



## ORIGINAL ARTICLE

# Factors Related to Levels of Burnout and Job Satisfaction in Family Physicians (Cross-sectional Research)

## Aile Hekimlerinde Tükenmişlik ve İş Doyumunu Düzeyleri ile İlişkili Faktörler (Kesitsel Araştırma)

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**ABSTRACT**

**Aim:** The study aims to evaluate the burnout and job satisfaction levels of family physicians in terms of some variables.

**Method:** The study is of cross-sectional type. It was held between 03.06.2019-03.09.2019. The sample was not selected in the study, the whole universe was tried to be reached. 255 family physicians working in Van province were included in the study. The participation rate is 82%.

**Results:** The mean scores of the participants of the study; Maslach sensuality:  $29.87 \pm 3.5$ , achievement:  $23.62 \pm 3.5$ , insensitivity:  $13.37 \pm 3.5$ , total:  $22.29 \pm 3.54$ , Minnesota total:  $3.03 \pm 0.68$ . There is a significant difference between gender ( $p < 0.04$ ), compliance with the personality structure of the study ( $p < 0.04$ ), choosing the profession at its own will ( $p < 0.006$ ), presence of chronic illness ( $p < 0.05$ ), physical and social conditions in the workplace ( $p < 0.04$ ), and burnout scores. Although there was no difference between the satisfaction of the family medicine system ( $p < 0.001$ ), the future anxiety of the system ( $p < 0.001$ ), and the burnout scores according to the satisfaction of the wage ( $p < 0.002$ ), there was a significant difference in terms of job satisfaction scores.

**Conclusion:** The study results show that family physicians feel from moderate to high levels of fatigue and emotional fatigue related to their profession. High scores in the depersonalization sub-dimension indicate that this situation is reflected negatively on the people they serve. It has been determined that thoughts about the family medicine system have an effect on job satisfaction rather than burnout.

**Keywords:** Family Practice; Burnout, Psychological; Job satisfaction, Cross-Sectional Studies

**ÖZ**

**Amaç:** Çalışmada aile hekimlerinin tükenmişlik ve iş doyumunu düzeylerini bazı değişkenler açısından değerlendirmek amaçlanmıştır.

**Yöntem:** Çalışma kesitsel tiptedir. 03.06.2019-03.09.2019 tarihleri arasında yapılmıştır. Araştırmada örneklem seçilmemiş, evrenin tamamına ulaşılmaya çalışılmıştır. Çalışmaya Van ilinde çalışan 255 aile hekimi dahil edilmiştir. Katılma oranı % 82'dir.

**Bulgular:** Çalışmaya katılanların ölçek puan ortalamaları; Maslach duygusallık:  $29.87 \pm 3.5$ , başarı:  $23.62 \pm 3.5$ , duyarsızlaşma:  $13.37 \pm 3.5$ , toplam:  $22.29 \pm 3.54$ , Minnesota toplam:  $3.03 \pm 0.68$ 'dir. Cinsiyet ( $p < 0.04$ ), işinin kişilik yapısına uyması ( $p < 0.04$ ), mesleğini kendi isteği ile seçme ( $p < 0.006$ ), kronik hastalık varlığı ( $p < 0.05$ ), iş yerindeki fiziksel ve sosyal durumlarla ( $p < 0.04$ ) tükenmişlik puanları arasında anlamlı fark vardır.

Aile hekimliği sisteminden memnuniyet ( $p < 0.001$ ), sistemle ilgili gelecek kaygısı duyma ( $p < 0.001$ ) ve ücretten memnuniyet durumlarına ( $p < 0.02$ ) göre tükenmişlik puanları arasında fark olmamasına rağmen iş doyumunu puanları açısından anlamlı fark vardı ( $p < 0.05$ ).

**Sonuç:** Çalışmanın sonuçları, aile hekimlerinin meslekleriyle ilgili orta ila yüksek düzeyde yorgunluk ve duygusal yorgunluk hissettiğini göstermektedir. Duyarsızlaşma alt boyutundaki yüksek puanlar, bu durumun hizmet ettikleri kişilere olumsuz yansıtıldığını göstermektedir. Aile hekimliği sistemi ile ilgili düşüncelerin tükenmişlikten ziyade iş tatmini üzerinde bir etkisi olduğu belirlenmiştir.

**Anahtar Kelimeler:** Aile Hekimliği; Tükenmişlik, Psikolojik; İş doyumunu, Kesitsel çalışmalar

**Introduction**

Job satisfaction is an emotional reaction that occurs when the employee evaluates his job, working environment and workplace conditions. Job satisfaction is affected by personal characteristics such as age, gender, and education level, as well as organizational and environmental factors such as job content, wages, management policy and working conditions (1).

