Original Article

Factors Affecting the Quality of Work Life of Emergency Service Personnel

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Abstract

Background: As a result of variables such as increased workload, shift work, occupational injury risk, traumatic stress, and violence of emergency service personnel (physicians, health officers, nurses, emergency medical technicians, and paramedics their quality of work life decreases and healthcare services are adversely affected.

Objective: This study aimed to determine the quality of work life and the affecting factors in emergency service personnel.

Methodology: This descriptive and cross-sectional study was conducted with 250 healthcare professionals working at the command and control center and emergency health services stations between June and December 2022. "Socio-Demographic Characteristics Form" and "Quality of Life Scale for Employees" were used as data collection tools.

Results: The result of the research: It was determined that there were significant differences in all sub-dimensions of the quality of work life scale in the variables of income level, weekly working hours, regular use of annual leaves, adequate rest after work, participation in social activities and satisfaction with the current job.

Conclusion: As a result, the study raises awareness of the factors that affect the quality of working life of the health personnel working in emergency health services, and emphasizes the need to plan and develop initiatives to protect and improve the quality of work life. Initiatives should be planned to reduce factors that negatively affect the quality of life of emergency service personnel, such as long working hours and the risk of exposure to violence during work.

Keywords: emergency health services, quality of work life, healthcare professionals

Introduction

Throughout history, illnesses, accidents, and injuries have significantly affected human life. For this reason, a line of business has been created whose mission is to meet the needs of people in the field of emergency medical services (Demirbilek and Hatik, 2020). The goal of emergency medical service is to minimize death and disability by responding quickly and effectively in the

event of an emergency or injury. Today, emergency medical services in Turkey are provided by control centers, 112 emergency stations, and health facilities affiliated with provincial health directorates (Ministry of Health, 2019). There is more than one health personnel in emergency medical services, both in terms of job description and title. Healthcare workers in facilities consist of physicians, health officers, nurses, emergency

medical technicians, and paramedics (Aksu, 2020; Uslu, 2017; Yilmaz, 2014). As a result of variables such as increased workloads, the current physical conditions of the work environment, working 24-hour shift systems, the risk of occupational injuries, traumatic stress, and violence, the quality of work life decreases and the delivery of health care services is compromised (Guneri et al., 2011; Onal, 2015; Sarikahya et al., 2020). When the existing literature in Turkey is examined, it is seen that many studies have been conducted to determine the working conditions and factors affecting the quality of work life of healthcare personnel involved in the provision of healthcare services. However, there are a limited number of studies examining the quality of work life of healthcare personnel involved in the provision of emergency healthcare services and the factors affecting it. Quality of work life; It is the process of humanizing the current job. Humanization of work; It is to meet the physical, social and psychological needs of employees and to evaluate these needs as a whole and to conditions improve current working accordingly (Durdu, 2019). Therefore, this study was conducted to determine the quality of work life and the factors that influence the quality of work life of emergency service personnel.

Methodology

Research type and study sample: This study followed a descriptive, cross-sectional design. Data were collected between June and December 2022, in the of emergency medical services in Antalya, Turkey. The participants were informed about the research purpose, and written consent was received from those who agreed to participate in the study. Data were collected by asking emergency service personnel face to face during breaks. Completion of the questionnaires took an average of 5-10 minutes.

Data collection tools: The data collection instruments used were the "Sociodemographic Characteristics Form" and the "Quality of Life Scale for Employees," which were created by the researchers based on literature reviews.

Socio-demographic characteristics form: The sociodemographic characteristics of the participants were; age, gender, marital status, education level, income status, number of

children, place of residence, whether there is a chronic illness, continuous drug use, current work unit, job title, employment status, total years of service, how many years he has worked in the facility, weekly working hours, night shift status, whether annual leave is used regularly, work in a unit suitable for vocational training, it consists of a total of 26 questions, including recovery participation in social activities, satisfaction with current job, exposure to physical-social violence during work, and experiencing a work-related accident. The questionnaire was designed by the researchers in accordance with the literature review (Erenoğlu et al., 2019; Macit et al., 2019; Pehlivan, 2017; Sahin, 2019; Uslu, 2017).

