total Score Averages			78.57±11.31 (min:51, max:115)	
Age			32.99±8.10 (min:18, max:63)	
Years in the profession			9.14±9.07 (min:1, max:42)	
BMI and range (kg/m²)			25.24±4.63(min:16.53, max:46.99)	

When the work stress scale is examined in Table 3; It was seen that 38.3%(n=72) health personnel working in the emergency department and 112 participated in the study experienced the level of stress which attracted to the person despite the high level of stimulus and responsibility.

In Table 4, there was a weak positive relationship between role conflict and role ambiguity, an intermediate negative relationship between role conflict and work stress, a very weak negative relationship between role conflict and education level. There was a weak negative correlation between role ambiguity and work stress. There was a very weak positive

correlation between work stress and education level. A very weak negative correlation was found between education level and weekly working time. There was a very weak negative correlation between age and work stress, and a weak negative correlation between age and weekly working time.

Table 2. The most important factors causing professional stress.

	N	%
Excessive workload	100	53.2
Lack of staff	75	39.9
Problems arising from the administration	72	38.3
Length of the run time	32	17
Staffing	17	9
Other	16	8.5
* Multiple options are checked	312	100

Table 3. Percentage averages of work stress of health personnel working in emergency services and 112

Work stress scale values	Range	N	%
A (1. Group)	3.5-4.0	14	7.4
B (2. Group)	1.0-1.3	4	2.1
C (3. Group)	1.4-1.9	24	12.8
D (4. Group)	2.0-2.5	54	28.7
E (5. Group)	2.6-3.1	72	38.3
F (6. Group)	3.2-3.4	20	10.6
TOTAL		188	100.0

Table 4. Relation between role ambiguity, role conflict, work stress and affecting factors experienced by health personnel working in emergency services and 112

Age	Role conflict	Role ambiguity	Work stress	Graduation	Weekly work hour
Role Conflict	r				
	p				
Role Ambiguity	r	,355(**)			
	p	,000			
Work stress	r	,609(**)	-,389(**)		
	p	,000	,000		
Graduation	r	-,200(**)	-,009	,166(*)	
	p	,006	,898	,023	
Weekly work hour	r	-,070	,115	,057	-,163(*)
	p	,342	,118	,440	,025
Age	r	,172	,010	-,178	-,043
	p	,018	,889	,015	,554

* Correlation is significant at 0.05 level.

** Correlation is significant at 0.01 level.

In the regression analysis in table 5, there was a positive relationship between role conflict score and role ambiguity score and a negative correlation with work stress score ($p < 0.05$). Role conflict was found to be affected 38% of role uncertainty and 37% of work stress. In addition, there was a positive correlation between role ambiguity score and liking profession, knowledge of law and regulation; There was a negative correlation between work stress score ($p < 0.005$). It was concluded that role ambiguity affects 26% of the liking of the profession, 21% of knowledge of laws and regulations and 15% of work stress. A negative correlation was found between work stress score and role conflict, role ambiguity, knowledge of law and regulation ($p < 0.005$). It was found that 43% of insufficiency of Law and Regulation Information, 40% of role ambiguity, 37% of role conflict affected work stress.

Table 5. Regression values of role ambiguity, role conflict and work stress among health personnel working in emergency services and 112 by dependent and independent variables

Factors affecting the role conflict of health personnel working in emergency services and 112

Factors	β	Std. Error	t	p	% 95 Confidence Interval		R ²
					Lower	Top	
Role Conflict Scale (Constant)	4,927	,508	9,707	,000	3,926	5,929	
Work Stress Scale	-,801	,090	-8,871	,000	-,979	-,623	,370
Role Ambiguity Scale	,151	,068	2,236	,027	,018	,284	,387

Regression Analysis

Factors affecting the role ambiguity of health personnel working in emergency services and 112

Factors	β	Std. Error	t	p	% 95 Confidence Interval		R ²
					Lower	Top	
Role Ambiguity Scale (Constant)	6,721	,237	28,354	,000	6,253	7,188	
Work Stress Scale	-,469	-,089	-5,272	,000	-,644	-,293	,151
Knowledge of Professional Law and Regulations	-,905	,224	-4,040	,000	-1,347	-,463	,211
Loving Profession	-,633	,165	-3,826	,000	-,959	-,306	,269

Regression Analysis

Factors affecting the work stress of health personnel working in emergency services and 112

Factors	β	Std. Error	t	p	% 95 Confidence Interval		R ²
					Lower	Top	
Work Stress Scale (Constant)	4,919	,238	20,660	,000	4,449	5,389	
Role Conflict Scale	-,360	,041	-8,730	,000	-,441	-,279	,370
Role Ambiguity Scale	-,177	,045	-3,906	,000	-,267	-,088	,404
Knowledge of Professional Law and Regulations	-,467	,149	-3,135	,002	-,761	-,173	,435

Regression Analysis

4. DISCUSSION

It was found that nurses and midwives working in institutions which provide primary Since health institutions are both work environments where service users experience intense stress and service providers experience stress very frequently, there is more work stress in these environments. The excessive workload and the poor determination of duties and responsibilities are among the important factors that cause work stress (17,18).

When the sociodemographic characteristics were examined; it is concluded that married people experience the role ambiguity more than singles. In the study conducted by Yeşilyurt (19) on nurses, a significant difference was found between the scores of role ambiguity according to marital status, but unlike our study, it was concluded that single nurses mostly experienced role ambiguity. Contrary to all these findings, some studies did not find a significant difference between the score of role ambiguity according to marital status (20-23) Married health workers have different roles such as mother, father and spouse compared to single workers in business life. therefore, it is thought that married employees experience more role ambiguity.