Burnout is the depletion of physical and mental resources. It occurs when we spend more energy than we take in (2). Burnout, first described by Freudenberg in 1974, often occurs in people who

constantly work face-to-face with other people. Burnout in the individual begins with the first dimension called emotional exhaustion (fatigue, exhaustion) (3).

Emotional exhaustion refers to feeling exhausted from work (4). The second dimension involves developing negative and cynical attitudes towards other people and is called depersonalization. The third dimension is the person's negative evaluation of himself regarding work and feeling unsuccessful. Burnout is generally considered work stress and includes these three dimensions. Burnout occurs as emotional exhaustion and depersonalization increase and the sense of

personal accomplishment decreases. Burnout causes consequences such as low job performance, constant absenteeism, and inability to fulfil work-related duties and is considered a social problem (5).

The workload of healthcare professionals can be heavy, especially when it comes to caring for terminally ill patients and providing emotional support. In addition, inadequacies in health services and imbalances in personnel distribution can create disappointment and tension. Work stress and burnout can lead to psychological effects (depression, anxiety) and physiological effects (headaches, muscle tension). Additionally, work-related tension can reduce productivity in the workplace, reduce job satisfaction, and cause staff loss (6).

In the health sector, the failure to compensate for mistakes, because the job requires attention and sensitivity, gives rise to the opinion that the professional satisfaction of health workers should be increased. It is expected that as employee satisfaction increases, job satisfaction will also increase and this will increase patients' satisfaction (7).

In this study, it was aimed to determine the burnout and job satisfaction levels of family physicians and to evaluate the burnout and job satisfaction levels in terms of some variables.

### Material-Method

The study is of cross-sectional type. It was held between 03.06.2019-03.09.2019. The sample was not selected in the study, the whole universe was tried to be reached. 255 family physicians working in Van province were included in the study. The participation rate is 82%. Ethics committee approval was obtained for the study with the decision dated 01.11.2018 and numbered 2018/15 from the Regional Training and Research Hospital Clinical Research and Ethics Committee. Verbal informed consent was obtained from all participants included in the study. In this study, the necessary ethical requirements for human studies determined by the 2008 Helsinki Declaration were fulfilled.

In this study, a questionnaire prepared by the literature on the subject, the Maslach Burnout Scale (MBS) consisting of 22 items and the Minnesota Job Satisfaction Scale (MIS) consisting of 20 items were applied.

The validity and reliability study of MBS was carried out by Canan Ergin from Hacettepe University (8). MBS is a 22-item self-assessment scale consisting of three subsections: Emotional Exhaustion (EE), Depersonalization (D) and Lack of Personal Achievement (LPA). There are nine items in the EE subsection (Article no: 1,2,3,6, 13,14,16,20), five items in the D subsection (Item no:5,10,11,15,22), and eight items in the LPA subsection. Article (Article no: 4,7,12,17,18,19,21) is included. The options consist of five-point Likert-type questions (never, very rarely, sometimes, often, always). Questions belonging to the EE and D subsections of the MBS are negative while

the questions belonging to the LPA subsection are positive. Therefore, high EE and D scores and low LPA scores indicate burnout.

The MIS validity and reliability study was conducted by Baycan in 1985 (9). MIS is a five-point Likert-type scale scored between 1 and 5. For the answer to each question, "I am not at all satisfied: 1 point, I am not satisfied: 2 points, I am undecided: 3 points, I am satisfied: 4 points, I am very satisfied: 5 points". All score averages are calculated as a value between 1.0 and 5.0. As a percentage value; 25% and below indicate low job satisfaction, 26-74% medium job satisfaction, and 75% and above indicate high job satisfaction (10).

### Statistical Analysis

Data entry and analysis of the research were done with Van YYU Licensed SPSS 15.0 statistical program. Normal distribution was tested with Shapiro-Wilk. In the analysis of groups with two independent variables, the Student's t-test was used if parametric test conditions were met, and the Mann-Whitney U test was used if not. Spearman correlation test was used to evaluate the relationship between independent variables and scale scores,  $p < 0.05$  was considered significant. Means are given with standard deviation.

### Results

41.6% (n=106) of the participants were female and 58.4% (n=149) were male. The mean age is  $35 \pm 7.0$ , the total length of service is  $9.78 \pm 7.3$ , and the average number of children is  $1.86 \pm 1.0$ . 32.9% (n=84) of the participants were single, and 67.1% (n=171) were married. The spouses of 54.3% (n=93) of those married are working, and 12.9% (n=78) are not working. Of the family physicians, 91.4% (n=233) were general practitioners and 8.6% (n=22) were family physicians. 54.7% (n=127) of the general practitioners are considering specialization training. The average service period of the physicians is  $9.78 \pm 7.3$  years. The mean time they worked as family physicians were  $5.0 \pm 2.8$  years.