Quality of life scale for employees: The Quality of Life Scale for Employees was developed by Stamm (2005) to assess the quality of work life of health care workers, Yeşil et al. (2010) adapted into Turkish. The scale is a 6-point Likert scale (0: never, 5: very often) consisting of 10 questions in three subdimensions and a total of 30 questions. The first subdimension of the scale is the dimension of job satisfaction (compassion satisfaction). Questions 3, 6, 12, 16, 18, 20, 22, 24, 27, and 30 of the scale measure job satisfaction. The Cronbach's alpha value of the job satisfaction dimension is 0.87, and a high value on this subscale indicates the degree of satisfaction or contentment as a helper. The burnout dimension is the second subscale dimension. A high score on this subscale indicates a high level of burnout. Questions 1, 4, 8, 10, 15, 17, 19, 21, 26, and 29 of the scale measure burnout. The Cronbach's alpha value of the burnout dimension is 0.72. The compassion fatigue dimension is the last dimension of the scale. Employees who score high on this subscale are advised to get support or help. Questions 2, 5, 7, 9, 11, 13, 14, 23, 25, and 28 of the scale are used to measure compassion fatigue. The Cronbach's alpha value of the empathy fatigue dimension is 0.80. Since questions 1, 4, 15, 17, and 29 contain negative statements, the analysis of the data obtained from the scale is performed by inversion (Yesil, 2010). In our study, the Cronbach's alpha value for the job satisfaction dimension of the scale was 0.88, the Cronbach's alpha value for the burnout dimension was 0.70, and the Cronbach's alpha value for the empathy fatigue dimension was 0.86.

Data analysis: Analysis was conducted using descriptive statistics tests using the Statistical Package for the Social Services SPSS 22.0 (SPSS Inc., Chicago, IL). Descriptive statistics were used to determine patients' characteristics. A test of hypothesis with p value of < 0.05 was considered significant.

Ethical considerations: This study was approved by the Burdur Mehmet Akif Ersoy University Non-Interventional Clinical Research Ethics Committee dated 11.05.2022 and decision number GO 2022/730, and the decision numbered 98360293-604.01.02 from Antalya Provincial Health Directorate dated 15.06.2022. The objective of the research was explained to the participants and written permission was received from those agreeing to participate in the research. Data was collected through face-to-face interviews to help increase the accuracy of the collected information.

Results

The sociodemographic characteristics of the emergency service personnel participating in the study are summarized in Table 1.

The mean score of job satisfaction subdimension of the respondents was 36.66 ± 8.95 , the mean score of burnout subdimension was 20.19 ± 7.62 , and the mean score of empathy fatigue sub-dimension was 21.70 ± 10.82 (Table 2).

There was no statistically significant difference between the mean scores of job satisfaction, burnout and empathy fatigue according to gender, marital status, place of residence, continuous drug use, job title,

employment status, length of service in the institution and work in the corresponding educational unit (p>0.05). (Table 3).

In our study, it was found that women's quality of life scale average scores were higher than men. It was found that job satisfaction sub-dimension mean scores were higher in single people, whereas burnout and empathy fatigue sub-dimensions were higher in married people. The average burnout and empathy fatigue scores of employees living in the city center were found to be higher than those living in the district. It was found that the job satisfaction averages of contract employees were higher, and the burnout and empathy fatigue average scores of permanent employees were higher.

It was determined that as the number of years working in the institution increased, job satisfaction decreased and burnout and empathy fatigue increased. It has been determined that as emergency service personnel' weekly working hours increase, job satisfaction decreases and burnout and empathy fatigue increase. It has been found that emergency service employees who take annual leave, participate in social activities and have enough rest after work have higher job satisfaction and lower levels of burnout and fatigue (Table 3).

It was found that the average job satisfaction score of emergency service personnel who were exposed to violence and had a work accident while working was low, but their burnout and fatigue average scores were high (Table 3).