It was seen that people who did not like their profession experienced more role ambiguity. Şahin (22) found a significant difference between role ambiguity scores in terms of liking the work environment and found that those who were not satisfied with the work environment experienced the role ambiguity more. It is thought that health workers experience role ambiguity because they do not adopt the roles they are obliged to perform because they do not like their professions.

It was concluded that people who do not have professional law and regulation knowledge experience more role ambiguity. In his study on physicians and nurses, Özkan (21) found a significant difference between role ambiguity scores according to professional law and regulation information, and, contrary to our study, concluded that physicians and nurses with sufficient professional laws and regulations experienced more role ambiguity. The reason for this may be that health workers do not want to learn the roles they are obliged to perform because of dislike of their profession and the duties and responsibilities defined for these roles. As is known, professional laws and regulations determine the duties and responsibilities of individuals. If these rules are not followed, legal problems arise.

It is seen that people who have partial knowledge of professional duties and responsibilities experience more role ambiguity. Similar to our study, Yörükoğlu (24) and Narin (25) concluded that people who partially have professional duty and responsibility knowledge experienced more role ambiguity in their studies. It is thought that people with limited knowledge experience more ambiguity than those who do not.

It was seen that the role conflict was mostly experienced by health personnel between 25-30 years of age. Yeşilyurt (19) found a significant difference between the role conflict scores according to age in the study performed by nurses, and concluded that those who had a role conflict had a maximum age of 49 and older. Topuz (20), Yörükoğlu (24), Şahin (22), Narin (25) and Tarrant (26) did not find a significant difference in their work on role conflict.

Emergency units are the places where the patients health is decided and intervened very quickly. Most of the time, physicians, nurses, emergency medical technicians and ambulance and emergency care technicians provide services to the same patient at the same time. In this

case, a role conflict may occur. It is thought that it is due to the lack of experience and professional excitement of the employees especially in the 25-30 age range. It is also possible that emergency medical technicians and ambulance and emergency care technicians intervene to the patient alone and away from the hospital.

It is seen that people who do not like their profession experience more role conflict. It is thought that health workers who do not like their profession also experience role conflicts because they do not fully know or adopt the roles they are obliged to do.

It is seen that women experience more work stress than men. Erşan et al. (27) obtained the same result in our study on health workers. Contrary to our results; he it found no significant difference between work stress by gender in their study on health workers of Aslan et al. (28), physicians of Sünter et al. (29), ambulance workers of Tokuç et al. (30), emergency staff of Koç (31), nurses of Laal and Aliramaie (32), ambulance workers of Atan and Tekingündüz (33). It is thought that women experience more work stress than men due to their work in stress-intensive units, gender discrimination, sexual harassment, violence, conflict in their roles and responsibilities in their family life and work life.

It was seen that people between 25-30 years experienced more work stress. In the study of Arıkan and Karabulut (34), health workers between 26 and 33 years of age and In the study of Koç (31), health workers between 25 and 35 years of age have been found as the most stressful age group. Such a result may be the health care workers due to their early get a job, not being fully aware of their duties and responsibilities, and especially for 112 employees to encounter emergencies outside the hospital and to make quick and accurate decisions in a short time. In addition, it is thought that it is due to the fact that institutions do not fully implement their initiatives to reduce the factors causing work stress.

It was found that those who do not like their profession experience more work stress. In general, individuals who work in a job they do not like may experience situations such as unhappiness, tension, unwillingness to come to work, and desire to quit, and it is inevitable that all of these will cause stress. Therefore, it is thought that health workers who do not like their jobs experience intense work stress.

It was found that people who have partial knowledge of professional laws and regulations experienced more work stress. It is thought that these employees do not know their roles and how they will react in case of an emergency, and because of their lack of professional knowledge, they feel insufficient to make quick and correct decisions in crisis and acute moments and thus experience stress. If health professionals have full knowledge of professional laws and regulations, they become more aware of their duties and responsibilities and act more decisively.

Although there is no study in the literature on the inadequacy of law and regulation knowledge of health workers, in our study; It was observed that work stress was mostly affected by inadequacy in law and regulation knowledge, and respectively role ambiguity and role conflict played an important role in increasing work stress. The emergency department and 112 health workers are often confronted with situations such as making quick and accurate decisions about the patient, responding quickly, and being in direct contact with the relatives of the patients during the emergency. therefore, if problems related to work stress, role conflict and role uncertainty are resolved, confusion that may arise in medical errors and interventions may be eliminated. Better quality and excellent health service can be offered.

5. CONCLUSION

Role conflict, ambiguity and work stress are a serious problem for emergency workers. Because of the great responsibility of saving lives and competing against over time, emergency workers happily accept the stress they experience regardless of the severity of the stress. However, in the long run, the factors that cause this stress reduce the productivity and quality of life of emergency workers. Therefore, deficiencies in the areas where problems are experienced should be identified, the roles of emergency workers should be determined with a sharp limit and the factors that cause stress should be eliminated and areas where they can easily fulfill their responsibilities should be created. There is no such study in the literature including emergency and 112 employees similar to our study. Our goal is to fill this gap in the literature, identify problems and to contribute to the institutions to overcome.

Limitations

The limitations of the research are that the research is conducted in a single center and evaluated only in terms of sociodemographic features.

Ethical consideration of the study

During the research, the Human Rights Helsinki Declaration was adhered to. Written permission was obtained from the institutions where research data was collected by applying an information form containing the purpose and scope of the study. Ethics Committee approval was received (Number: 53043469-050.04.04 - Date and Number of Documents: 09/09/2016-E.37542).

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Conflict of interest statement

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