Family health centers classes are in five groups A, B, C, D, E. 20% (n=51) of the physicians were A class, 8.5% (n=22) B class, 5.6% (n=14) C class, 18% (n=46) D and 48% (122) of them work in an E-class family health center. There is a difference between Class A and Class B in terms of Maslach depersonalization scores. Those who work in class B have a higher score. There was no difference between the other classes. The physical condition of the workplace was evaluated as good, medium or bad. There was a difference between those who rated it as good and bad. Those who stated it as bad had a higher depersonalization score.

A weak positive correlation was found between the total length of service and Maslach achievement scores ( $p=0.028$ ,  $r=0.263$ ). There was a weak negative correlation between the Minnesota total score and the Maslach depersonalization scores ( $p=0.025$ ,  $r=0.269$ )

Scale score averages of the participants in the study;

**Table 1.** Distribution of variables according to scale scores

		n	Maslach Scale (Mean±SD)				Minnesota Scale (Mean±SD)					
			Depersonalization score	p	Achievement score	p	Emotion score	p	Total score	P	Minnesota score	P
Gender	Female	106	14.06±3.3	0.173	24.10±3.6	0.352	31.72±5.3	0.030	23.29±3.26	0.044	3.08±0.67	0.58
	Male	149	12.87±3.7		23.29±3.5		28.56±6.2		21.57±3.59		2.99±0.69	
Marital status	Single	84	13.69±4.1	0.600	23.13±4.4	0.478	30.34±7.6	0.649	22.39±4.50	0.869	2.83±0.54	0.082
	Married	171	13.21±3.3		23.87±3.0		29.63±5.1		22.24±3.02		3.13±0.72	
Does the spouse work?	Yes	220	13.36±3.4	0.514	23.97±3.2	0.644	29.44±5.5	0.512	22.26±3.26	0.886	3.15±0.76	0.690
	No	35	12.55±3.0		23.44±2.0		30.44±3.5		22.14±1.78		3.04±0.55	
Branch	Practitioner	233	13.2±3.5	0.202	23.57±3.5	0.702	29.81±6.2	0.793	22.19±3.55	0.479	2.99±0.65	0.098
	Family Physician	22	15.1±4.0		24.16±3.6		30.50±4.4		23.27±3.54		3.47±0.87	
Specialization training contemplation?	Yes	139	13.31±3.6	0.784	23.20±3.4	0.357	29.97±4.9	0.824	22.16±3.07	0.930	2.94±0.65	0.501
	No	116	13.06±3.4		24.03±3.6		29.62±7.5		22.24±4.12		3.05±0.66	
Does Your Job Match Your Personality?	Yes	193	12.75±3.6	0.01	23.73±3.4	0.659	28.96±6.0	0.26	21.81±3.61	0.04	3.08±0.69	0.245
	No	62	15.29±2.7		23.29±3.9		32.70±5.2		23.76±2.93		2.86±0.63	
Did you choose your job voluntarily?	Yes	193	12.65±3.4	0.001	23.18±3.5	0.04	29.25±6.3	0.10	21.69±3.56	0.006	3.11±0.67	0.06
	No	62	16.00±2.7		25.26±3.2		32.13±4.4		24.46±2.50		2.74±0.64	
Are you considering quitting your job?	Yes	81	13.72±4.0	0.60	22.27±3.3	0.01	30.63±7.1	0.58	22.21±3.93	0.77	2.74±0.56	0.01
	No	174	13.23±3.4		24.38±3.4		29.80±5.2		22.47±3.26		3.18±0.68	
Do you have any chronic diseases?	Yes	22	16.50±2.4	0.02	24.33±3.3	0.616	34.00±6.0	0.081	24.94±2.88	0.054	3.05±0.51	0.951
	No	233	13.07±3.5		23.56±3.5		29.48±5.9		22.04±3.51		3.03±0.70	
Do you have a physical defect?	Yes	11	15.66±3.2	0.26	25.33±5.7	0.400	36.00±2.6	0.073	25.66±3.33	0.09	2.66±1.05	0.346
	No	244	13.26±3.5		23.55±3.4		29.59±6.0		22.13±3.49		3.05±0.66	
How is your socio-cultural environment at work?	Good	106	12.51±3.3	0.094	23.20±3.1	0.409	28.34±4.8	0.076	21.35±2.61	0.047	3.30±0.76	0.004
	Bad	149	13.97±3.6		23.92±3.8		30.95±6.6		22.95±3.97		2.84±0.55	
Salary*	5-10 K over 10 K	124	12.35±3.6	0.020	23.55±3.6	0.875	29.76±6.3	0.887	21.89±3.73	0.364	2.85±0.67	0.03
		131	14.33±3.2		23.69±3.5		29.97±5.8		22.66±3.35		3.20±0.66	
Are you satisfied with the fee?	Yes	41	13.68±3.2	0.391	23.85±3.3	0.533	30.07±5.6	0.743	22.53±3.19	0.494	3.18±0.74	0.023
	No	29	12.93±3.9		23.31±3.8		29.58±6.6		21.94±4.01		2.81±0.52	
Are you satisfied with the family medicine system?	Yes	113	12.70±3.0	0.170	23.90±2.6	0.569	29.87±5.3	1.000	22.16±2.64	0.778	3.34±0.74	0.001
	No	142	13.89±3.9		23.41±4.1		29.87±6.6		22.39±4.15		2.78±0.52	
Do you have any future concerns about the family medicine system?	Yes	215	13.54±3.5	0.359	23.69±3.7	0.582	29.91±6.1	0.890	22.38±3.63	0.612	2.95±0.65	0.019
	No	40	12.454±3.7		23.27±1.9		29.63±5.9		21.78±3.10		3.47±0.68	