Table 1: Sociodemographic characteristics of emergency services personnel

Sosyo-Demographic Characteristics	$\bar{\mathbf{X}} \pm \mathbf{S}\mathbf{D}$		
Age (min:22, max: 52)	31.34 ± 6.36		
	n	%	
Gender			
Female	133	53.2	
Male	117	46.8	
Marital Status			
Married	163	65.2	
Single	87	34.8	
Income Status			

Income exceeds expenses	36	14.4
Income equals expenses	97	38.8
Income is less than expenses	117	46.8
Number of children		
None	113	45.2
1-3	137	54.8
Place of residence		
State	141	56.4
District	98	39.2
Village	11	4.4
Educational Level		
High School	13	5.2
Associate' degree	90	36.0
Bachelor's degree	125	50.0
Master's degree and above	22	8.8
Do you have a chronic illness?		
Yes	40	16.0
No	210	84.0
Do you take any regular medication?		
Yes	36	14.4
No	214	85.6
Current work unit		
Emergency medical services station	217	86.8
Command and control center	33	13.2
Job title		
Paramedic and emergency medical technician	111	44.4
Emergency medical services technician	139	55.6
Employment status		
Permanently employed	207	82.8
Contractual	43	17,2
Total years of service		,
Less than 1 year	6	2.4
1-5 years	56	22.4
6-10 years	79	31.6
More than 11 years	109	43.6
Years of service at your current facility		
Less than 1 year	17	6.8
1-5 years	93	37.2
6-10 years	86	34.4
More than 11 years	54	21.6
Hours worked per week		
Between 25-49 hours	150	60.0
Between 50-70 hours	70	28.0
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711	20	12.0
71 hours and above	30	12.0
Regular use of annual leave?		
Yes	123	49.2
No	127	50.8
Do you work in a unit appropriate for your training?		
Yes	241	96.4
No	9	3.6
Are you performing duties beyond your job description?		
Yes	136	54.4
No	114	45.6
Is the workload heavy in the unit where you currently work?		
Yes	169	67.6
No	81	32.4
Are you able to get adequate rest before and after your shift?		
Yes	116	46.4
No	134	53.6
Do you participate in social activities?		
Yes	113	45.2
No	137	54.8
Are you satisfied with your current job?		
Yes	150	60.0
No	100	40.0
If your answer is no, please indicate the reason why		
Communication problem	4	1,6
Job dissatisfaction	5	2,0
Financial inadequacies	36	14,4
Inadequate physical conditions	6	2,4
Lack of social opportunities	4	1,6
Unsuitable work system	45	18,0
Have you experienced violence at work?		
Yes	197	78.8
No	53	21.2
Have you had a work-related accident?		
Yes	79	31.6
No	171	68.4
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X: Mean, SD: Standard Deviation

Table 2: Scores of the participants in the quality of life scale (n=250)

Sub-Dimensions of the Quality of Life Scale	Min	Max	$\overline{X} \pm SD$
Job Satisfaction	7	50	36.66 ± 8.95
Burnout	0	43	20.19 ± 7.62
Compassion Fatigue	2	50	21.70 ± 10.82

X: Mean, SD: Standard Deviation

Table 3: Comparison of socio-demographic characteristics of emergency services personnel with the average score of the Quality of Life Scale

Sosio-Demographic Characteristics		Quality of Life Scale for Employees		
	_	Job Satisfaction	Burnout	Compassion Fatigue
	n	$ar{X}\pm SS$	$ar{X}\pm SS$	$ar{X}\pm SS$
Income Status				
Income exceeds expenses	36	39.22 ± 6.64	19.05±6.61	20.41 ± 9.43
Income equals expenses	97	38.42 ± 8.08	17.80 ± 7.22	19.49 ± 10.30
Income is less than expenses	117	34.41 ± 9.74	22.59±7.59	23.94±11.28
Statistical Analysis	F***	7.383	11.554	4.917
·	p	0.001*	0.000*	0.008*
Number of children				
None	113	36.85 ± 8.94	19.73±7.57	19.84 ± 10.19
1-3	137	36.50 ± 8.98	20.57±7.67	23.24±11.12
Statistical Analysis	t**	0.311	-0.868	-2.490
·	p	0.756	0.386	0.013*
Educational Level	-			
High School	13	39.46 ± 10.30	15.46 ± 7.22	13.84 ± 9.92
Associate's degree	90	36.97 ± 9.62	19.77±7.88	19.92±9.91
Bachelor's degree	125	35.97 ± 8.57	20.92±7.57	23.22±11.49
Master's degree and above	22	37.63 ± 7.33	20.54 ± 6.32	25.04±7.79
Statistical Analysis	KW****	3.29	5.317	13.350
·	p	0.348	0.150	0.004*
Do you have a chronic illness?	2			
Yes	40	36.15 ± 8.13	22.90 ± 8.09	25.22±11.42
No	210	36.76 ± 9.11	19.68 ± 7.44	21.03 ± 10.60
Statistical Analysis	t**	-0.396	2.472	2.259
·	р	0.693	0.014*	0.025*
Current work unit	•			
Emergency medical services station	217	36.17 ± 9.05	20.34 ± 7.71	21.43 ± 10.93
Command and control center	33	39.87 ± 7.59	19.21±7.07	23.48 ± 10.10
Statistical Analysis	t**	-2.232	0.795	-1.012
y	n	0.026*	0.427	0.313

Less than 1 year	6	39.00±8.79	15.33±3.93	21.50±8.57
1-5 years	56	38.32 ± 8.34	20.17 ± 8.35	21.44±11.46
6-10 years	79	34.02 ± 9.66	20.25 ± 8.11	19.87 ± 11.93
More than 11 years	109	37.59 ± 8.40	20.43 ± 6.99	23.18 ± 9.61
Statistical Analysis	KW****	9.195	3.367	5.18
·	р	0.027*	0.338	0.138
Hours worked per week	•			
Between 25-49 hours	150	38.18 ± 8.28	18.54 ± 7.03	20.44 ± 9.87
Between 50-70 hours	70	35.98 ± 9.13	21.94±7.55	22.52 ± 10.65
71 hours and above	30	30.63 ± 9.26	24.40 ± 8.34	26.10 ± 14.35
Statistical Analysis	F***	9.832	10.704	3.768
v	р	0.000*	0.000*	0.024*
Regular use of annual leave?	•			
Yes	123	38.13 ± 8.85	17.50 ± 6.79	19.28 ± 10.04
No	127	35.23 ± 8.84	22.80 ± 7.50	24.05 ± 11.07
Statistical Analysis	t**	2.592	-5.847	-3.563
	p	0,010*	0.000*	0.000*
Are you performing duties beyond your job descript	ion?	- 7		
Yes	136	35.80 ± 9.33	21.62 ± 7.22	23.61 ± 10.89
No	114	37.69 ± 8.40	18.49 ± 7.76	19.43 ± 10.35
Statistical Analysis	t**	-1.670	3.299	3.085
v	р	0.096	0.001*	0.002*
Is the workload heavy in the unit where you current	lv work?			
Yes	169	35.10 ± 9.13	22.08 ± 7.19	23.17±10.69
No	81	39.92 ± 7.63	16.24 ± 7.00	18.64 ± 10.53
Statistical Analysis	t**	-4.115	6,061	3,154
, a contract of the contract o	р	0.000*	0.000*	0.002*
Are you able to get adequate rest before and after yo	our shift?			
Yes	116	38.72 ± 8.32	17.37 ± 7.08	19.34 ± 10.34
No	134	34.88±9.11	22.63 ± 7.25	23.75±10.85
Statistical Analysis	t**	3.460	-5.775	-3.272
<i>,</i>	p	0.001*	0.000*	0.001*
Do you participate in social activities?	ı			
	112	20.05.5.40	17.75.7.42	10.46+10.20
Yes	113	38.85 ± 7.49	17.75 ± 7.43	19.46 ± 10.20

Statistical Analysis	t**	3.604	-4.801	-3.029
v	p	0.000*	0.000*	0,003*
Are you satisfied with your current job?	*			·
Yes	150	40.64 ± 7.21	17.04 ± 6.73	19.68 ± 10.27
No	100	30.69 ± 7.94	24.93 ± 6.35	24.75 ± 10.97
Statistical Analysis	t**	10.264	-9.283	-3.719
·	p	0.000*	0.000*	0.000*
Have you experienced violence at work?	-			
Yes	197	36.54 ± 8.71	21.16±7.53	23.12 ± 10.84
No	53	37.09 ± 9.84	16.60 ± 6.92	16.45 ± 9.06
Statistical Analysis	t**	-0.394	3.976	4.104
·	p	0.694	0.000*	0.000*
Have you had a work-related accident?	•			
Yes	79	35.91 ± 7.93	22.79 ± 7.38	24.75 ± 11.64
No	171	37.01 ± 9.38	18.99 ± 7.45	20.29 ± 10.15
Statistical Analysis	t**	-0.903	3.761	3.079
•	р	0.367	0.000*	0.000*