Values in bold represent statistically significant results. The Student's t-test and the Mann-Whitney U test was used. \* The specified numerical range is 25-50k and over 50k when adjusted according to 2024 inflation data.

Maslach emotionality: 29.87±3.5, achievement: 23.62±3.5, depersonalization: 13.37±3.5, total: 22.29±3.54, Minnesota total: 3.03±0.68. The distribution of independent variables according to scale scores is presented in Table 1.

There is a significant difference between emotional and total burnout scores according to gender. Emotional and total burnout scores are higher in women.

There is a significant difference between depersonalization and total burnout scores according to the fit of the job to the personality structure. Depersonalization and total burnout scores are significantly higher in those who say that the job does not fit their personality structure.

According to the answers given to the question "Did you choose your profession voluntarily," those who answered no have significantly higher burnout scores than those who answered yes.

Maslach achievement scores and Minnesota job satisfaction scores are significantly lower in those who are considering quitting their jobs than in those who do not.

Depersonalization scores are significantly higher in

patients with chronic disease than those without.

Physicians with a good social environment at work have lower total burnout scores and higher job satisfaction scores.

Although depersonalization scores are higher in those with an income of over ₺ 10.000, there is no difference between the groups in terms of total burnout and job satisfaction scores.

Although there is no difference between burnout scores according to their satisfaction with the wage and family medicine system, job satisfaction scores are significantly higher in those who are satisfied with the wage and family medicine system.

There is no difference between burnout scores according to future anxiety about the family medicine system. Job satisfaction scores are significantly higher in those who are not worried about the future of the family medicine system.

## Discussion

Burnout is one of the most common problems faced by employees in today's challenging business life. This situation is more common, especially in the field of health, where the workload is quite high.

Considering the burnout status of family physicians, emotional scores were  $29.87 \pm 3.5$ , achievement scores  $23.62 \pm 3.5$ , and depersonalization scores were  $13.37 \pm 3.5$ . In a study conducted with family physicians, the mean emotional burnout score was calculated as  $17.34 \pm 7.02$ , the personal achievement score as  $9.96 \pm 4.30$ , and the depersonalization score as  $4.93 \pm 4.06$ .11

In another study, the mean emotional exhaustion score of family physicians was calculated as  $16.1 \pm 7.2$ , personal achievement score as  $21.0 \pm 3.7$ , and depersonalization score as  $4.3 \pm 3.2$  (12). Subscale score distributions are similar to other studies. However, emotionality and depersonalization scores are higher than in other studies. Although no cutoff point is used for the assessment, the study results show that physicians experience high levels of burnout, considering that the upper values are 36 for emotional exhaustion, 20 for depersonalization, and 32 for a sense of personal accomplishment. The fact that the trait depersonalization sub-dimension score is higher than the scores obtained in other studies indicates that physicians reflect burnout in people who receive service.

In the studies examined in the literature, there are different results regarding the effect of gender and marital status on burnout. Some studies did not detect a difference according to gender, as well as studies that did (11-14) In our study, emotional and total burnout scores were significantly higher in women. There was no difference between burnout and job satisfaction scores according to my marital status. The difference in the studies may be due to the inclusion of assistant physicians or non-physician health personnel in the study.