^{*}p<0.05, **Student t-test, ***Oneway Anova test, **** Kruskal Wallis H test

Discussion

In accordance with the results of the study, it was found that there was a statistically significant difference between the income status variable of the paramedic employees and the mean scores of the quality of life scale. There are similarities between many studies in the literature and our study (Erenoglu et al., 2019; Hwang, 2022; Toygar et al., 2018). In contrast to the results of our study, it was found that the average income status did not affect the quality of work life and there was no significant difference between the mean scores of job satisfaction, burnout, and empathy fatigue of the participants and their income status (Sahin, 2019). Tamer and Ozturk (2021) found in their study that there was no significant difference between nurses' monthly income status and quality of work life. It is believed that participants' monthly income, basic and special needs of people, relationship between income and expenses, perspective on income situation may be different.

It was found that there was a statistically significant difference between the weekly work hours variable of emergency medical service workers and the mean score of the quality of life scale. There are similarities between many studies in the literature and our study (Hemanathan et al., 2017; Saygili et al., 2016; Tamer and Ozturk, 2021). In contrast to the results of our study, it was found that there was no significant difference between nurses' mean weekly work hours and mean scores of burnout and empathy (Denk, 2018). Raeissi et al (2019) found in their study that there was no statistically significant difference between nurses' weekly work hours and quality of work life. The fact that the results of the study were different; it was suggested that this could be caused by variables such as the attrition effect of healthcare professionals working more than weekly overtime, the stress and fatigue caused by monthly overtime, the direct proportionality of overtime work and time spent at work, and the impact of this situation on the person's family and personal

In accordance with the results of the study, it was found that there was a statistically significant difference between the variable of the presence of a chronic illness and the mean

scores of burnout and empathy fatigue of the paramedic staff. However, it was found that there was no statistically significant difference between the variable of presence of chronic illness and job satisfaction. In contrast to the results of our study, no statistically significant difference was found between healthcare workers with or without chronic illness and burnout (Yeniyol, 2018). Aydin et al (2011) found that there was no significant difference between nurses with or without chronic illness and burnout. Uzun and Mayda (2020) found in their study that there was no significant difference between nurses with or without chronic illness and burnout. However, the literature review could not discuss the relationship between the presence of a chronic illness and job satisfaction and compassion fatigue because no studies could be reached.

It was found that there was a statistically significant difference between the variable of satisfaction with the current job of emergency medical personnel and the mean score of the quality of life scale. There are similarities between many studies in the literature and our study (Sen, 2016; Tamer and Ozturk, 2021). In contrast to the results of our study, it was found that there was no statistically significant difference between nurses' job satisfaction and empathy fatigue, and the nurses who were dissatisfied with their jobs had higher mean scores for empathy fatigue than the others (Denk, 2018). Durdu (2019) found in his study that there was no statistically significant difference between nurses' satisfaction with their work and quality of work life. The difference in the research findings; It is believed that this could be due to the differences in the level of love and satisfaction of emergency service personnel.

Conclusion: The human being is the most important element in the provision of health care services. This service includes: the human life process, strength, resistance to disease, and all activities that affect life. Maintaining people's health needs is the main goal of health service delivery. It is the health worker who provides for the realization of this goal. The result of our research is that health personnel working in emergency care: income status, weekly working hours, regular use of annual leave, excessive workload in the work unit, adequate rest before and after the shift, participation in social activities, satisfaction with the current job, It was found that the variables of being exposed to violence during work and having an occupational accident affect the quality of work life. As a result, the study raises awareness of the factors that affect the quality of work life of health personnel in emergency services and emphasizes the need to plan and develop initiatives to protect and improve the quality of work life. These initiatives; This may include developing policies that will prevent the violence that emergency healthcare service workers are exposed to while working and imposing deterrent penalties on those who implement them. In addition, steps can be taken to shorten the working hours of emergency service employees in order to improve their quality of life. In addition, initiatives should be planned to improve personal rights, such as granting annual leaves and allowing time for adequate rest after work.

Limitations: The limitation of the study is that the number of samples is inadequate. In the future, qualitative studies should be conducted in order to find out how variables affect the quality of work life.

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