There is no similar study evaluating job suitability for personality structure and burnout. In our study, it is noteworthy that depersonalization scores were high among those who indicated that their job was not suitable for their personality structure. In a study conducted with family physicians in Malatya, higher job satisfaction scores were observed among physicians who stated that their profession was compatible with their personality structure. Although job satisfaction scores were higher among those who reported job suitability for their personality in our study, no significant difference was found (15). This discrepancy may be attributed to the larger number of physicians participating in our study compared to other studies.

In a study conducted with family physician specialists, it was found that all burnout scores were higher in physicians who did not choose their profession voluntarily, which is consistent with our findings (16). Similarly, in our study, a difference was observed in general job satisfaction scores based on whether the profession was chosen willingly. Those who chose their profession willingly exhibited higher job satisfaction scores.

Another study with family physician specialists revealed

higher depersonalization scores and lower personal achievement scores among those contemplating leaving their jobs. However, there was no difference in depersonalization and emotional exhaustion scores.

In the same study, it was observed that physicians considering leaving their jobs had lower job satisfaction scores. Similarly, in another study with family physicians, it was reported that those thinking of quitting their jobs had lower job satisfaction scores (15).

In a study conducted with family physicians in Kayseri, no difference was observed between having a diagnosed disease and burnout scores (12).

In studies conducted with family physicians, a difference was found between the physical conditions and working environment of the workplace and burnout scores. Those who reported inadequate physical conditions and working environment tended to have higher emotional exhaustion and depersonalization scores, and lower personal achievement scores (12,16). Unlike our study, there was no difference observed between workplace conditions and burnout scores. This difference may be attributed to the fact that classification was not considered in other studies.

In the study conducted with family physicians, the correlation between perceiving the salary as sufficient and burnout scores was examined, revealing a negative significant relationship only between emotional burnout score and salary adequacy (17). In another study with physicians, a significant difference was found between income sufficiency and personal achievement scores (16), while no difference was observed in emotional exhaustion and depersonalization scores (18). The literature review indicates varying results regarding wages and satisfaction with wages. In our study, a significant difference was found only in the depersonalization subscale score based on income level. Interestingly, physicians earning  $\text{₺}10,000$  or more showed higher depersonalization scores.

Considering the studies on wages and job satisfaction, a significant difference was found between income coverage and job satisfaction scores in the study conducted with physicians (15). In another study, it was reported that physicians who were satisfied with their salaries had higher job satisfaction scores (19). In a study with physicians working in primary care, it was observed that job satisfaction scores increased as the monthly income level increased (20). The results of our study suggest that factors such as salary and wage satisfaction have a greater impact on job satisfaction than burnout. Consistent with the literature findings, physicians with higher incomes who reported satisfaction with their pay had higher job satisfaction scores in our study.

In the study conducted with family physicians in Kayseri, the burnout scores of physicians who are satisfied with being in the family medicine system and who state that the practice meets their expectations decreased (12).

According to the study conducted in Sakarya, it was determined that there was a negative relationship between the positive perception of the family medicine system and burnout (17).

In studies conducted with family physicians in Eskişehir and Malatya, it has been reported that physicians who are satisfied with the family medicine system have higher job satisfaction scores (15).

It has been determined that the situations related to the system are most effective on job satisfaction. In our study, family physicians who are satisfied with the system and are not worried about the future of the system have higher job satisfaction scores.

### Conclusion

Study results; suggest that family physicians may experience moderate-to-high levels of professional fatigue and emotional strain, and commuting to work is a source of anxiety. Remarkably, the high scores in the depersonalization sub-dimension indicate that this situation is reflected negatively on the people they serve. Unlike other studies, it has been determined that conditions such as monthly income, satisfaction with the wage satisfaction with the family medicine system, and worrying about the future of the system have an effect on job satisfaction rather than burnout. The job satisfaction score of the majority of physicians is moderate. It seems important to make institutional arrangements for the preparation of conditions that protect and maintain the mental health of the employees to reduce the emotional attrition of the physicians working in primary care, to increase job satisfaction, and to increase the quality of the services provided.

**Ethical approval:** Ethics committee approval was obtained for the study with the decision dated 01.11.2018 and numbered 2018/15 from the Regional Training and Research Hospital Clinical Research and Ethics Committee

**Informed Consent:** Verbal informed consent was obtained from all participants in this study.

**Conflict of Interest:** The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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**Author's Contributions:** All the authors declare that they have all participated in the design, execution, and analysis of the paper and that they have approved the final version.

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